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MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT
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Subject: Supplemental RFI Report, DP30/SD-33 (SWMU 113B), SS-39 (SWMUs 165, 177, 179, and 181), SD-27 (SWMU 141)

1. The subject RFI report is hereby submitted to NMED for review and approval.

2. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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SUPPLEMENTAL RCRA FACILITY INVESTIGATION
DP-30/SD-33 (SWMU 113),
SS-39 (SWMUS 165, 177, 179, AND 181), AND
SD-27 (SWMU 141)
HOLLOMAN AIR FORCE BASE
ALAMOGORDO, NEW MEXICO

Air Force Center for Environmental Excellence
Brooks City-Base, Texas

July 2007

SUPPLEMENTAL RCRA FACILITY INVESTIGATION DP-30/SD-33 (SWMU 113B), SS-39 (SWMUS 165, 177, 179, AND 181), AND SD-27 (SWMU 141)

HOLLOMAN AIR FORCE BASE ALAMOGORDO, NEW MEXICO

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Supplemental RCRA Facility Investigation Report, DP-30/SD-33 (SWMU 113B), SS-39 (SWMUS 165, 177, 179, AND 181), and SD-27 (SWMU 141)
July 2007

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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LIST OF ACRONYMS, SYMBOLS AND ABBREVIATIONS

°C	degree Celsius
%	percent
%D	percent difference
%R	percent recovery
±	plus or minus
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
AFB	Air Force Base
AFCEE	Air Force Center for Environmental Excellence
AOC	Area of Concern
bgs	below ground surface
Bhate	Bhate Environmental Associates
CMS	Corrective Measures Study
DCE	dichloroethene
DO	dissolved oxygen
DoD	Department of Defense
DPT	direct push technology
DQO	data quality objective
DRMO	Defense Reutilization and Marketing Office
D-TPH	diesel-range total petroleum hydrocarbons
EE/CA	Engineering Evaluation/Cost Analysis
ERP	Environmental Restoration Program
ft/day	feet per day
ft/ft	feet per foot
FS	Feasibility Study
ft/year	feet per year
G-TPH	gasoline-range total petroleum hydrocarbons
HGL	HydroGeoLogic, Inc.
HHMSSL	human health medium specific screening level
HSA	hollow stem augers
HSWA	Hazardous and Solid Waste Amendments
IDW	investigation derived waste
IRFNA	inhibited red fuming nitric acid
IRP	Installation Restoration Program

IWFNA	inhibited white fuming nitric acid
LCS	laboratory control sample
LTM	long-term monitoring
MCL	maximum contaminant level
MDL	method detection limit
mg/kg	milligram per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
msl	mean sea level
NFA	no further action
NMAC	New Mexico Administrative Code
NMED	New Mexico Environmental Department
NMGWQ	New Mexico Groundwater Quality
NOD	notice of deficiency
NTU	nephelometric turbidity unit
O&M	operations and maintenance
ORNL	Oak Ridge National Laboratory
ORP	oxidation reduction potential
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
pCi/G	picocuries per gram
PID	photoionization detector
PR	Preliminary Review
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QC	quality control
Radian	Radian Corporation, Inc.
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RI	Remedial Investigation
RFI	RCRA Facility Investigation
RPD	relative percent difference
SDG	sample delivery group
SSLs	Soil Screening Levels

SOP	standard operating procedure
SVOCs	semi-volatile organic compounds
SWMU	Solid Waste Management Unit
TAL	target analyte list
TCA	trichloroethane
TCE	trichloroethene
TCLP	toxicity characteristic leaching potential
TDS	total dissolved solids
TPH	total petroleum hydrocarbon
TRPH	total recoverable petroleum hydrocarbons
UDMH	unsymmetrical dimethylhydrazine
USAF	U.S. Air Force
USDA	U.S. Department of Agriculture
U.S. EPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
VSI	Visual Site Inspection
WRRI	New Mexico Water Resources Research Institute
yd^3	cubic yards

SUPPLEMENTAL RCRA FACILITY INVESTIGATION
DP-30/SD-33 (SWMU 113), SS-39 (SWMU 165, 177, 179, AND 181), AND SD-27 (SWMU 141)
HOLLOMAN AIR FORCE BASE
ALAMOGORDO, NEW MEXICO

1.0 INTRODUCTION

This Supplemental Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) report was prepared by HydroGeoLogic, Inc. (HGL) on behalf of Holloman Air Force Base (AFB) for the New Mexico Environment Department (NMED) under contract to the Air Force Center for Environmental Excellence (AFCEE), Contract No.F41624-03-D-8602, Task Order No. 037. This Supplemental RFI report presents the results of supplemental RFI field investigation activities conducted at the following Holloman AFB Environmental Restoration Program (ERP) sites / Solid Waste Management Units (SWMUs):

DP-30/SD-33 (SWMU 113)	Grease Trap/Cooking Grease Disposal Pits
SS-39 (SWMUs 165, 177, 179, and 181)	Missile Fuel Spill Area
SD-27 (SWMU 141)	Pad 9 Washrack Area

1.1 INVESTIGATION PURPOSE

ERP sites DP-30, SD-33, SS-39, and SD-27 are listed in Appendix 4-A Table A of the facility's RCRA permit (NM6572124422-2) (NMED, 2004), requiring the sites to be investigated and undergo corrective action if warranted. Remedial investigations (RIs), biennial groundwater compliance long term monitoring (LTM) and/or site assessments have been conducted historically at all three sites. Upon review of the historical data, NMED determined in 2004 that additional characterization of DP-30, SD-33, and SS-39 would be required before no further action (NFA) approval and removal from the Holloman AFB RCRA Part B Permit would be considered (United States Department of the Air Force [USAF], 2004). Work at SD-27 was performed in accordance with the Phase II RFI Work Plan (Bhate, 2003), designed to collect additional data requested by NMED in correspondence dated 5 March 2002.

The purpose of this supplemental RFI for each site was to obtain additional site-specific physical and analytical data to address NMED concerns and determine the next appropriate step for each of the sites.

The work described herein at DP-30, SD-33, and SS-39 was performed in accordance with the project workplans (Bhate, 2003; HGL, 2005a, 2005b, 2006b, 2006c), the response to the RFI workplan Notice of Deficiency (NOD) (HGL, 2006a), and discussions during a NMED site visit (HGL, 2006d), as approved in NMED correspondence dated 29 August 2006.

1.2 REPORT ORGANIZATION

This supplemental RFI report is organized in to six sections. Section 1 is this introduction. Section 2 presents the overall Holloman AFB environmental setting and base installation restoration program. Sections 3 (DP-30/SD-33), 4 (SS-39), and 5 (SD-27) present site-specific background and environmental setting information, summarize former investigation activities and results (evaluated against current screening criteria), document supplemental RFI activities and analytical results, evaluate results of the collected data, and provide conclusions and recommendations based on this information obtained. References cited in this report are provided in Section 6. Supporting information including photographs, boring logs, field sample data sheets and data validation reports are included as appendices.

2.0 HOLLOMAN AIR FORCE BASE ENVIRONMENTAL SETTING

The environmental setting information in the following subsections is reproduced primarily from the Radian Corporation, Inc. (Radian) 29-site Remedial Investigation report (Radian, 1994), unless cited otherwise.

2.1 LOCATION

Holloman AFB is situated in south-central New Mexico, in the northwest-central part of Otero County. The Base is located about 75 miles northeast of El Paso, Texas, and about seven miles west of Alamogordo, New Mexico. The Base occupies about 50,000 acres in the northeast quarter of section Township 17 South, Range 8 East. Additional land extending northward is occupied by the White Sands Missile Range testing facilities. A facility location map is included as Figure 2.1. The locations of the four ERP sites, in relation to the surrounding facility, are shown on Figure 2.2.

2.2 DEMOGRAPHICS

Alamogordo is the county seat of Otero County, and the only town of appreciable size within 30 to 50 miles of the Base. The population of Alamogordo was 23,535 in 1975, and has since grown to about 31,000. The economy of Alamogordo depends largely upon Holloman AFB and other military installations in the area. Approximately 5,500 people live at Holloman AFB.

2.3 CLIMATE

The climate in the Tularosa Basin is arid, with low annual rainfall and low relative humidity. The surrounding mountain ranges greatly influence the local weather. They modify approaching weather systems and provide orographic lifting, which produces summer thunderstorms.

Holloman AFB receives most of its total annual rainfall from thunderstorm activity from May through October. Winter is generally dry and is characterized by clear skies and erratic snowfall. The period from March through May is characterized by strong southerly wind flow and periods of blowing dust and sand. Mean annual precipitation is 7.9 inches. The mean annual lake evaporation rate, commonly used as an estimate of the mean annual evapotranspiration rate, is approximately 67 inches per year. As presented by Huff in the 49th Annual New Mexico Water Conference Proceedings (New Mexico Water Resources Research Institute [WRRI], 2005), approximately 30,000 acre-feet per year of groundwater left the Tularosa basin through evapotranspiration under 1995 conditions.

2.4 TOPOGRAPHY

The Base is located in the Tularosa Basin, which is part of a 170-mile-long structural depression. The basin is bounded to the south by a low topographic divide near the New Mexico/Texas state line; to the west by the uplifted Organ, San Andres, and Oscura Mountains; to the north by Chupadera Mesa; and to the east by the uplifted Jicarilla and

Sacramento Mountains. The interior plain has low relief with altitudes ranging from about 4,000 feet above mean sea level (msl) in the southwestern portion of the basin to about 4,400 feet above msl in the northeastern portion. The surrounding mountains rise abruptly to altitudes of 7,000 to 12,000 feet above msl.

Surface runoff from the mountains bordering the basin has deposited extensive alluvial fans on the interior plain. The Tularosa Basin is a closed basin from which no surface water drains. Near the Base, the ground surface is gently undulating and is composed of alluvial fan deposits, eolian dunes, and flat-bottomed playas (pan-shaped depressions carved by wind erosion). To the west of the Base lie the gypsum sand dune fields of White Sands National Monument. A regional topographic map is provided as Figure 2.3.

2.5 GEOLOGY

The Tularosa Basin is the easternmost extension of the Basin and Range Province of the western United States. The basin was created by Cenozoic extensional, or normal, faulting of a sequence of Precambrian- through Tertiary-age sedimentary and igneous rocks. These rocks are exposed in the fault scarps bounding the basin floor. The basin is a graben, or downthrown block, bounded by the upthrown fault blocks of the San Andres and Sacramento Mountains. A geologic map of the Tularosa Basin is provided as Figure 2.4; a generalized cross-section of the Basin is provided as Figure 2.5.

During the Permian period of the Paleozoic era (approximately 270 million years ago), southern New Mexico was covered by a shallow sea. Limestone and sandstone were deposited, forming thick sedimentary units. Toward the end of the Mesozoic era (approximately 70 million years ago), the major mountain building activities that formed the Rocky Mountains took place. During these events, southern New Mexico emerged from the ocean as the earth's crust upwarped gently in that area. During the Cenozoic era (beginning approximately 70 million years ago), basin and range formation was initiated in what is now the southwestern United States. Approximately 10 million years ago, Cenozoic faulting formed the graben structure known as the Tularosa Basin. During this process, arched portions of rock collapsed between large-scale, north-south trending faults. The Tularosa Basin is a central downthrown area, bounded on the east and west by fault block mountains. Bedded Permian strata can be seen along the faces of the Sacramento and San Andres Mountains. Permian limestones also occur west of the Base in a low bedrock outcrop near Hurtz Spring. Sediments have been filling the basin continuously since its formation.

Recently (less than 10 million years ago), lava flows erupted along existing fault planes created during active basin development. The Carrizozo lava flow north of the Base is an example of such an eruption.

Permian Huew and Yeso Limestones are exposed in a north-south bedrock high beginning south of Holloman AFB in the Jarilla Mountains trending north through Tres Hermanos and Twin Buttes. The bedrock high extends through a small outcrop near Hurtz Spring west of the Base and through Tularosa Peak on the Base north of the test track. A schematic east west cross-sectional view of the southern basin is shown in Figure 2.5. The bedrock

outcrops represent a large, buried, down-faulted block. The fault block is tilted to the east slightly and plunges to the north. The fault is en-echelon to the basin-forming fault at the base of the Sacramento Mountains. The fault is buried by sedimentary deposits in the Holloman area, but is suspected to trend north-south in line with the bedrock outcrops described. This tilted fault block divides the larger Tularosa Basin/White Sands area from the Alamogordo sub-basin. The schematic cross-section shows the relationship between the Tularosa Basin and Alamogordo sub-basin. West of Holloman AFB (near Hurtz Spring), the main Tularosa Basin begins. It is bounded on the east by the near-vertical fault associated with the bedrock high between the Alamogordo sub-basin and the main Tularosa Basin, and on the west by the fault at the foot of the San Andres Mountains. Fault scarps and aligned springs are the predominant physical expression of this faulting. Shallow Permian rocks, including the Yeso and Hueco Formations, are the groundwater source for these springs. The Yeso Formation outcrops several hundred feet south of Hurtz Spring.

The Tularosa Basin is a bolson, or a basin that has no surface drainage outlet. Bolson deposits refer to sediments carried by water into a closed basin. The bolson fill in the Tularosa Basin is derived from the erosion of limestone, dolomite, and gypsum in the surrounding mountains. Coarser material is deposited at the base of the mountains while finer material is carried to the basin's interior. The bolson fill deposits thin out from Alamogordo toward the western edge of the sub-basin, ranging in thickness from 4,000 feet near Alamogordo to less than 100 feet near Hurtz Spring. Bolson fill deposits are 8,000 feet thick or more in the central portion of the Tularosa Basin.

Near-surface geologic conditions at Holloman AFB have been established during previous investigations. The near-surface bolson deposits consist of sediments that are of alluvial, eolian, and lacustrine or playa origin. Alluvial fan deposits are characteristically laterally discontinuous units of interbedded sands, silts, and clays. The eolian deposits consist of gypsum sands. The eolian and alluvial fan deposits are often indistinguishable because the wind simultaneously reworks alluvial fan sediments and deposits gypsum sands, resulting in an intermingling of the two. Lacustrine or playa deposits in the area consist of medium to high plasticity clays containing gypsum crystals and other salts. Lacustrine deposits are juxtaposed with alluvial fan and eolian deposits throughout the Base. A generalized cross section across the Base is provided as Figure 2.6. The uppermost deposits (generally top fifteen feet) at the Base are typically silty sands, grading vertically and laterally into silts and small lenses of clay and sand. These are typical alluvial fan sediments, which commonly exhibit lateral variability because they are deposited as lobes. A 5 to 8-foot thick clay unit grades laterally into a silty, clayey sand, which underlies the alluvial sediments. These are lacustrine or playa deposits, which typically display less vertical variability than alluvial deposits but are also laterally discontinuous. These lacustrine clays almost always are highly plastic and contain abundant gypsum crystals. Below this, sands grading into silty sands, and underlain by silts, are present, and are again characteristic of alluvial fan sediments. Lenses/beds of lacustrine clay underlie these sediments.

2.6 SOILS

The United States Department of Agriculture (USDA) Soil Conservation Service has identified two soil associations in the vicinity of Holloman AFB: the Holloman-Gypsum Land-Yesum complex, and the Mead silty clay loam. The permeability of these soil horizons ranges from 4×10^{-4} to 1×10^{-3} centimeters per second. A soil distribution map of the Holloman AFB and surrounding area, as presented in the Soil Conservation Service Soil Survey of Otero Area, New Mexico (USDA, 1981), is provided as Figure 2.7.

Most of the surficial soils at the Base are the well-drained, sandy loam and gypsum of the Holloman-Gypsum Land-Yesum complex. The soils of this association are formed from alluvial and eolian gypsiferous sediments. The Holloman unit makes up about 35 percent (%) of the complex. The soil unit is light brown to pink, very fine, sandy loam with a high gypsum content. The soil is moderately permeable, calcareous, and mildly to moderately alkaline. The Gypsum land unit makes up about 30% of the complex. It is soft to hard white gypsum, typically overlain by less than one inch of very fine, sandy loam. The Yesum unit, which makes up 20% of the complex, is light brown to pinkish-white, very fine sandy loam that is also high in gypsum. It is moderately permeable, calcareous, and mildly alkaline (USDA, 1981).

The Mead silty clay loam soil occurs over a small area of the Base. This soil consists of reddish-brown, silty clay loam, clay loam, and clay with a high salt content. The Mead soil unit is derived from fine grained alluvium deposited over lacustrine sediments. The soil has low permeability, and available water capacity is low. This soil is moderately calcareous, and moderately to strongly alkaline. The soil has a layer of salt that is more soluble than gypsum (USDA, 1981).

2.7 SURFACE WATER

The Tularosa Basin is a closed basin with no surface water drainage. Water is lost to evaporation, transpiration, and infiltration, or collects in Lake Lucero, the lowest point in the basin, approximately 20 miles southwest of Holloman AFB.

The Base is crossed by several southwest-trending arroyos as shown in Figure 2.8, which control surface drainage in the undeveloped part of the Base. These arroyos are: Hay Draw, in the far northern part of the Base; Malone Draw and Ritas Draw, which drain into Lost River; and Dillard Draw to the east, which runs in a southwesterly direction near the southern boundary of the Base. Lost River, the largest arroyo, is dammed near the western boundary of the Base to prevent runoff from the Base from entering White Sands National Monument. Runoff from Lost River, Malone Draw, and Ritas Draw collects in the dammed area and either evaporates or infiltrates.

2.8 HYDROGEOLOGY

Groundwater occurs in unconfined conditions in the unconsolidated bolson deposits beneath Holloman AFB. The primary source of recharge for groundwater in the bolson aquifer is

percolation of rainfall and stream infiltration through the coarse, unconsolidated alluvial fan deposits along the western flank of the Sacramento Mountains. Water migrates downward into the bolson fill aquifer and flows downgradient through progressively finer-grained sediments into the basin. The depth to groundwater decreases from 270 feet (or more) near the mountains to less than 5 feet to 50 feet below the ground surface (bgs) at Holloman AFB. The hydraulic gradient is steep in the recharge zones at the base of the mountains, but then flattens out as groundwater migrates into the valley. Results of the 1992 RI indicated that groundwater gradients at the Base are very low, ranging from about 9×10^{-4} feet per foot (ft/ft) to 7×10^{-3} ft/ft. Groundwater discharge occurs either through evapotranspiration, springs or seeps along steep-sided arroyos, or into closed playa lakes such as Lake Lucero, the regional groundwater discharge area.

Groundwater flow direction at Holloman AFB is influenced by the surface water flow along southwest trending arroyos. In general, groundwater flow direction is west and southwest depending upon the immediate proximity of these drainage features; a basewide regional groundwater elevation contour map is provided as Figure 2.9. In the southeastern portion of the Base, regional groundwater flows southwest, following the Dillard Draw surficial drainage system. In the northern portion of the Base, groundwater flows to the west, following the Ritas Draw, Malone Draw, and Lost River drainages. An apparent divide between these two drainage subsystems is seen in the northeast-central part of the Base north of DP-30 and SD-33. The greatest local effects on groundwater flow direction occur at sites located closest to the arroyos.

Hydraulic conductivity estimates were derived from slug tests performed during previous investigations. These estimates and estimates of seepage velocity for each site are presented in the site-specific sections of this RFI report.

Groundwater in the Tularosa Basin is of potable quality at the recharge areas in close proximity to the Sacramento Mountains, but becomes increasingly mineralized as it flows downgradient toward the interior of the basin. This natural degradation of water quality can be attributed to slow groundwater migration from recharge to discharge areas, and the presence of readily soluble minerals in the bolson sediments. The groundwater beneath Holloman AFB is designated as unfit for human consumption because it naturally exceeds total dissolved solids (TDS) and sulfate thresholds. TDS values presented in the 1992 RI report ranged from 1,600 milligrams per liter (mg/L) to 66,000 mg/L, averaging over 17,000 mg/L. Sulfate and chloride average concentrations were on the order of 4,000 mg/L and 6,000 mg/L, respectively. Using the *Guidelines for Groundwater Classification Under the EPA Groundwater Protection Strategy* (U.S. Environmental Protection Agency [U.S. EPA], 1986), the groundwater can be classified as IIIB, i.e. not a source or a potential source of drinking water. Class III groundwater is characterized as having a TDS concentration greater than 10,000 mg/L and a low degree of interconnection to adjacent surface waters or groundwaters of a higher class, as is the case at Holloman AFB. Regulated water under New Mexico Water Quality Control Commission regulations is also defined by this 10,000 mg/L TDS threshold.

2.9 BASE INSTALLATION RESTORATION PROGRAM

The Installation Restoration Program (IRP) at Holloman AFB commenced in 1982 when CH2MHill was retained by the Air Force to conduct the Holloman AFB records search. Department of Defense (DoD) Policy, directed by Defense Environmental Quality Program Memorandum 81-5, directed that suspected problems at DoD sites associated with past hazardous material disposal be evaluated and addressed. The IRP was developed to comply with RCRA; under Sections 6003 and 3012 of RCRA, Federal agencies were directed to assist the U.S. EPA and state agencies to inventory past disposal sites and make the information available to the requesting agencies. To fulfill this policy, DoD implemented a four-phase IRP that formed the basis for remedial actions at DoD installations under the provisions of Comprehensive Environmental Response, Compensation and Liability Act. Phase I, the records search, is the identification of potential problems. Follow-on phases in the four-phase process included fieldwork (Phase II), remedial alternative evaluation (Phase III), and remedial action (Phase IV).

The Holloman AFB records search included a detailed review of pertinent installation records, contact with 16 government organizations for documents relevant to the records search effort, and a Base site visit conducted in May 1983. Activities conducted during the Base site visit included interviews with 54 past and present Base employees, a ground tour of Base facilities, a detailed search of installation records, and a helicopter overflight to identify past disposal areas. The Records Search, submitted in August 1983, identified 43 sites. Based on the Records Search results, Holloman AFB completed EPA Form 8900-1, Notification of Hazardous Waste Site Activity, for 34 of the sites, in December 1983. The forms were submitted to U.S. EPA Region VI in March 1984.

In September 1988, the RCRA Facility Assessment (RFA) Preliminary Review (PR) / Visual Site Inspection (VSI) was completed by A.T. Kearney and DPRA Incorporated for U.S. EPA Region VI. In accordance with RCRA, Holloman AFB had initially submitted a RCRA Part A Permit Application (a request for interim status for existing facilities and the initial permitting step for new facilities) in November 1980 for 11 SWMUs; a Part B Permit Application (describing how the facility is designed, constructed, maintained, and operated to be protective of public health and the environment, as well as release prevention measures and a contingency plan in the event of a spill or release) for the Defense Reutilization and Marketing Office (DRMO) Hazardous Waste Storage Facility was submitted by Holloman AFB at U.S. EPA's request in July 1985. The 1984 Hazardous and Solid Waste Amendments (HSWA) provided new authority to U.S. EPA to require comprehensive corrective actions at SWMUs and other areas of concern (AOCs) at interim status facilities. These corrective actions were intended to address unregulated releases of hazardous constituents. The intent of the RFA was to support this authority by identifying releases or potential releases warranting further investigation. The RFA PR/VSI process identified 228 SWMUs (35 of which no longer existed or could not be located) and 21 AOCs at Holloman AFB. Five additional SWMUs and 1 AOC were identified at the Primate Research Institute operated by New Mexico State University on Holloman AFB property. The SWMUs and AOCs included all 43 IRP sites previously identified by Holloman AFB.

All four of the ERP sites addressed in this supplemental RFI report (i.e., DP-30, SD-33, SS-39, and SD-27) are included in the Base IRP and were placed on the original 1991 Holloman RCRA permit issued jointly by the U.S. EPA Region VI and NMED. Multiple phases of investigation, as well as LTM (DP-30/SD-33 and SS-39 only) have been conducted during that time. This previous work and the most recent phase of investigation are presented in the site-specific sections of this report.

2.9.1 Applicable Screening Data

Analytical data obtained from previous investigations and the supplemental RFIs were evaluated against applicable regulatory screening data as specified in Appendix 4-F Section III.1.2 of the Holloman AFB Hazardous Waste Permit No. NM6572124422 (NMED, 2004). Data evaluation consisted of a direct comparison to applicable screening criteria. The associated screening criteria are included on the individual analytical data tables. Specifically, the following regulatory criteria were used to evaluate the analytical data:

- **Soils**:
  - NMED residential, industrial, construction worker Soil Screening Levels (SSLs) (NMED, 2006a, 2006c).
  - U.S. EPA Region VI Human Health Medium Specific Screening Levels (HHMSSL) (U.S. EPA Reg VI, 2007) if NMED SSLs were not available (NMED, 2004).
    - The U.S. EPA Region VI HHMSSL for total chromium was used to evaluate chromium analytical data since the HHMSSL for total chromium assumes a 1:6 ratio between hexavalent and trivalent chromium.
  - U.S. EPA radionuclide SSLs (U.S. EPA, 2000).

- **Unsaturated Sediment**:
  - NMED residential, industrial, construction worker NMED SSLs (NMED, 2006a, 2006c).
  - U.S. EPA Region VI HHMSSL (U.S. EPA Reg VI, 2007) if NMED SSLs not available (NMED, 2004).
    - The U.S. EPA Region VI HHMSSL for total chromium was used to evaluate chromium analytical data since the HHMSSL for total chromium assumes a 1:6 ratio between hexavalent and trivalent chromium.
  - U.S. EPA radionuclide SSLs (U.S. EPA, 2000).

- **Groundwater (for reference only in cases where TDS exceeds 10,000 mg/L)**:
  - New Mexico Groundwater Quality (NMGWQ) standards, New Mexico Administrative Code (NMAC) 20.6.2.3103.
  - U.S. EPA Maximum Contaminant Levels (MCLs).
  - U.S. EPA Region VI tap water HHMSSL (U.S. EPA Reg VI, 2007) for perchlorate.

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FIGURES

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Revised: 05/25/07 TH
Map Source: Holloman AFB

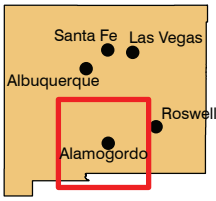
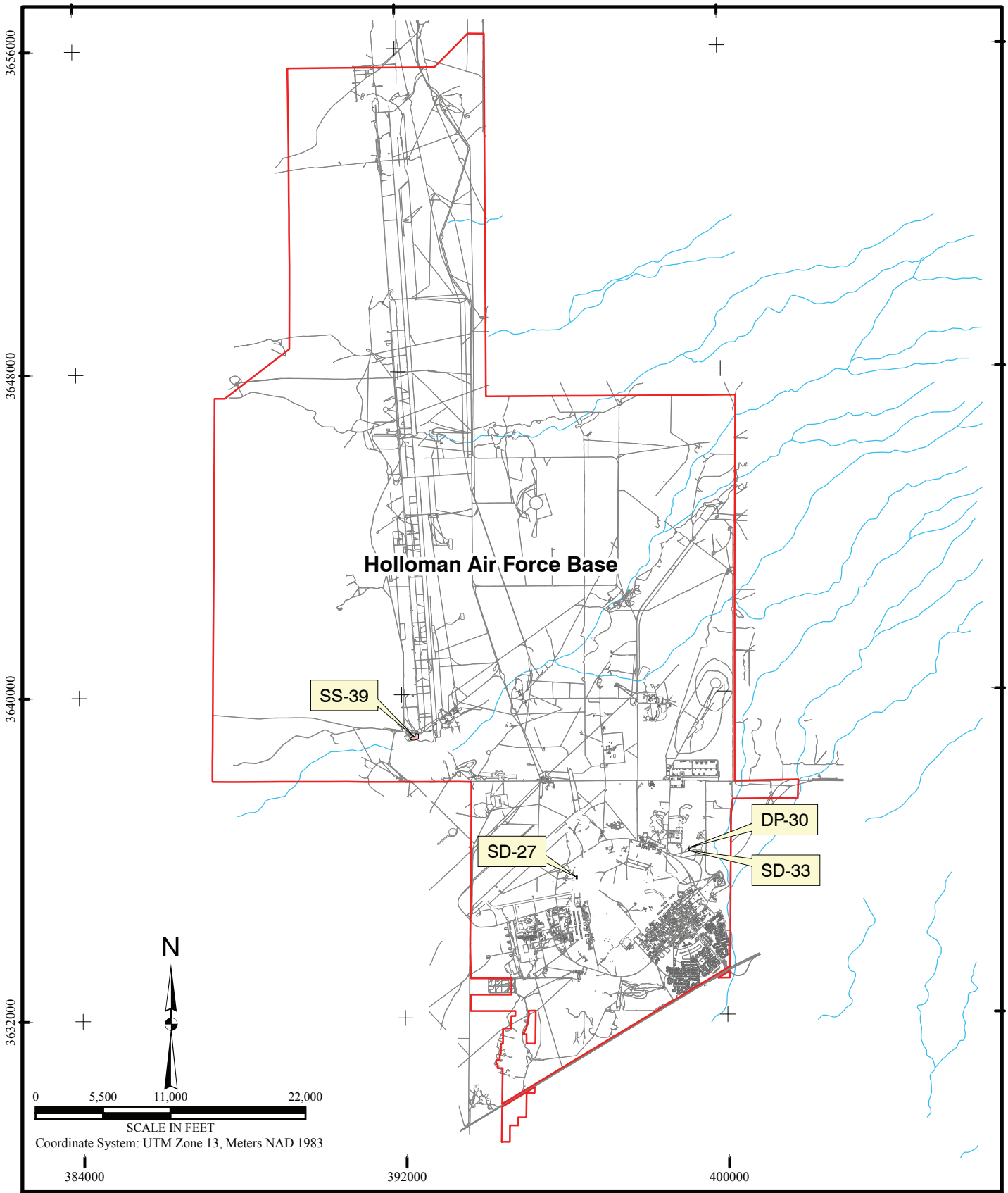


Figure 2.1
Facility Location Map
Holloman AFB



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Revised: 05/25/07 PS
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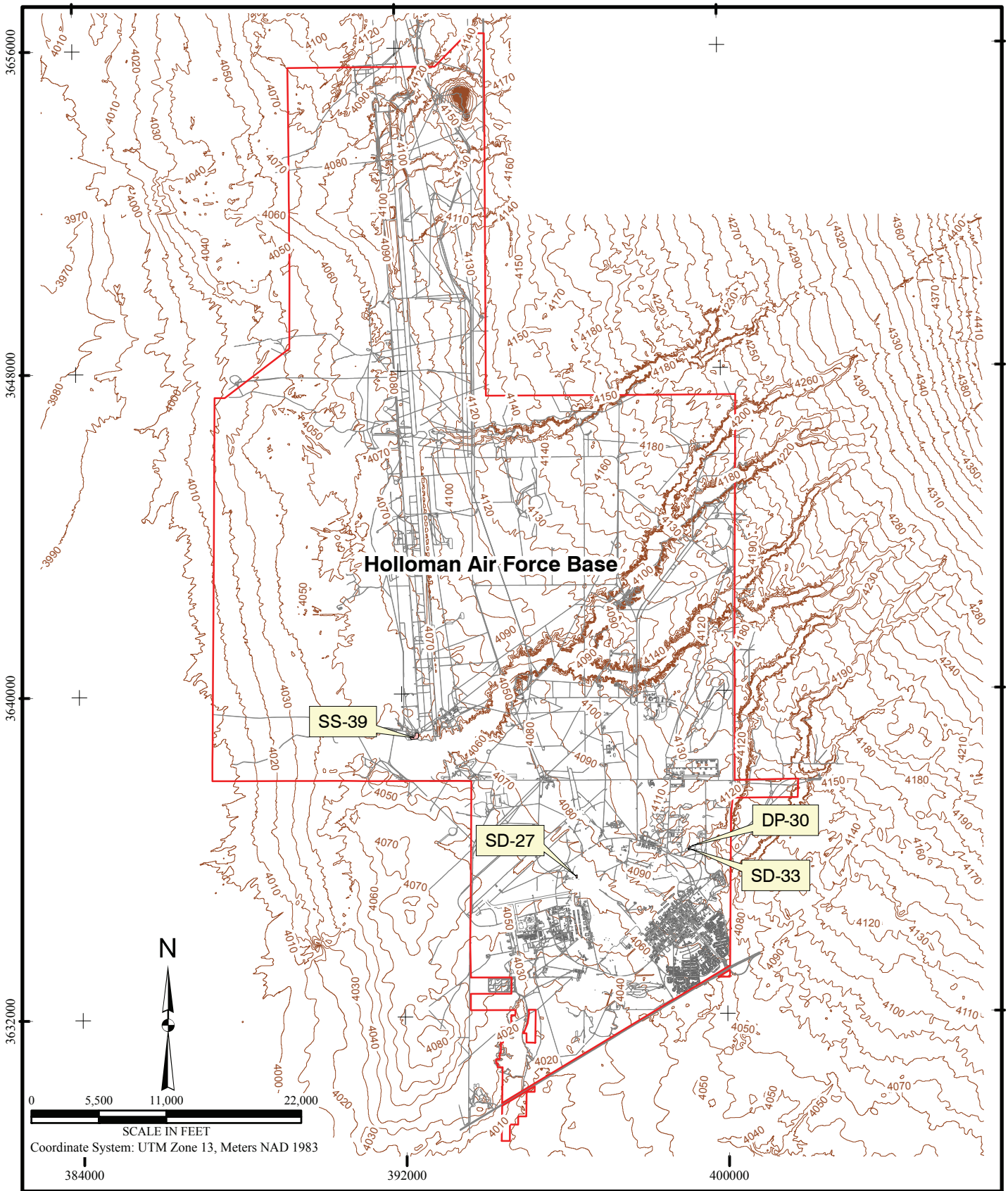
Legend

- Holloman AFB Boundary
- Building/Structure
- Operable Unit Boundary (Approx.)

Figure 2.2
Facility Layout Map
Holloman AFB



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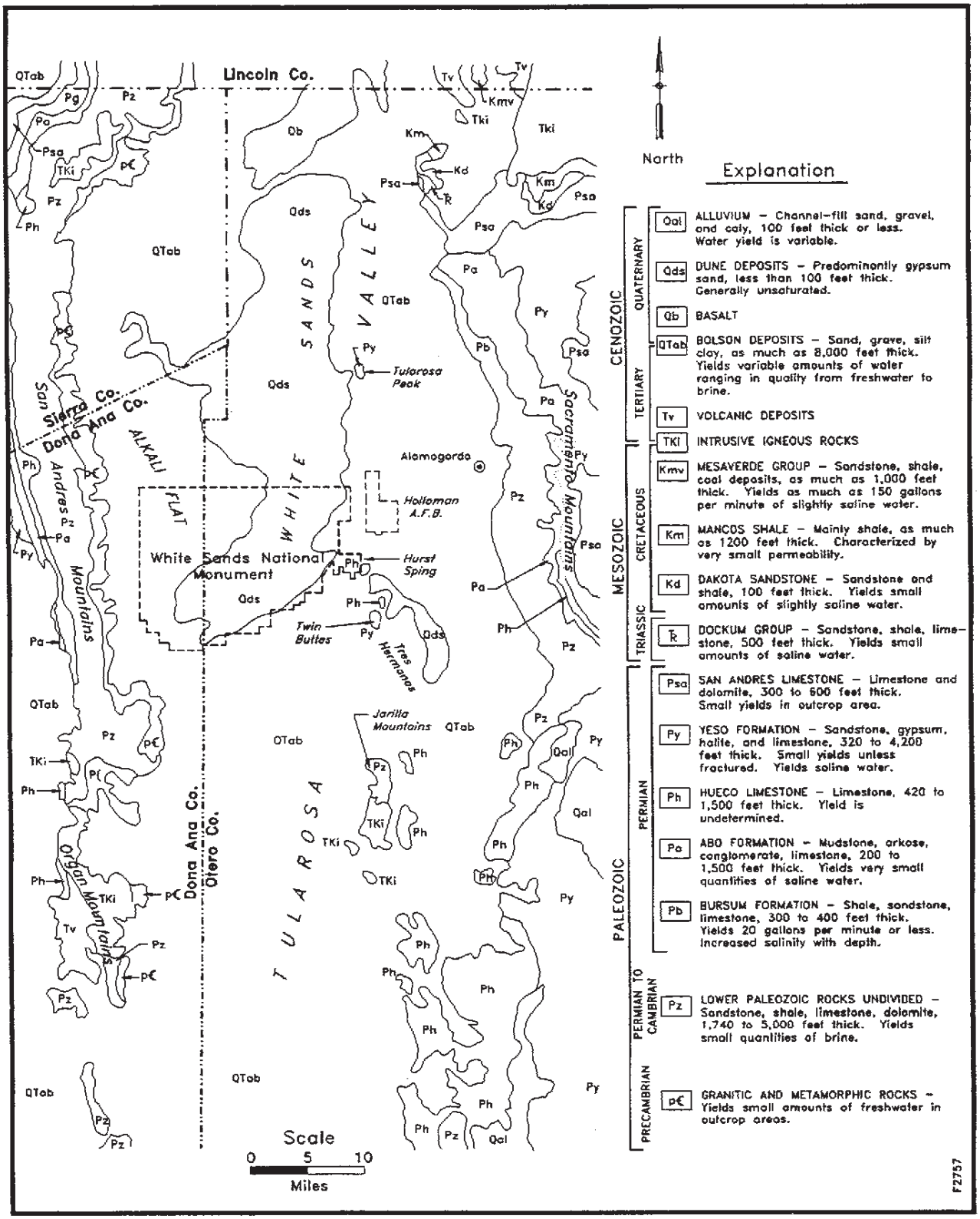
Revised: 11/10/06 TB
Map Source: Holloman AFB

Legend

- Holloman AFB Boundary
- Building/Structure
- Operable Unit Boundary (Approx.)
- Topographic Contour and Associated Elevation (feet MSL)

Figure 2.3
Regional
Topographic Map
Holloman AFB



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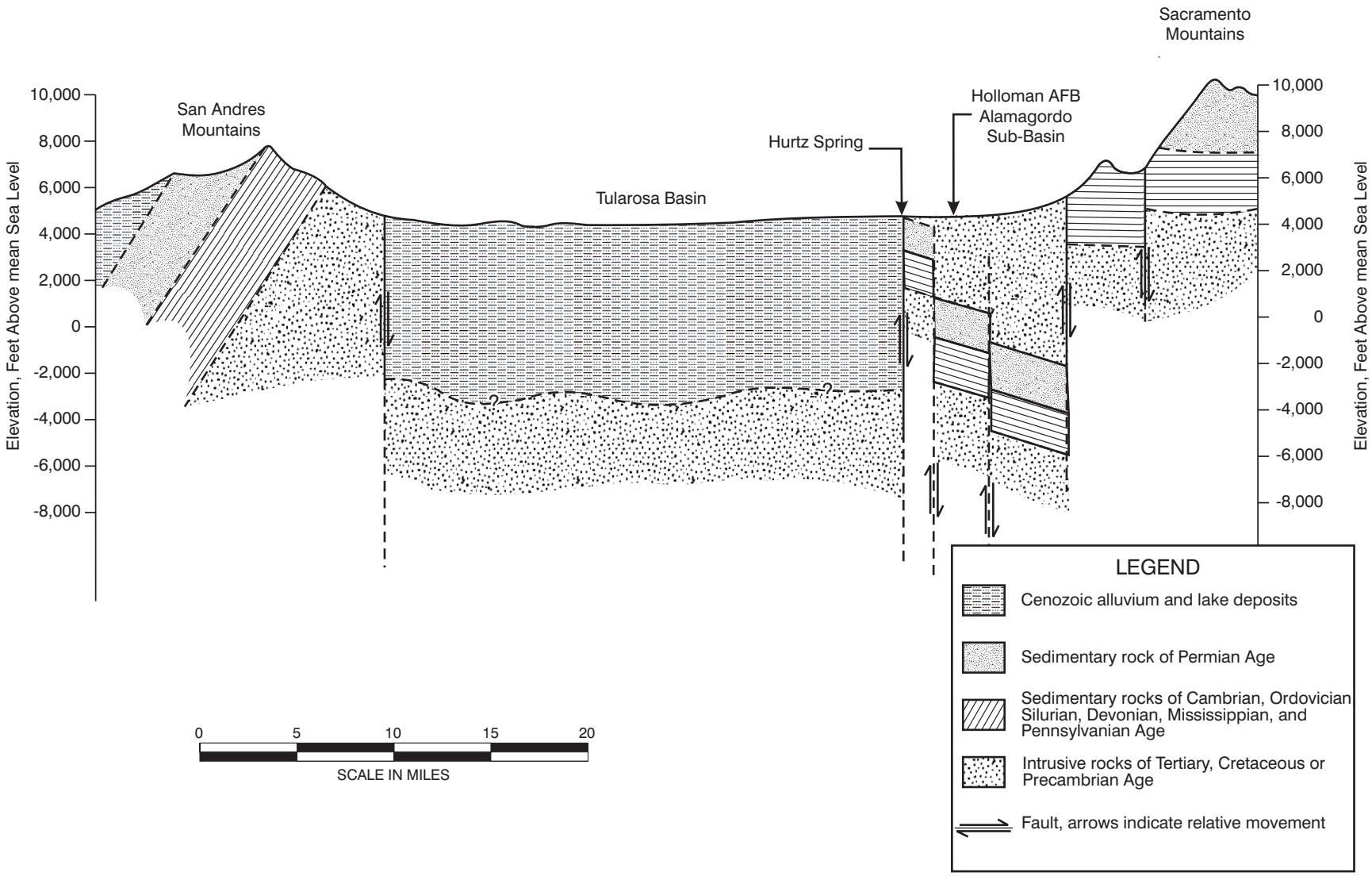
Revised: 11/10/06 TB
Source: Orr and Myers, 1986

Figure 2.4
Geologic Map of the Tularosa Basin



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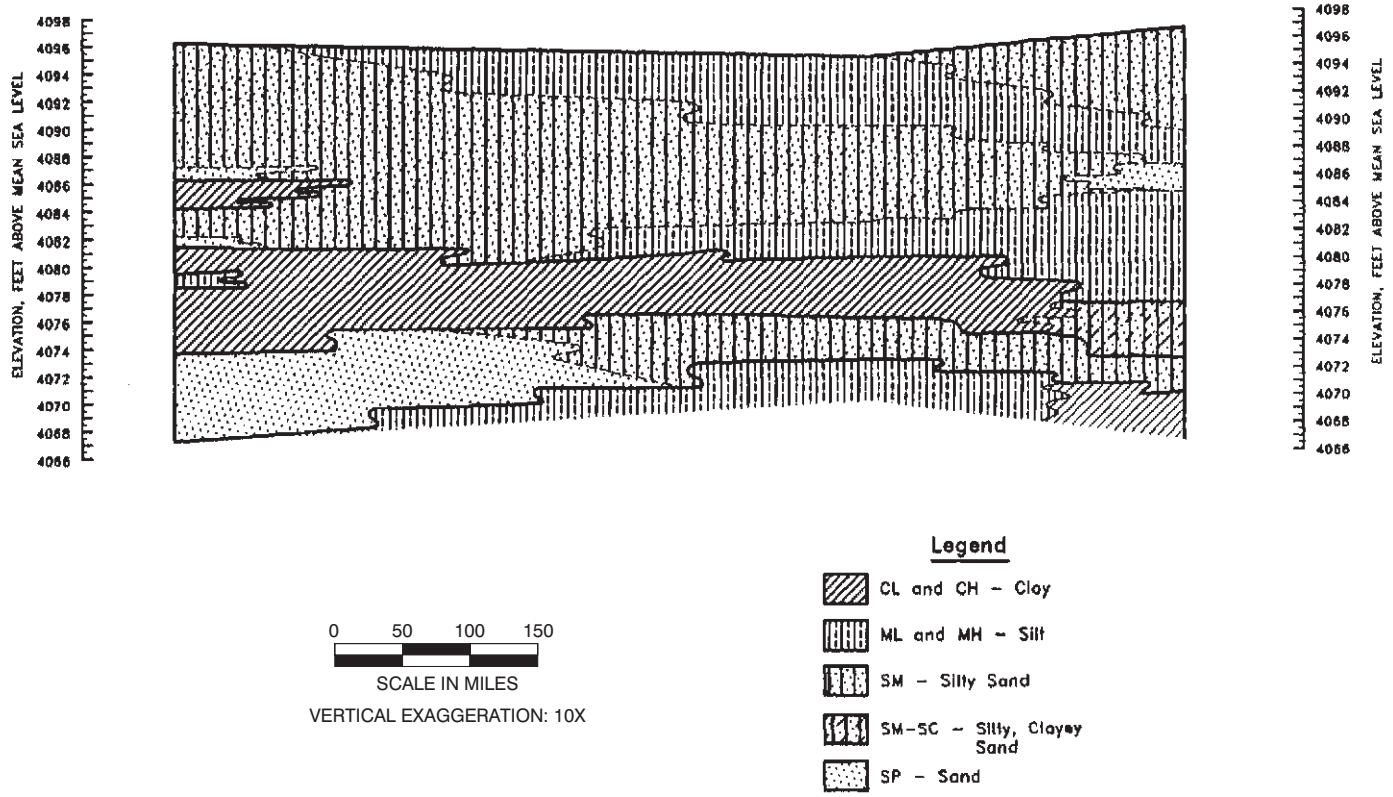
Revised: 11/10/06 TB
Source: Radian, 1992

Figure 2.5
Generalized Cross Section
Tularosa Basin



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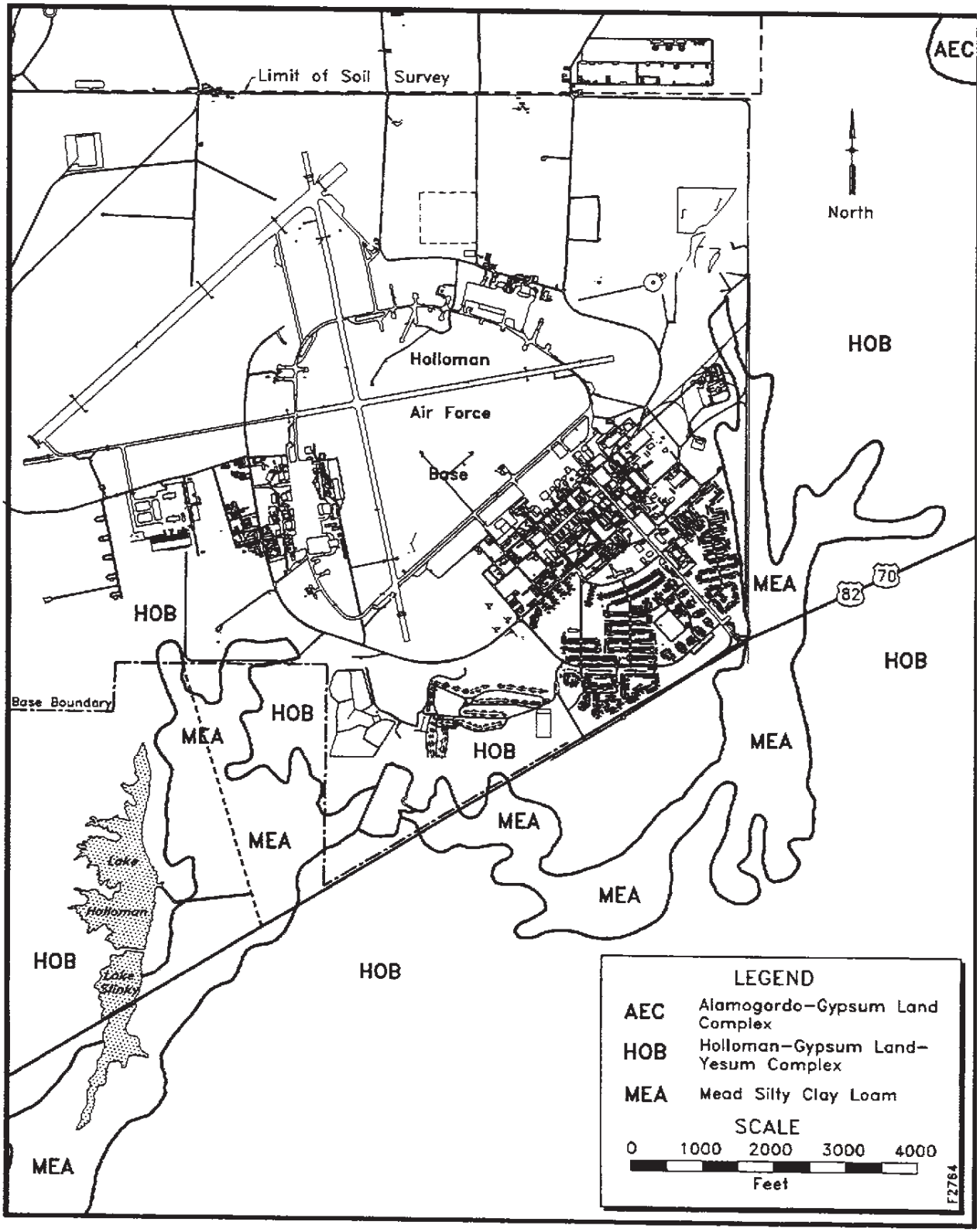
Revised: 11/10/06 TB
Source: Radian, 1992

Figure 2.6
Generalized Near-Surface Geologic Cross Section
Holloman AFB



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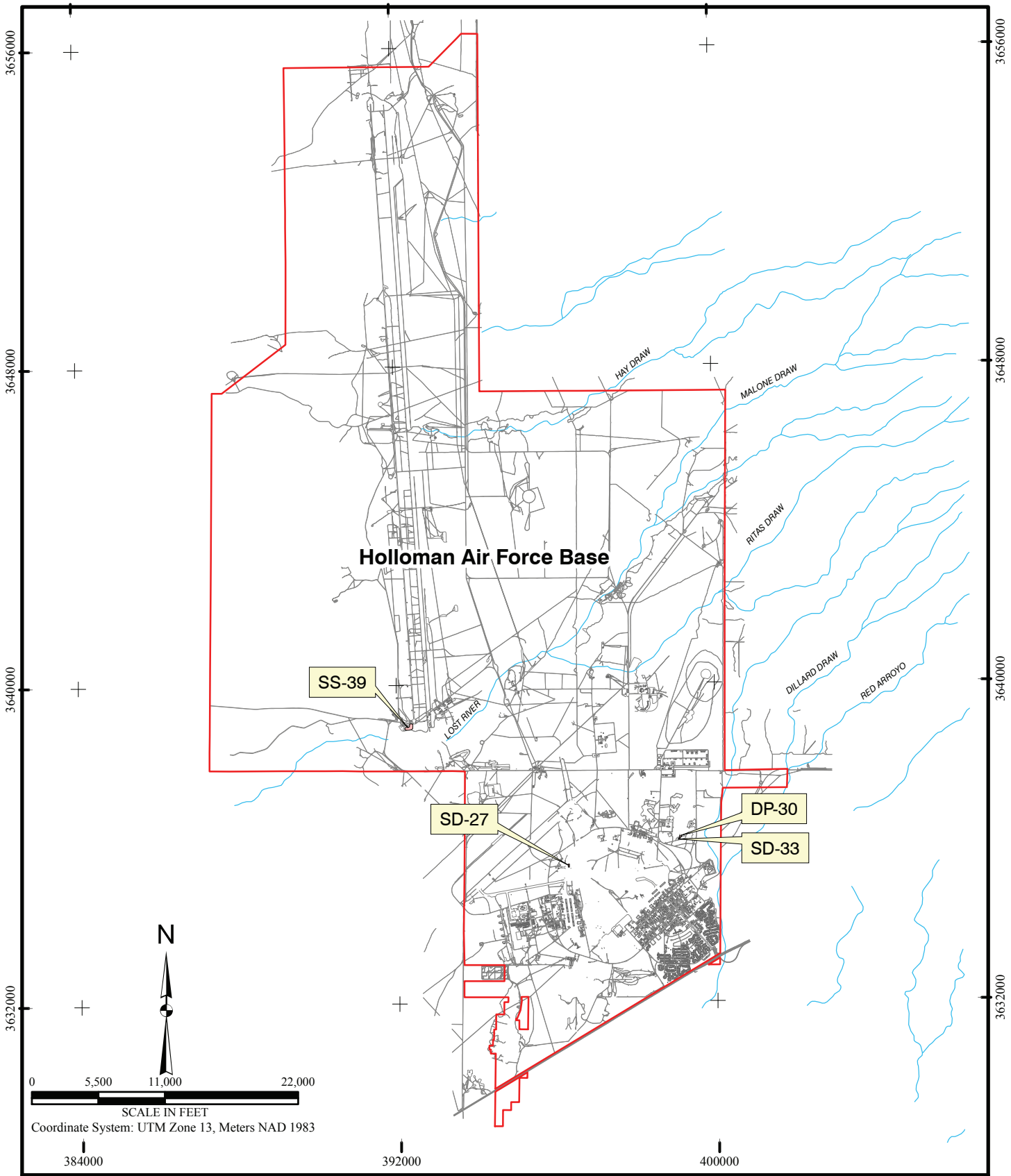
Revised: 11/10/06 TB
Source: USDA, 1981

Figure 2.7
Distribution of Soils at Holloman AFB



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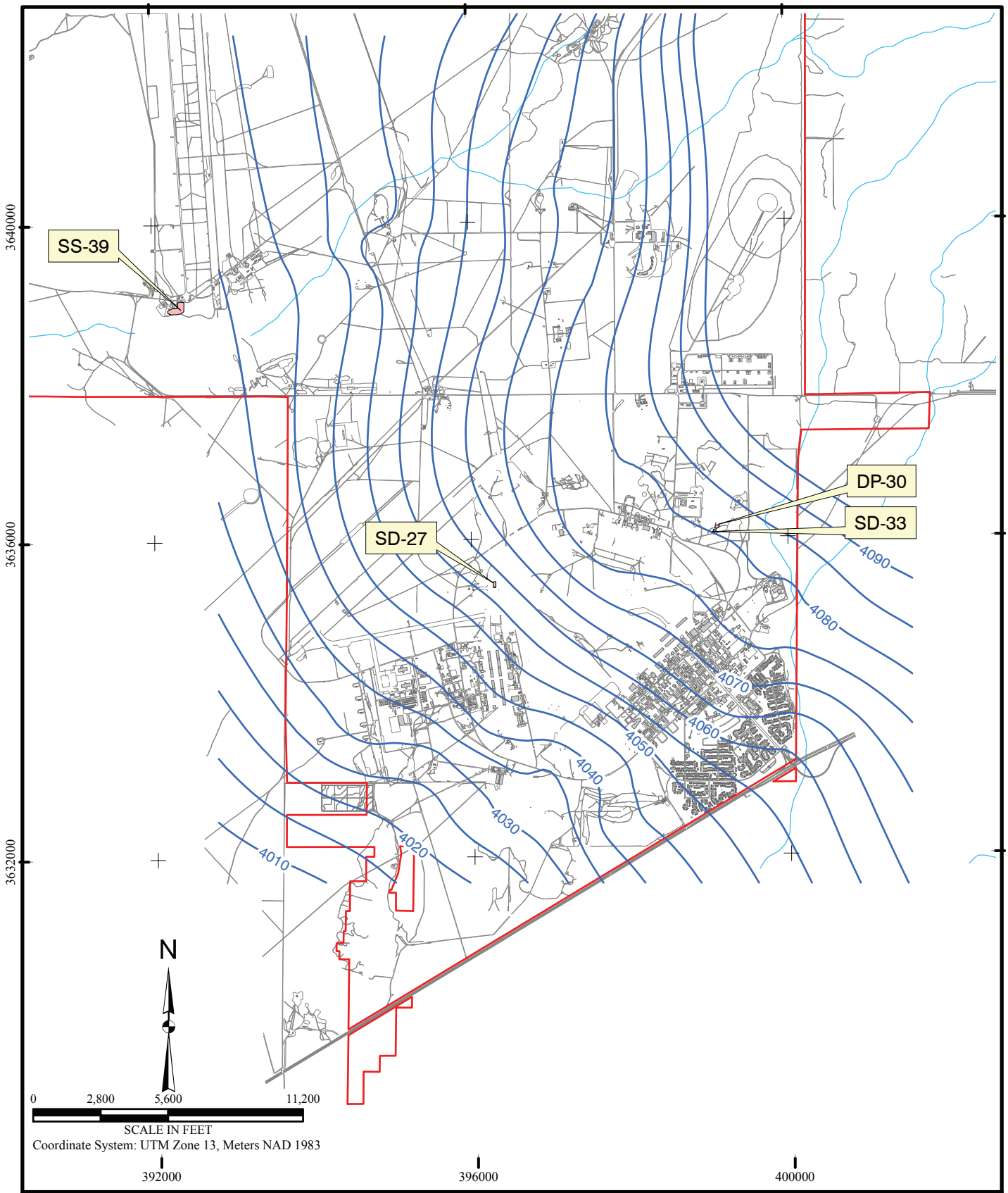
Revised: 11/13/06 TB
Map Source: Holloman AFB

Legend

- Holloman AFB Boundary
- Building/Structure
- Operable Unit Boundary (Approx.)

Figure 2.8
Surface Drainage
Holloman AFB



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Revised: 11/10/06 TB
Map Source: Holloman AFB

Legend

- Holloman AFB Boundary
- Building/Structure
- Operable Unit Boundary (Approx.)
- 1993 Groundwater Contour and Associated Groundwater Elevation (ft MSL)

Figure 2.9
Groundwater Elevation Contour Map
Holloman AFB

3.0 DP-30 / SD-33 (SWMU 113) - GREASE TRAP / COOKING GREASE DISPOSAL PITS

Due to the close proximity of ERP site DP-30 (the Grease Trap) to ERP site SD-33 (the Cooking Grease Disposal Pits), and the similarity of waste disposal practices at the two sites, they were investigated as one unit.

3.1 LOCATION

ERP sites DP-30 and SD-33 are located in the southeastern portion of Holloman AFB, northwest of the airfield and Sabre Road and west of the fire department training area. The locations of DP-30 and SD-33, with respect to the surrounding facility, are shown on Figure 2.1.

The sites are located on opposite sides of an unpaved and unnamed service road, approximately 15 feet apart. The unnamed service road connects the two sites to Sabre Road and provides vehicle access. Several highly restricted buildings are located near the two sites; consequently, unauthorized access to the DP-30/SD-33 area is prohibited.

3.2 SITE DESCRIPTION

DP-30 and SD-33 are unpaved and undeveloped and moderately vegetated with shrubs, grasses, and cacti. An aerial photograph of the two sites is presented as Figure 3.1. Photographs of the two sites are included in Appendix A.

DP-30 is located immediately north of the unpaved service road and encompasses approximately 0.76 acres. Several linear depressions, remnants of former disposal and site investigation trenches, cross the site in primarily northwest-southeast and secondary northeast-southwest orientations. No remnant of the former disposal pit, noted during the 1991 RI site visit, was observed. In addition, no soil staining, stressed vegetation, or waste material disposed at the site were observed on the surfaces of the sites.

SD-33 is located south of the unpaved service road and encompasses approximately 0.17 acres. A semi-circular shaped soil berm, approximately 4 feet high and 50 feet long and composed primarily of reworked native soil, is presented along the northern edge of SD-33. Several metal signs indicate the area to be a former disposal unit. As with ERP site DP-30, several linear depressions, remnants of former disposal and site investigation trenches, cross the site in a northwest-southeast orientation.

Four groundwater monitoring wells, designated MW30&33-01 through MW30&33-04, were observed around the two sites. The locations of the wells are depicted on Figure 3.1. Monitoring well MW30&33-01 was located north of DP-30 while wells MW30&33-02 through MW30&33-04 were located south of ERP site SD-33.

3.3 WASTE HISTORY

From 1972 to 1979, shallow trenches were dug and reportedly received wastes from base grease traps, oil/water separators, and grit from the wastewater treatment system. One interviewee during the RFA indicated that quantities of various pesticides (diazinon, malathion, pyrethrum) were also disposed of here; however, this statement could not be verified (HGL, 2005a), and the RFI data do not indicate pesticide disposal. Bioenvironmental Engineering personnel identified ERP site SD-33 as the disposal site for cooking grease from base kitchens. In addition, personnel from Exterior Plumbing indicated that the DP-30/SD-33 pits were occasionally used to dispose Primate Research lab sewage when the sewer line clogged and a vacuum truck was used to evacuate the line. Prior to 1988, the Water and Wastewater Department used the area for grit disposal. The personnel who conducted disposal activities from 1980 to 1988 indicated that the pits were used for oil-water separator sludge disposal as well as possible uncontrolled dumping.

3.4 SITE-SPECIFIC ENVIRONMENTAL SETTING

3.4.1 Topography

The topography of DP-30 and SD-33 is relatively flat with an overall gentle southerly dip of approximately 0.3 ft/ft. The topography of the two sites has been modified by the former trenches and soil berm. Five waste pits were originally identified at the sites during the RI. Typically these waste pits were approximately 40 to 50 feet long and between 2 and 3 feet wide. The depths of the pits varied between 2.5 and 9 feet bgs. During the RI, an active pit, approximately 50 feet long, 5 feet wide, and 10 feet deep was also observed.

As part of this supplemental RFI, a visual inspection of the two sites was conducted prior to initiating field activities. No visual evidence of the former waste pit observed during the 1991 RI was observed. Approximately 16 linear depressions, most likely remnants of the former disposal trenches and 1991 RI investigation trenches, were observed criss-crossing the two sites. The locations of the 1991 identified linear depressions and the 2006 identified linear depressions are presented on Figure 3.1.

3.4.2 Surface Water

No surface water bodies or surface water drainage features were observed within, crossing, or bounding either site. Due to the unpaved and moderately vegetated condition of the two units, the arid climate, and the presence of numerous linear depressions composed of reworked soils, precipitation falling onto the site soils will most likely evaporate, be transpired, or infiltrate into the underlying soils.

3.4.3 Soils

The soils beneath DP-30 and SD-33 are classified by the USDA Soil Conservation Service as belonging to the well-drained, sandy loam and gypsum of the Holloman-Gypsum Land-Yesum complex (USDA, 1981). The soils of this association are formed from alluvial and eolian gypsiferous sediments. The Holloman unit makes up about 35% of the complex and is

described as being a light brown to pink, very fine, sandy loam with high gypsum content. The soil is moderately permeable, calcareous, and mildly to moderately alkaline. The Gypsum land unit makes up about 30% of the complex and is described as being a soft to hard white gypsum, typically overlain by less than one inch of very fine, sandy loam. The Yesum unit, which makes up 20% of the complex, is light brown to pinkish-white, very fine sandy loam that is also high in gypsum. The Yesum unit is moderately permeable, calcareous, and mildly alkaline (USDA, 1981).

3.4.4 Geology

The DP-30 and SD-33 geologic information presented below was obtained during the 1991 RI, as summarized in the supplemental RFI workplan (HGL, 2005a), and from this supplemental RFI subsurface soil investigation. The previously presented geologic conceptual site model has been refined through the incorporation of the subsurface stratigraphic data obtained during these subsurface supplemental RFI field activities. A cross section of the subsurface lithology is presented as Figure 4.2. Soil boring and monitoring well borehole logs prepared during the 1991 RI and this supplemental RFI are attached as Appendix B.

In the undisturbed soils surrounding ERP sites DP-30 and SD-33, the soils are primarily underlain with clayey silt and silty sand units. In the northern and central portions of the DP-30/SD-33 area, the clayey silt and silty sand units appear to be interfingered in a pancake stratigraphy. The silty sand unit thickens to the southeast. In the south central portion of the site, 2 to 3 foot thick sandy clay lenses are present, with a thicker sequence of sandy clay centered around MW-30&33-03 below 18 feet bgs.

Based on the supplemental RFI subsurface investigation, desiccated waste was observed only within the linear depressions (i.e., waste pits) observed crossing the sites. Not all of the observed trenches contained waste material. The waste material consisted primarily of pale to dark yellowish orange/brown to black reworked soil, sands and silts, with elevated photoionization detector (PID) readings. Debris consisting of stained soils, plastic sheeting, and plastic fragments were observed within the linear trenches. The waste material varied in thickness and occurrence between DP-30 and SD-33. When present, the top of the waste material ranged from 0.9 feet to 3 feet bgs while the base of the waste material ranged from 2.6 feet to 8.8 feet bgs. Thickness of the waste material ranged from 1.6 feet to 6.2 feet. Waste material and evidence of waste was not observed in soil borings completed within six inches to one foot of the linear depressions containing waste, indicating that lateral migration of waste from the pits did not occur.

3.4.5 Hydrogeology

Groundwater occurs beneath DP-30 and SD-33 as a shallow unconfined aquifer within the underlying clayey silt, silty sand, and sandy clay sediment. In 1991, the top of the underlying watertable was approximately 20 feet bgs and flowed in a southerly direction. Based on the 1991 RI measured water elevations, the watertable beneath the two sites has a very low hydraulic gradient of 0.0006 ft/ft. Using the calculated hydraulic gradient, the

horizontal groundwater velocity beneath the two sites was estimated to be approximately 0.2 to 1.0 feet per year (ft/year).

A groundwater potentiometric surface map of the underlying watertable based on the July 2006 supplemental RFI groundwater sampling event and the January 2007 compliance LTM event are included as Figures 3.3 and 3.4. As shown on the groundwater potentiometric maps, a slight groundwater gradient is present beneath DP-30 and SD-33, with groundwater flowing to the south. A slight mounding of the underlying watertable was observed in the July 2006 and January 2007 sampling events, most likely reflecting higher infiltration rates associated with the former DP-30 disposal trenches.

3.5 PREVIOUS INVESTIGATIONS

As summarized in the Supplemental RFI workplan (HGL, 2005a), several investigations were previously conducted at ERP sites DP-30/SD-33. A discussion of the former investigations and the associated results, as presented in the supplemental RFI workplan (HGL, 2005a), is presented below. The locations of the previous investigation soil and groundwater samples are depicted on Figure 3.5.

3.5.1 1991 Remedial Investigation

In 1991, a RI was conducted on ERP sites DP-30 and SD-33. The RI consisted of a site visit, trenching, soil sampling, and the installation and sampling of several onsite groundwater monitoring wells. At the time of the RI, the terrain of the two sites was determined to be fairly flat and sparsely vegetated. An active pit, approximately 5 feet wide, 10 feet deep and 50 feet long was open at the site. The ground surface north and south of the active pit was void of all vegetation and appeared to be recently graded. Former disposal pit sites were identified north of the active pit by the presence of linear surface depressions in the soil from the compaction of the back-filled waste pits.

Trenching activities were conducted to help locate and delineate burial pits. Eleven trenches were dug across the area in an effort to identify as many waste pits as possible. Five waste pits were originally identified by the linear depressions observed in the surface soils resultant from compaction and settling of the backfilled waste pits. These suspected waste pits were confirmed as burial pits by the exposure of waste material during the trenching activities. Five additional waste pits not identified by surface features were discovered at the site during trenching. A total of 10 waste pits were identified and marked for soil borings.

The identified waste pits were approximately 40 to 50 feet long and between 2 and 3 feet wide. The depths of the pits at the soil boring locations varied between 2.5 and 9 feet bgs; waste material were covered by soil composed of silty sands and sandy silts. The RI drilling logs, included in Appendix B, show the thickness of the waste and give detailed descriptions of the waste material encountered at each waste pit.

A sample of the waste material from a discrete interval was selected for volatile organic compound (VOC) analysis; other analyses were conducted on a composite sample of the waste

from each pit. These composite samples and samples obtained in native soils below the waste were analyzed for semi-volatile organic compounds (SVOCs), total metals, organochlorine and organophosphorus pesticides, polychlorinated biphenyls (PCBs), oil and grease, gross alpha/beta, and chlorinated herbicides. Soil and waste material metals and gross alpha/beta analytical results are summarized on Table 3.1. Oil and grease, pesticides, PCBs, herbicides, SVOCs, and VOCs analytical results are summarized on Table 3.2.

No constituents exceeded human health based SSLs and background in the soil intervals beneath the waste with the exception of oil and grease. This demonstrates that soils beneath the waste have not been adversely affected by the waste with any significance.

The cadmium concentrations in all of the waste samples, with the exception of waste collected from boring SB30&33-06, exceeded the construction worker SSL. Cadmium was unusually elevated in only one sample, obtained from boring SB30&33-07. The remaining constituent concentrations detected in the waste samples collected from borings SB30&33-03, SB30&33-04, and SB30&33-06 did not exceed any of the human health-based SSLs; although, oil and grease concentrations exceeded the 1,000 mg/kg total petroleum hydrocarbon (TPH) cleanup standard in place at the time for Holloman AFB. Aroclor 1254, a PCB, exceeded the SSL for all receptors in the waste sample collected from boring SB30&33-05. It exceeded only the residential SSL in the waste sample collected from borings SB30&33-01, SB30&33-08, and SB30&33-09. Trichloroethene (TCE) exceeded the SSL for residential and industrial receptors in borings SB30&33-08 and SB30&33-09, and the residential SSL only in the waste sample collected from boring SB30&33-10. Ethylbenzene exceeded residential and industrial SSLs in the waste samples collected from borings SB30&33-02 and SB30&33-10. Lead exceeded SSLs for all receptors in the waste samples obtained from borings SB30&33-07 and SB30&33-10. Chromium exceeded the residential and construction worker human health-based SSLs in the waste sample collected from boring SB30&33-07. In summary, VOCs (TCE and ethylbenzene), Aroclor 1254, and metals (chromium, cadmium, and lead in boring SB30&33-07, and lead in boring SB30&33-10) are constituents of concern detected in the waste material that exceeded human health-based SSLs and background for one or more receptors.

As part of the RI, four monitoring wells (designated as MW30&33-01 through MW30&33-04) were installed upgradient (MW30&33-01) and downgradient (MW30&33-02 through MW30&33-04) of the identified trenches. The locations of the four monitoring wells are depicted on Figure 3.1. Field slug tests were conducted during the RI to estimate hydraulic conductivity of the lithology around each monitoring well. The hydraulic conductivity for the DP-30/SD-33 groundwater monitoring wells were determined to be:

- MW30&33-01: 4.23 feet per day (ft/day);
- MW30&33-02: 0.61 ft/day;
- MW30&33-03: 0.22 ft/day; and
- MW30&33-04: 0.92 ft/day.

In addition, the groundwater velocity was estimated to be 0.2 to 1.0 ft/year), based on a very low hydraulic gradient of 0.0006 ft/ft.

As part of the RI, one round of groundwater samples were collected and analyzed for VOCs, SVOCs, oil and grease, total metals, gross alpha/beta, organochlorine and organophosphorus pesticides, PCBs, chlorinated herbicides, anions, and TDS. These results are summarized in Table 3.3. No constituents were detected above background and groundwater standards. Low concentrations (i.e., below standards) of halogenated VOCs were detected in monitoring well MW30&33-04. TDS concentrations ranged from 19,000 mg/L in MW-0&33-01, the upgradient well, to 40,000 mg/L (MW-30&33-04).

The risk screen performed as part of the RI indicated unacceptable risk to Sites DP-30 and SD-33 based on several constituents in the soil exceeding action levels. Therefore, it was recommended that the sites should proceed beyond an RI to a Feasibility Study (FS)/Corrective Measures Study (CMS)

3.5.2 Corrective Measures Study Plan

A CMS plan was prepared submitted in November 1992 (Radian, 1992). The CMS plan stated an Engineering Evaluation/Cost Analysis (EE/CA) would be performed to determine the appropriate remedial alternative. A subsequent decision document, signed by NMED in September 1995 and the Base Commander in November 1995, alternatively recommended NFA with groundwater monitoring based on an absence of exposure pathways and receptors and the remote location of the sites.

3.5.3 Long Term Monitoring

LTM at DP-30/SD-33 commenced in 1995 and continues to date. The last LTM event was conducted in January 2007. LTM analytical results are summarized in Table 3.4. As shown in Table 3.4, only TCE has been present above background and groundwater standards, and predominantly in well MW30&33-04, over the life of the LTM program. Comparison to standards is for reference only, since TDS is greater than 10,000 mg/L at the site.

Initially LTM activities required groundwater samples be analyzed for the following constituents: VOCs, metals, pesticides, and herbicides. With the approval of NMED, the required analyte monitoring list was reduced over time until limited in 2003 to solely chloroform, 1,1-dichloroethane, TCE, arsenic, barium, iron, and selenium.

The 2003 LTM represented the fifth round (10 years) of sampling at the site in accordance with the signed Decision Document. The 2003 LTM report recommended closeout because no contaminants were detected above NMGWQ standards, and decreasing concentrations were in evidence over the life of the monitoring program. In 2004 USAF and NMED correspondence, NMED required additional characterization of the DP-30/SD-33 waste and surrounding soils before considering a NFA recommendation. NMED further stated that LTM could not be suspended and required a plan be submitted for quarterly groundwater monitoring at the

SWMU. In a follow-up response letter, dated January 17, 2007, NMED agreed that semi-annual LTM was acceptable for ERP sites DP-30/SD-33 (NMED, 2007).

During the 2005 LTM event, the target analyte list was increased to include 10 VOCs, 16 metals, organochlorine pesticides, chlorinated herbicides, and TDS (Bhate Environmental Associates [Bhate], 2006). TCE was detected for the first time in the upgradient well, MW-30&33-01, and was detected at a concentration (26.6 μg/L) exceeding the U.S. EPA MCL. In addition, TCE was also detected slightly above the MCL in well MW-30&33-03 (7.6 μg/L) but was not detected in well MW-30&33-04, a well historically containing TCE above the MCL. No other analytes were detected above criteria. As stated previously, groundwater standards are not applicable; consistent with historic data, TDS concentrations in the 2005 event ranged from 14,300 mg/L (MW-30&33-04) to 30,200 mg/L (MW-30&33-03).

3.6 SUPPLEMENTAL RFI FIELD ACTIVITIES

Supplemental RFI activities were conducted at DP-30 and SD-33 between September 2005 and July 2006 in accordance with the supplemental RFI workplan (HGL, 2005a). Minor deviations from the workplan occurred and are discussed under the respective topics. Soil cuttings, decontamination water, and purged groundwater generated during the supplemental RFI and January 2007 LTM event were handled in accordance with Holloman AFB standard operating procedure (SOP) 9 (Field Management of Investigation-Derived Waste). A sampling/analytical summary table is provided as Table 3.5.

3.6.1 Non-Invasive Geophysical Survey

A non-invasive terrain conductivity survey of DP-30 and SD-33 was conducted in September and October 2005. Based on the waste reportedly disposed at the two units, metallic and magnetic susceptible debris were not anticipated at the sites. Consequently, a magnetic survey of the DP-30/SD-33 area was not performed.

The DP-30/SD-33 geophysical survey results were presented in a technical memorandum (HGL, 2006c), submitted to NMED in January 2006 as Appendix A of the Response to NOD, Supplemental RFI Work Plan (HGL, 2006a). The technical memorandum documented the geophysical survey field activities and associated assumptions, discussed the results of the survey, presented conclusions based on the obtained data, and included the geophysical survey report. For the completeness of this supplemental RFI report, the information, results, and conclusions provided in the geophysical survey technical memorandum have been included in Section 3, the site-specific section referring to DP-30 and SD-33. A copy of the geophysical survey report included in the technical memorandum has also been included in this report as Appendix C.

Prior to surveying DP-30/SD-33, the Geonics Limited Model EM-31 Mark2 terrain conductivity instrument was utilized to measure lateral soil conductivity changes at another ERP site. Due to the naturally high conductive soils encountered at Holloman AFB, the metal-detection (in-phase) component of the electromagnetic survey was adversely and significantly compromised and could not be used as proposed in the RFI work plan (HGL, 2005a).

Consequently, the electromagnetic survey strategy was modified to utilize only the quadrature (conductivity) component of the electromagnetic method.

The EM-31 Mark2 system operates on magnetic induction and Maxwell's Law, whereby an electromagnetic field is transmitted through the soil and the associated electrical field current is ultimately picked up by the receiver and correlated directly to soil conductivity. The Mark2's fixed intercoil spacing of 3.66 meters (12 feet) produces an ellipsoidal electromagnetic field that is approximately 20 feet wide and 40 feet high and typically penetrates subsurface soils to a depth of 20 feet and laterally 10 feet. However, the highly conductive soils present beneath Holloman AFB most likely lessened the effective signal penetration depth to approximately 10 feet. At DP-30/SD-33, the electromagnetic survey was conducted on a 10-foot line spacing. A two reading per second sampling rate was employed, translating into a 1.5 station spacing along each line.

As presented in the soil gas and geophysical survey technical memorandum, included as Appendix A of the response to NOD (HGL, 2006a), low conductivity anomalies (blue areas depicted on Figure 3.6), consistent with oil and grease contamination, were identified within the surveyed area. The locations of the anomalies correspond to the approximate locations of DP-30 and SD-33; however, the sizes of the anomalies suggest the two sites may be larger than previously determined. The SD-33 anomaly is an inverted "L" shaped anomaly approximately 100 feet long and ranges in width from 40 to 80 feet. The anomaly appears to be comprised of multiple linear and several oblong shape anomalies, possibly reflecting former disposal trenches and pits. The DP-30 anomaly is more amorphous in shape with less differentiation within the anomaly, and extends approximately 240 feet long and ranges in width from approximately 100 to 160 feet. The inferred boundaries, based on the conductivity results, of the waste units are depicted on Figure 3.6.

3.6.2 DPT Soil and Waste Characterization Assessment

3.6.2.1 Subsurface Drilling

A subsurface soil investigation was conducted at DP-30 and SD-33 to analytically characterize the waste materials present on site, assess the soil quality beneath the waste material, and verify the boundaries of the former waste pits. The subsurface investigation was conducted using a direct push technology (DPT) drill rig in May 2006. Due to limited information on historic waste disposal practices, the DPT subsurface soil investigation targeted potential waste disposal trenches identified from the geophysical survey data (Section 3.6.1). The locations of the supplemental RFI soil borings are shown on Figure 3.7.

During borehole advancement, continuous soil sampling was conducted until the maximum desired depth was achieved, considered to be approximately 2 feet below the base of the waste material. Based on previous investigation results, waste materials are present to a maximum depth of 8.8 feet bgs. Consequently, supplemental RFI soil borings were generally completed between 10 and 15 feet bgs. Soils were retrieved from the subsurface using a 4-foot long, stainless steel, 2-inch diameter macrocore sampler fitted with disposable acetate liners. The sampler was advanced into the underlying soils in four foot increments. Upon achieving a four

foot push, the sampler was removed from the subsurface and the acetate line extracted from the sampler. The liner was then opened and the contained soils were lithologically characterized, visually inspected, and field screened using a PID. No elevated PID readings were detected in the soil cuttings. The collected data including the presence or absence of waste material and evidence of contamination was recorded on individual boring logs for each location. The associated boring logs are included in Appendix B.

Initially, 14 soil borings were proposed for DP-30 and 6 soil borings were proposed for SD-33. However, during the subsurface investigation, waste material was not observed in many of the borings completed within the geophysical-defined boundaries of the two sites. As a result, 11 additional soil borings were drilled at the sites to collect a sufficient number of waste samples for analytical characterization. Twenty soil borings (designated SB30-01 through SB30-20) were completed within and around ERP site DP-30 and 11 soil borings (designated SB33-01 through SB33-11) were completed within and around ERP site SD-33. The locations of the completed soil borings are shown on Figure 3.2.

During the subsurface soil investigation, loose soils were encountered across the entire site, resulting in moderate to poor sample recoveries. In addition, voids were also encountered in many of the linear depressions (i.e., former trenches) crossing the sites, possibly indicating poor historic compaction practices and/or dessication of the waste material resulting in borehole collapse. DP-30 and SD-33 lithologic logging results and visual observations are summarized in Section 3.4.4 and presented on individual drilling logs included in Appendix B.

3.6.2.2 Waste Sampling for Hazard Classification

Waste material encountered during borehole advancement was sampled and analyzed for Toxicity Characteristic Leaching Potential (TCLP) VOCs; TCLP SVOCs; TCLP metals; pH; RCRA Toxicity, Ignitability, Corrosivity, and Reactivity (sulfide and cyanide) to determine, should the material be removed, the appropriate means of disposal.

Within ERP site DP-30, waste material, generally consisting of light yellow to dark brown silty sand containing pieces of plastic sheeting, was encountered in six borings (i.e., SB30-11 through SB30-13, SB330-17, SB30-18, and SB30-20) at various depths ranging from 3 to 9 feet bgs. Cresols (m&p), barium, cadmium, lead, and mercury were the only analytes detected within the six waste samples collected from DP-30. None of the detected analytes exceeded TCLP regulatory levels. No TCLP VOCs were detected in any of the waste samples retrieved from DP-30.

Within ERP site SD-33, the waste material, consisting of blackish brown to dark brown fine-grained silty sand containing pieces of clear plastic sheeting and cut timber, was encountered in three soil borings (SB33-07, SB33-08, and SB33-10) primarily between 4 and 5 feet bgs in borings SB33-08 and SB33-10, and at 2 to 3 feet bgs in boring SB30-07. Only barium and cadmium were detected in the three waste samples collected from SD-33. Neither metal was detected at concentrations exceeding TCLP regulatory levels. No TCLP VOCs and SVOCs were detected in the waste samples retrieved from SD-33.

Table 3.6 summarizes the TCLP analytical results of the DP-30 and SD-33 waste samples. Waste sample data sheets are included in Appendix D. The data indicate that the material, should it be removed and disposed, does not require management as a hazardous waste.

3.6.2.3 Subsurface Soil Sampling

In accordance with the supplemental RFI workplan (HGL, 2005a), native soil samples, generally consisting of partially-cemented fine-grained silty sand, were collected immediately below identified waste material as well as surrounding the waste disposal trenches/pits and analyzed for VOCs, SVOCs, PCBs, organochlorine and organophosphorus pesticides, herbicides, gasoline-range total petroleum hydrocarbons (G-TPH), diesel-range total petroleum hydrocarbons (D-TPH), and Target Analyte List (TAL) metals.

Due to borehole collapse, a soil sample could not be collected directly below the waste material encountered in boring SB30-11. Rather, a boring (i.e., SB30-16) was completed immediately adjacent to the SB30-11 linear depression and angled to retrieve a soil sample from below the waste material.

DP-30 (Grease Trap): Methylene chloride, a common laboratory contaminant, 7 pesticides, and 18 metals were detected in the soil samples (Table 3.7) collected from the DP-30 disposal boundary delineated by the geophysical survey. The highest pesticide concentrations detected around DP-30 varied between borings, but were typically detected in borings SB30-02 (4,4'-DDT), SB30-04 (endrin aldehyde and endrin ketone), and SB30-07 (beta-endosulfan, endosulfan sulfate, and methoxychlor). The highest concentrations of 13 of the 18 metals detected in the boundary soil samples were reported in soil sample SB30-02-0305. No constituents exceeded SSLs with the exception of manganese, in one boundary sample.

With respect to the soil samples collected immediately beneath waste material present at DP-30, three VOCs, 12 pesticides, 1 herbicide, PCB-1254, G-TPH, D-TPH, and 21 metals were detected. Analyte concentrations varied across the site; however, the herbicide naled was detected only in sample SB30-12-0709 and PCB-1254 was detected only in sample SB30-13-0910. The maximum concentrations of the 3 VOCs (chloromethane, n-butylbenzene, and n-propylbenzene) and the 12 pesticides were typically detected in boring SB30-16, SB30-17, SB30-18, and SB30-20. G-TPH was detected only in boring SB30-16. D-TPH was detected in three borings, SB30-13, SB30-16, and SB30-20, with the highest concentration (161 mg/kg) detected in boring SB30-16. Maximum metal concentrations were detected in all but one of the subsurface soil samples, with the majority of the maximum concentrations detected in sample SB30-18-0709. Again, no constituents exceeded SSLs, with the exception of manganese in one sample underlying the waste.

Manganese was the only metal detected at concentrations exceeding applicable screening criteria. The metal's concentration in sample SB30-02-0305 (357 mg/kg), a boundary soil sample, and SB30-18-0709 (250 mg/kg), collected below identified waste, exceeded the construction worker NMED SSL (150 mg/kg). Concentrations were below residential and industrial SSLs. It is likely that the manganese is unrelated to the waste material based on the

absence of other contaminants, such as oil and grease. Furthermore, SB30-02-0305 is well beyond the soil berm and outside of the area delineated by the geophysical survey.

SD-33 (Cooking Grease Disposal Pits): Table 3.8 summarizes the SD-33 soil analytical positive detections. Fluoranthene and 18 metals were detected in the SD-33 boundary assessment soil samples. Fluoranthene was detected only in sample SB33-01-0809 while maximum metal concentrations were detected in either sample SB30-02-0809 or SB30-11-0607.

With respect to the soil samples collected beneath identified SD-33 waste materials, 3 VOCs (ethylbenzene, n-propylbenzene, and p-cymene), bis(2-ethylhexyl)phthalate, dimethoate, PCBs 1254 and 1260, and 19 metals were detected. The highest concentrations of all 3 VOC analytes were detected in boring SB33-07, collected at 4 to 5 feet bgs, while D-TPH, bis(2-ethylhexyl)phthalate, and PCBs 1254 and 1260 were detected in boring SB33-08 at 10 to 12 feet bgs. Organophosphorus pesticide, dimethoate, was detected in both soil samples. Maximum metal concentrations were detected in both soil samples; however, mercury was detected only in sample SB33-08-1012.

None of the organic compounds or metals detected in the SD-33 soil samples were detected at concentrations exceeding SSLs. No organochlorine pesticides or herbicides were present in the SD-33 soil samples.

3.6.3 Groundwater Monitoring Well Installation

In response to the supplemental RFI workplan, NMED requested the installation of a groundwater monitoring well immediately downgradient but adjacent to DP-30 (NMED, 2006b). The additional groundwater monitoring well, designated MW-30&33-05, was installed in June 2006 using a DPT drill rig fitted with 4¼-inch hollow stem augers (HSAs). The location of the new well is depicted on Figure 3.1.

The MW-30&33-05 borehole was drilled to 30 feet bgs, approximately eight feet below the top of the underlying watertable, measured at the time of drilling. During monitoring well borehole advancement, soil samples were continuously collected using a 2 foot long, 2-inch diameter, stainless steel split spoon sampler for lithologic logging, PID field screening, and visual inspection. Lithologic logging data, PID results, and visual observations were recorded on the MW30&33-05 drilling log and have been summarized above in Section 3.4.4 and included in Appendix B.

Upon achieving the desired depth, a 2-inch diameter monitoring well constructed of a 10-foot long, 0.010-slotted, Schedule 40 polyvinyl chloride (PVC) well screen and Schedule 40 PVC riser pipe was installed straddling the underlying watertable. In accordance with the workplan, the well was positioned straddling the watertable with approximately 8 feet of screen set below the watertable and 2 feet above. The well was completed with an above ground steel monument set within a 2-foot by 2-foot by 6-inch concrete pad and surrounded by 3 concrete filled bollards. Monitoring well construction information for the previously installed monitoring wells and MW-30&33-05 has been summarized on Table 3.9.

After installation, the newly installed monitoring well was developed using an electronic submersible pump and dedicated, disposable tubing. During the development process, water quality parameters were monitored in five minute increments using a water quality meter and separate turbidity meter to determine when well development was achieved, as defined in the workplan. Water quality parameter measurements were collected every 5 minutes and development was achieved. Well development was considered achieved when three consecutive measurements of the monitored water quality parameters (i.e., temperature, pH, specific conductance, dissolved oxygen (DO), oxidation reduction potential (ORP), and turbidity) were within:

- plus or minus (±) 1 degree Celsius (°C);
- ± 0.1 pH units;
- ± 10 % for specific conductance;
- ± 10% for DO;
- ± 10% for ORP; and
- Less than or equal to 10 nephelometric turbidity units (NTUs) or ± 10% difference.

Approximately 130 gallons of water were purged from MW-30&33-05 during the development process. The well development data sheet for MW-30&33-05 is included in Appendix D.

3.6.4 Supplemental RFI and January 2007 Compliance LTM Groundwater Sampling

The four pre-existing monitoring wells (MW30&33-01 through MW30&33-04) and the newly installed monitoring well (MW30&33-05) were purged and sampled in July 2006 in accordance with the workplan (HGL, 2005a) as modified by the supplemental RFI response to NOD (HGL, 2006a). The collected groundwater samples were analyzed for VOCs, total and dissolved TAL metals, and TDS. Dissolved metals samples were collected in the field by running the sample water through a 0.45 micron in-line filter. Groundwater purging and sample data sheets for the two DP30/SD33 monitoring wells are located in Appendix D.

Monitoring wells MW30&33-01, MW30&33-04, and MW30&33-05 were purged and sampled using a peristaltic pump fitted with disposable tubing and employing low-flow purging and sampling methods. During the purging process using a peristaltic pump, water quality parameters were measured using an in-line water quality meter and separate turbidity meter. Well purging was considered complete when stabilization of the water quality parameters was achieved in accordance with the workplan (HGL, 2005a). Upon achieving stabilization, the in-line water quality meter was disconnected and the appropriate sample containers filled. Due to poor well yields, MW30&33-02 and MW30&33-03 were purged and sampled using disposable, polyethylene bailers. During the purging process, the disposable bailers were lowered slowly and carefully into the water column in an effort to minimize agitation of the water column. Water quality parameters were obtained after removing every casing volume. Approximately three well casing volumes were purged from the two wells prior to sampling. Upon removal of three casing volumes, the disposable bailer was used to fill the appropriate

sample containers. July 2006 dissolved metals samples were filtered by the laboratory; January 2007 dissolved metals samples were field filtered.

The July 2006 supplemental RFI and January 2007 LTM groundwater data are presented on Table 3.10. Sixteen VOCs, 16 total and/or dissolved metals, and TDS were detected in the groundwater samples collected during the July 2006 supplemental RFI and the January 2007 semi-annual compliance monitoring events. During the two events, TDS concentrations ranged from 21,500 mg/L to 35,400 mg/L, which is consistent with the December 2005 LTM data.

Of the VOCs detected, only TCE was detected at concentrations exceeding U.S. EPA MCLs. TCE was detected above the U.S. EPA MCL of 5 μg/L in MW-30&33-03 during the January 2007 sampling event (21.1 μg/L); in MW-30&33-04 during the July 2006 (14.2 μg/L) and January 2007 (15.6 μg/L) sampling events; and in MW-30&33-05 during the July 2006 (59.3 μg/L) and January 2007 (58.1 μg/L) sampling events.

Iron was detected at 1,410 μg/L in well MW-30&33-05 during the January 2007 sampling event, exceeding the irrigation NMGWQ standard (1,000 μg/L); however, the metal was not detected in the filtered metals sample, indicating the reported concentration was associated with sample turbidity. None of the dissolved metals data obtained from the January 2006 sampling event exceeds regulatory criteria.

3.7 ASSESSMENT OF DATA RESULTS

A general description of the DP-30/SD-33 data assessment results is provided below. Detailed information regarding the data and assessment findings and responses are included in the data validation packages included in Appendix E.

A total of thirty-two soil samples including three duplicate sample and six groundwater samples including one duplicate sample were submitted for laboratory analysis as part of the supplemental RFI. The analytical data for the groundwater samples are presented in sample delivery group (SDG) 6071808 and 7012209. The analytical data for the soil samples are presented in SDG 6052223, 6052304, D6E240388, D6F010162. Table 3.11 identifies the DP-30/SD-33 supplemental RFI samples by SDG.

3.7.1 Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limit met method or contractual requirements. All data reviewed were acceptable. The following minor issues were identified and resolved, including:

- The "J" flagging of several VOCs, SVOCs D-TPH, and metals soil results (in SDG 6052304) for being reported below the reporting limit but greater than the Method Detection Limit (MDL).

- The "J" flagging of several VOCs, SVOCs, D-TPH, and metals soil results (in SDG 6052223) for being reported below the reporting limit but greater than the MDL.

- The "UJ" flagging of reactive sulfide and cyanide results in SDG 6052223 that were not detected, as the extraction and distillation are defined as a semi-qualitative method.

- The "J" flagging of several organophosphate pesticide soil results in SDG D6E240388 for being reported below the reporting limit but greater than the MDL.

- The "JN" flagging of one dimethoate soil result for sample HGLSB33-07-0405 (in SDG D6E240388) for not being within a relative percent difference (RPD) of 40 as described in EPA Method 800B, Section 7.9.

- The "J" flagging of several VOCs, and metals groundwater results (in SDG 6071808) for being reported below the reporting limit but greater than the MDL.

3.7.2 Precision and Accuracy

Quality control (QC) data, including matrix spike (MS) / matrix spike duplicates (MSD), surrogates, and laboratory control sample (LCS) recoveries were used to assess the precision and accuracy for the soil and groundwater samples. The following minor issues were identified and resolved, including:

- The "J" flagging of one pyridine soil result (in SDG 6052304) for having a recovery out of criteria in the MS/MSD pair and in the LCS/LCSD pair.

- The "UJ" flagging of one pentachlorophenol soil result (in SDG 6052304) for having a recovery out of criteria in the MS/MSD pair.

- The "J" and UJ" flagging of several chlorinated pesticide soil results (in SDG 6052304) for having recoveries out of criteria in the MS/MSD pair.

- The "J" flagging of one antimony soil result and the "UJ" flagging of one zinc soil result (in SDG 6052304) for having recoveries out of criteria in the MS/MSD pair.

- The "UJ" flagging of several chlorinated pesticide rinse blank results associated with soil results (in SDG 6052223) for having recoveries low and out of criteria in the water MS/MSD pair.

- The "J" and "UJ" flagging of antimony and zinc results for sample HGLSB33-08-1012 (in SDG 6052223), for having recoveries for antimony and zinc out of criteria in the soil MS/MSD pair associated with QC Batch No. 26829.

- The "J" flagging of the iron result for sample HGLRB06-051806-AL (in SDG 6052223), for having a recovery for iron out of the method criteria in the water MS/MSD pair associated with QC Batch. No. 26872.

- A MS/MSD pair was not analyzed with the organophosphate pesticide and chlorphenoxy herbicide samples in SDG D6F010162. Normally, the associated positive results would be flagged "J." However, all sample results were not detected, so no data qualifier flags were recommended.

- With respect to the January 2007 groundwater compliance LTM samples, the "UJ" and "J" flagging of dissolved antimony, dissolved calcium, dissolved cobalt, dissolved copper, dissolved iron, dissolved magnesium, dissolved manganese, dissolved nickel, dissolved sodium, dissolved thallium, dissolved vanadium, dissolved zinc, dissolved silver, dissolved barium, dissolved cadmium, dissolved chromium, dissolved lead, and dissolved selenium (in SDG 7012209) due to matrix interference.

All soil and groundwater samples were properly preserved and analyzed within the required holding time. The following minor issues were identified and resolved, including:

- The "J" and "UJ" flagging of the re-extracted samples in Preparation Batch 6157599 in SDG D6E240388, for exceeding the holding time of 14 days by three to five days.

- The "X" flagging of the re-extracted samples in Preparation Batch 6160553 in SDG D6F010162, for exceeding the holding time of 14 days by nine days.

All initial and continuing calibration QC criteria were reviewed and were acceptable. The following minor issues were identified and resolved, including:

- The "J" and "UJ" flagging of several organophosphate pesticide results, for having a percent difference (%D) greater than the acceptance criteria.

- With respect to the groundwater compliance LTM samples, the "J" and "UJ" flagging of volatile organics groundwater results (in SDG 7012209), for having a percent difference greater than the acceptance criteria.

The frequency of analysis and percent recoveries (%R) of the second source calibration verifications were reviewed and determined to be acceptable, with the following exceptions:

- The recoveries for six organophosphate analytes - demeton, diazinon, ethyl parathion, malathion, methyl parathion, and phorate – were low and out of

criteria in the LCS associated with Preparation Batch 6149033 and 6151496. The samples were re-extracted, so the samples in the first two preparation batches were flagged "X" and "UX"

- The recovery for phorate was out of criteria in the LCS associated with all organophosphate soil samples in SDG D6F010162. The associated results, which were not detected, were flagged "UJ."

Surrogate spikes were added to all samples, QC checks, and blanks as required by the reference method. All data reviewed were acceptable, except as noted below:

- The percent recovery for the surrogate decachlorobiphenyl was out of criteria of 50.4 to 129 percent at 48 percent in sample HGLSB3012-0709. Since the recovery indicated a low bias, the associated results, which were not detected, were flagged "UJ" to indicate an estimated reporting limit.

- The surrogate percent recovery for decachlorobiphenyl was out of criteria in several samples in SDG 6052223. Since the recovery indicated a low bias, the associated results that were not detected were flagged "UJ" to indicate an estimated reporting limit, and the positive hits were flagged "J" to indicate an estimated value.

- Both surrogates were out of criteria in Sample HGLSBDup-07 in SDG D6E240388. Since the recoveries indicate a low bias, the associated results, all of which were not detected, were flagged "UJ."

3.7.3 Comparability

Comparability represents the confidence with which one data set can be compared to another. In accordance with the approved Quality Assurance Project Plan (QAPP) (HGL, 2005b), data are comparable when collection techniques, measurement methods, and reporting procedures are equivalent for the samples within a sample set. Implementation of appropriate procedures for sampling and shipping, as specified in the QAPP (HGL, 2005b), were performed. Within the data sets, it was concluded that results were comparable to each other.

3.7.4 Representativeness

Representativeness was assessed by use of field duplicate and blank samples. Method and field blank samples were analyzed to determine potential contamination from laboratory or shipping procedures. Overall, representativeness was considered satisfactory, except as noted below.

- For VOC analyses in SDG 6052304, 11 even target analytes were detected in the method blank associated with the water samples in QC Batch No. 26937, of which only toluene was a common laboratory contaminants. Four analytes were detected in the method blank for soil samples in QC Batch No. 26929, and

9 analytes were detected in the method blank for soil samples in QC Batch No. 26968, of which toluene and methylene chloride were common laboratory contaminants. Eleven other target analytes were detected in the trip blank. For the affected results (in SDG 6052304), either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- For VOC analyses in SDG 6052223, 9 target analytes were detected in the method blank associated with the water samples in QC Batch No. 26849, and 3 target analytes were detected in the method blank for soil samples in QC Batch No. 26929. Six other target analytes were detected in the trip blank TB-051706 and 4 target analytes were detected in trip blank TB051806. For the affected results (in SDG 6052223), either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- D-TPH were detected in the water method blank sample HGLRB06-051806-AL. The associated sample result was raised to the reporting limit.

- Sodium and potassium were detected in the water method blank associated with sample HGLRB06-051806-AL. The reporting limit of the sample was raised to the observed value.

- For VOC analyses in SDG 6071808, 8 target analytes were detected in the method blank associated with the samples in QC Batch No. 28352. Fourteen target analytes were detected in both the method blank associated with the only trip blank and the trip blank itself. For the affected results (in SDG 6071808), either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- Dissolved metals data for the July 2006 round were rejected because results between the sample and duplicate were not comparable, nor were the data representative when compared with historic or 2007 metals results. Filtration at the laboratory likely compromised the samples, as this was not an issue in the January 2007 round, when samples were field-filtered.

With respect to the groundwater compliance LTM data:

- For VOC analyses in SDG 7012209, several target analytes were detected in the method blank associated with the groundwater samples in QC Batch Nos. 34075 and 34077. The affected results are "U" qualified as analytical artifacts. In addition, three target analytes were detected in the trip blank associated all samples in this SDG. All methylene chloride results are qualified "U" based on method blank contamination. Several target analytes were detected in the equipment blanks associated with all samples in this SDG. All methylene chloride results are "U" qualified based on method blank contamination.

- For metals analyses in SDG 7012209, method blanks were contaminated with total and dissolved potassium and total sodium. The total potassium detection in sample MW-30/33-04-011707 was less than the associated action level and was qualified "U."

- An equipment blank in SDG 7012209, RB-011707 is associated with the samples collected on 01/17/07 and was free from contamination with the exception of total copper, total nickel, total potassium, and total vanadium. The total copper, total nickel, and total vanadium detections in several groundwater samples were less than the associated action level and were qualified "U."

- For metals analyses in SDG 7012209, total aluminum had a high relative percent difference in the field duplicate and sample MW-30/33-05-011707. The total aluminum in groundwater samples MW-3/33 DUP and MW-30/33-05-011707 are "J" qualified.

3.7.5 Completeness

Completeness is defined as the percentage of the total number of analytical results requested that are judged to be valid, including estimated (J-flagged) values, in accordance with the QAPP (HGL, 2005b). Completeness of the laboratory analysis for the DP-30/SD-33 samples was determined to be 93.4%, which is below the supplemental RFI data quality objective (DQO) of 95%. The rejection of the filtered metals data from the July 2006 supplemental RFI groundwater sampling event resulted in the below DQO completeness percentage. As discussed above, the rejected data was most likely attributed to laboratory filtering methods. Consequently, all future dissolved metals samples will be filtered in the field to prevent future issues with dissolved metals analysis.

3.7.6 Usability

Based on the data review and validation, the accepted analytical data were determined to be useable for their intended purpose.

3.8 NATURE AND EXTENT OF CONTAMINATION

3.8.1 Contaminant Distribution

A summary of analytes detected at concentrations exceeding regulatory screening criteria segregated by media is included as Table 3.13.

3.8.1.1 Waste Material

Previous investigation results determined the presence of waste material within several linear depressions, most likely former disposal trenches/pits, which criss-cross DP-30 and SD-33. Based on supplemental RFI terrain conductivity surveying results, a visual site inspection, and a subsurface boundary site assessment, the maximum extent of the two sites has been determined. DP-30 encompasses approximately 0.76 acres while SD-33 encompasses

approximately 0.17 acres. The average depth to the top of the waste residual at both sites is 3 feet bgs while the average depth to the base of the waste residual at both sites is 7 feet bgs. Based on the collected data, approximately 4,900 cubic yards (yd^3) of waste residual is present beneath DP-30 and 1,100 yd^3 of waste residual is present beneath SD-33. The boundaries of the two sites are depicted on Figure 3.8. The soil borings where waste has been encountered have also been highlighted on Figure 3.8.

Physical descriptions of the waste present at the sites, when encountered during the previous and supplemental RFI field activities, are summarized on Table 3.12. In the 15 years since the RI, it appears that the waste material has dried to a residual and is now intermingled with soils. Voids are now present where the waste material, when wet, formerly occupied more volume. It is also important to note that elevated organic vapors are no longer prevalent, when comparing 1991 to 2006 data obtained during borehole advancement.

At SD-33, only oil and grease was detected above screening criteria in the waste samples. No targeted organics, VOCs or SVOCs, were present above SSLs, indicating that the material may have been composed primarily of cooking grease.

At DP-30, TCE, total xylenes, PCB-1254, four metals, and oil and grease were detected above screening criteria in the waste samples. TCE concentrations above screening criteria were detected in three waste samples, all collected from linear depressions located in the south-central section of DP-30. Total xylenes and PCB-1254 were detected above NMED SSLs in one sample collected from boring SB30&33-02 at 2 to 8 feet bgs. PCB-1254 was also detected above residential SSLs in sample SB-30&33-09. Cadmium, chromium, and lead were detected above SSLs in boring SB30&33-07. Analytes detected in the waste material at concentrations exceeding screening criteria are also presented Figure 3.8.

Oil and grease, PCB-1254, manganese, and mercury were detected above screening criteria in a soil sample collected from a 1.5 to 8 feet bgs in a trench near the southeastern corner of DP-30. This sample was collected from a soil interval typically containing waste; however, no waste was documented within the sample's associated soil boring. Since the sample was collected from a trench at a depth typically containing waste, and given the analyte concentrations, it is likely waste is present in the sampled trench.

TCLP analyses of the waste material during the supplemental RFI indicate the residual is non-hazardous.

3.8.1.2 Soil Contamination

The sample locations with the analyte exceedances are shown on Figure 3.9 along with the analytes and the associated concentrations.

Contamination beyond and below the waste interval was limited to oil and grease in one sample and manganese in two samples. One soil sample collected immediately below identified waste contained oil and grease concentrations above the NMED residential and industrial TPH SSLs (200 mg/kg), at a concentration of 1,100 mg/kg, at DP-30. Manganese is likely unrelated to

site activities given that the maximum manganese concentration is well beyond areas affected by disposal of grease and the absence of other contaminants.

3.8.1.3 Groundwater Contamination

TDS groundwater concentrations beneath DP-30/SD-33 have ranged from 21,500 mg/L to 35,400 mg/L. The TDS analytical data is depicted on a per well per event basis on Figure 3.10. Since TDS concentrations exceed 10,000 mg/L, U.S. EPA MCLs and NMGWQ standards do not apply. However, for reference purposes, the DP-30/SD-33 groundwater data have been screened against the U.S. EPA MCLs and NWGWQ standards as described in the following paragraphs.

TCE and thallium have been the only two analytes detected at concentrations exceeding screening criteria. Thallium was detected slightly above the U.S. EPA MCL (2.0 μg/L) in wells MW30&33-01, MW30&33-02, and MW30&33-03 during the December 2005 LTM event. The highest thallium concentration was 7.8 μg/L in well MW30&33-02, slightly exceeding the thallium concentration in the upgradient well MW30&33-01 (6.8 μg/L). Thallium was not detected in any of the wells during the January 2007 LTM event. TCE concentrations have exceeded the U.S. EPA MCL of 5 μg/L in MW-30&33-03, MW-30&33-04, MW-30&33-05, and MW-30&33-01, with the MW30&33-04 August 1995 and September 1999 concentrations also exceeding the NMGWQ standard (100 μg/L). As shown on Figure 3.10, TCE concentrations within well MW30&33-04 have continued to decrease from 150 μg/L in September 1999 to 15.6 μg/L in January 2007. Based on the January 2007 TCE concentrations, an ellipsoidal TCE plume appears to be present beneath and immediately downgradient of DP-30 and SD-33. The inferred location of the TCE plume is depicted on Figure 3.10.

3.8.2 Fate and Transport

3.8.2.1 Waste Materials

Based on subsurface soil investigation activities, desiccated waste material is present at DP-30 and SD-33 within former disposal trenches below an average depth of 3 feet bgs. Within the disposal trenches, the waste was typically observed as a dry residual mixed with native soils as a single unit, or as individual layers separated by uncontaminated soils. Borings completed immediately adjacent to former disposal trenches contained no waste and no analytes of concern above screening criteria except for oil and grease in one sample, suggesting the material is located solely within the former trenches and has not migrated.

PCB-1254, oil and grease, and mercury were detected in one 1991 soil sample above screening criteria from a soil interval typically containing waste. Although there was no indication in the boring log of the sample being collected from a former disposal trench, it is likely the sample represents waste material disposed at DP-30.

3.8.2.2 Soil Contamination

As stated in Section 3.6.2.3, oil and grease (in one sample) and manganese (in two samples) were the only constituents identified above screening criteria in soil samples collected beneath/beyond the DP-30 waste. The manganese concentrations above the construction worker SSL are likely not associated with site activities.

No contaminants of concern were detected beneath or beyond the SD-33 waste. No soil contamination was observed outside former disposal trenches or around the geophysical-defined boundaries of DP-30 and SD-33. In addition, no soil contamination was observed at the soil/groundwater interface during the installation of monitoring well MW30&33-05.

3.8.2.3 Groundwater Contamination

Groundwater beneath DP-30/SD-33 has been impacted with TCE. The TCE groundwater contamination can be attributable to former site activities; TCE was historically found in waste present in three former disposal trenches located in the south-central portion of DP-30. The decrease in TCE concentrations in the groundwater demonstrate that the residual material is not acting as a continuous source of groundwater contamination.

Groundwater water level measurements collected during historic LTM events indicate groundwater flows primarily in a southerly direction along a very low hydraulic gradient. Both the southerly flow direction and low hydraulic gradient explains the minimal migration of TCE beyond the extent of SD-33.

TDS concentrations have consistently exceeded 10,000 mg/L at the sites. Based on the groundwater's TDS concentrations, groundwater standards do not apply.

3.9 CONCLUSIONS

A maximum of 6,000 yd^3 of residual waste may be present beneath DP-30/SD-33 based on geophysical survey data and subsurface soil investigations. This calculation assumes waste is present beneath the entire site; however, during supplemental RFI activities, waste was only encountered within former disposal trenches. Consequently, the total waste beneath the site may be less. The waste material contains oil and grease, PCB-1254, total xylenes, arsenic, cadmium, chromium, lead, and TCE above NMED SSLs. TCLP analysis indicates the waste is non-hazardous.

Soils beneath and beyond the residual waste material in the former trenches are not contaminated, with exception of one oil and grease sample below the waste at DP-30. Two manganese concentrations above SSLs do not appear to be associated with the two sites based on a lack of other contaminants within the same samples and their locations.

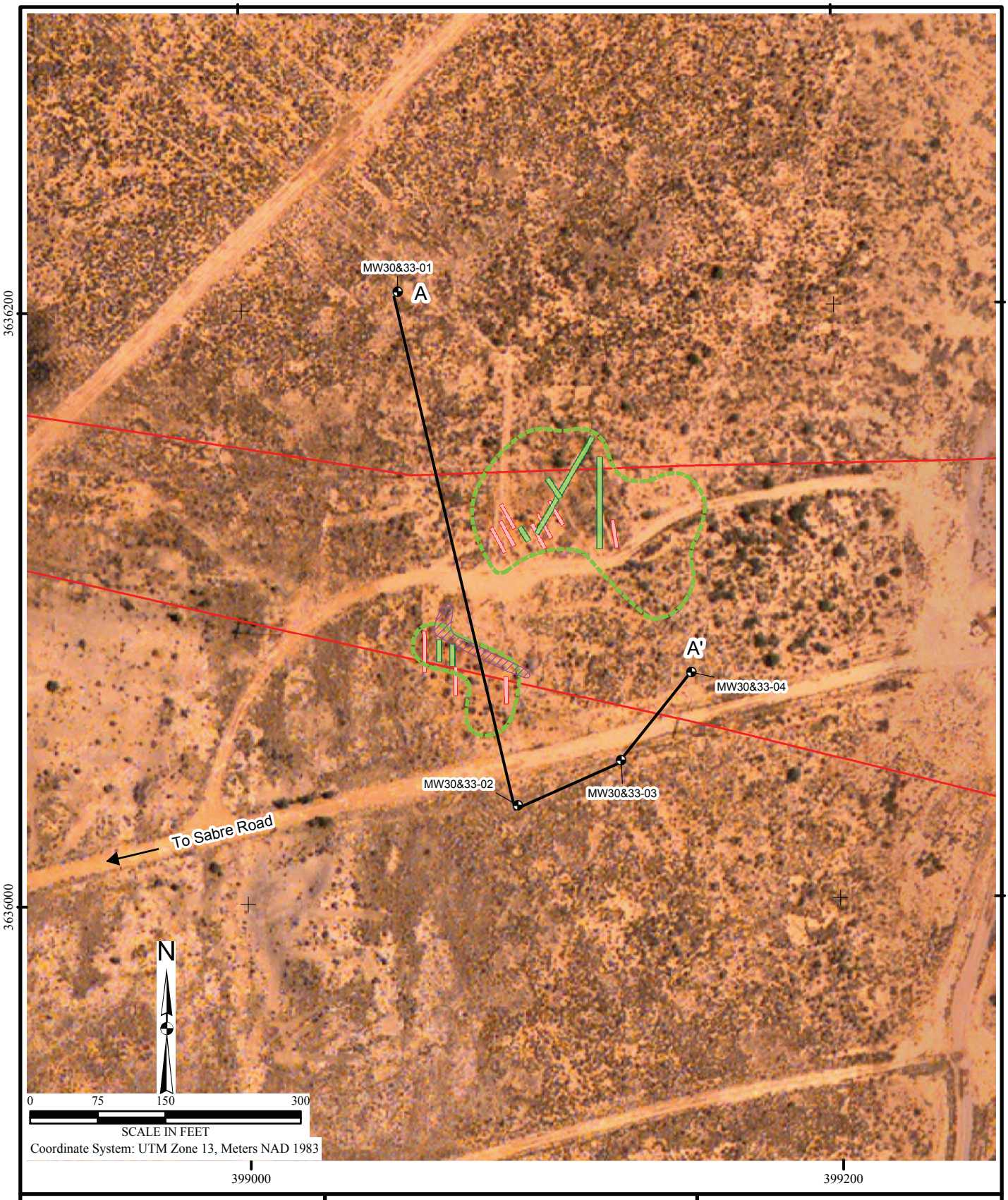
Based on the lack of targeted compounds above SSLs in the SD-33 material it appears that the residual there is primarily cooking grease. Groundwater beneath and immediately downgradient of DP-30/SD-33 has been impacted with TCE, most likely originating from

several trenches located within the south-central portion of DP-30. TDS concentrations exceed 10,000 mg/L indicating that groundwater standards do not apply. Evaluation of the groundwater within MW-30&33-05, located immediately downgradient of DP-30, indicates TCE concentrations are less than 60 μg/L. Evaluation of the MW-30&33-04 TCE data shows the TCE concentrations have continually decreased since compliance LTM began in 1995, suggesting that the site is not acting as a continuous source of contamination to groundwater.

3.10 RECOMMENDATIONS

The residual waste material, although historically shown to contain contaminants above SSLs, is present in the subsurface, and is not available for exposure to receptors. The material is confined to the former disposal trenches. TCE concentrations in the groundwater immediately downgradient of DP-30, as measured in MW-30&33-04, have been decreasing, indicating that the residual is not acting as a continual source of groundwater contamination. In summary, the material poses little to no risk under the current and projected land use scenario. Removal and off-site disposal of the material, assuming 6,000 tons, would cost upwards of $600,000. While feasible, removal would not provide a significant additional level of protectiveness to human health and the environment beyond what currently exists. It is therefore recommended that land use controls be implemented as a remedial measure to prevent uncontrolled exposure to the material. It is also recommended that the remaining six rounds of semi-annual groundwater monitoring be performed for TCE analysis only, to confirm that TCE levels in the groundwater have stabilized. At the end of the monitoring period, provided the plume is stable, NFA under NMED Criterion 5 will be appropriate with land use controls as the remedial measure.

FIGURES



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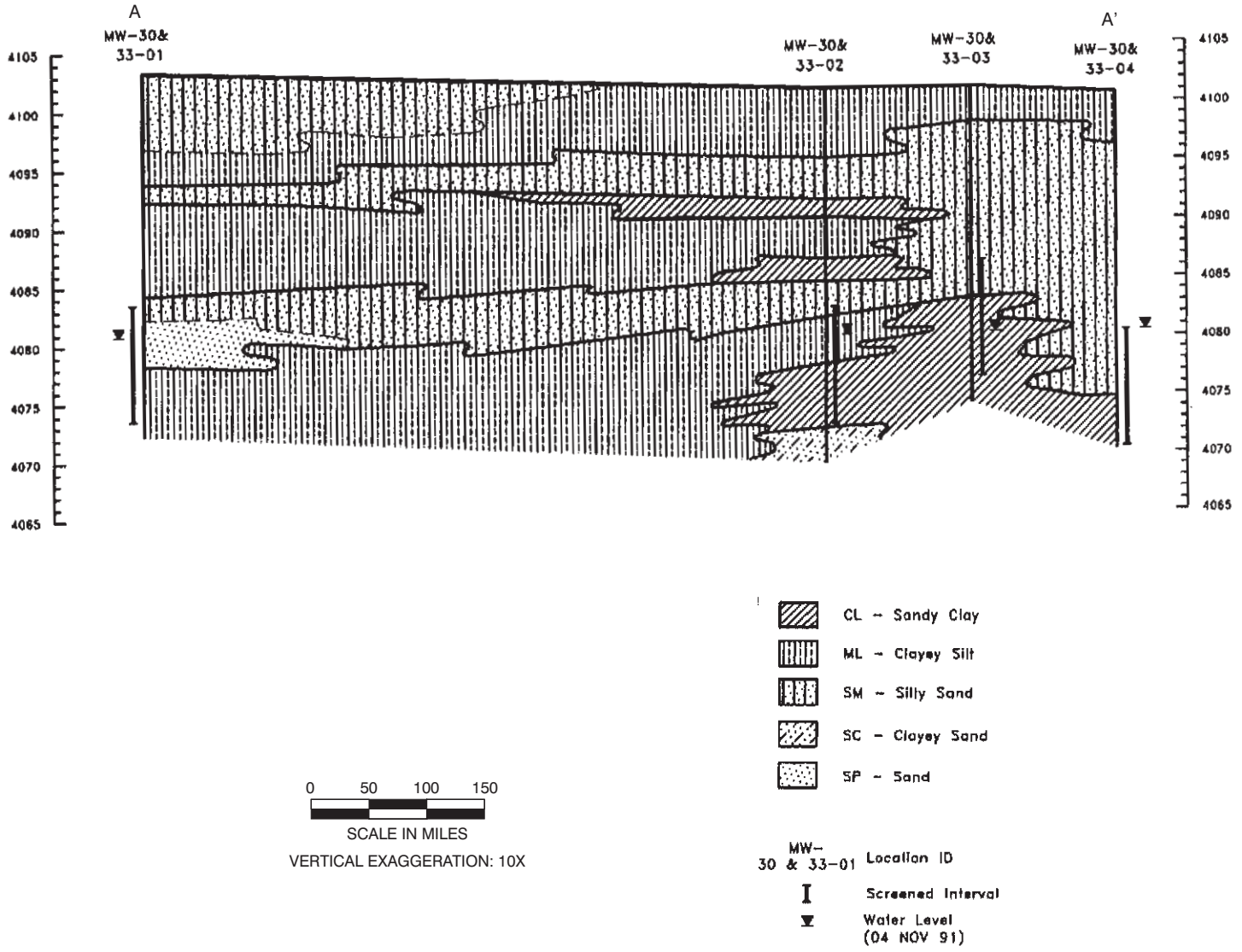
Project: AFC002-037-04-11-02
Revised: 05/15/07 PS
Map Source: Holloman AFB

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- A — A' Line of Section
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Monitoring Well (Existing)

Figure 3.1
DP-30 and SD-33
Layout Map



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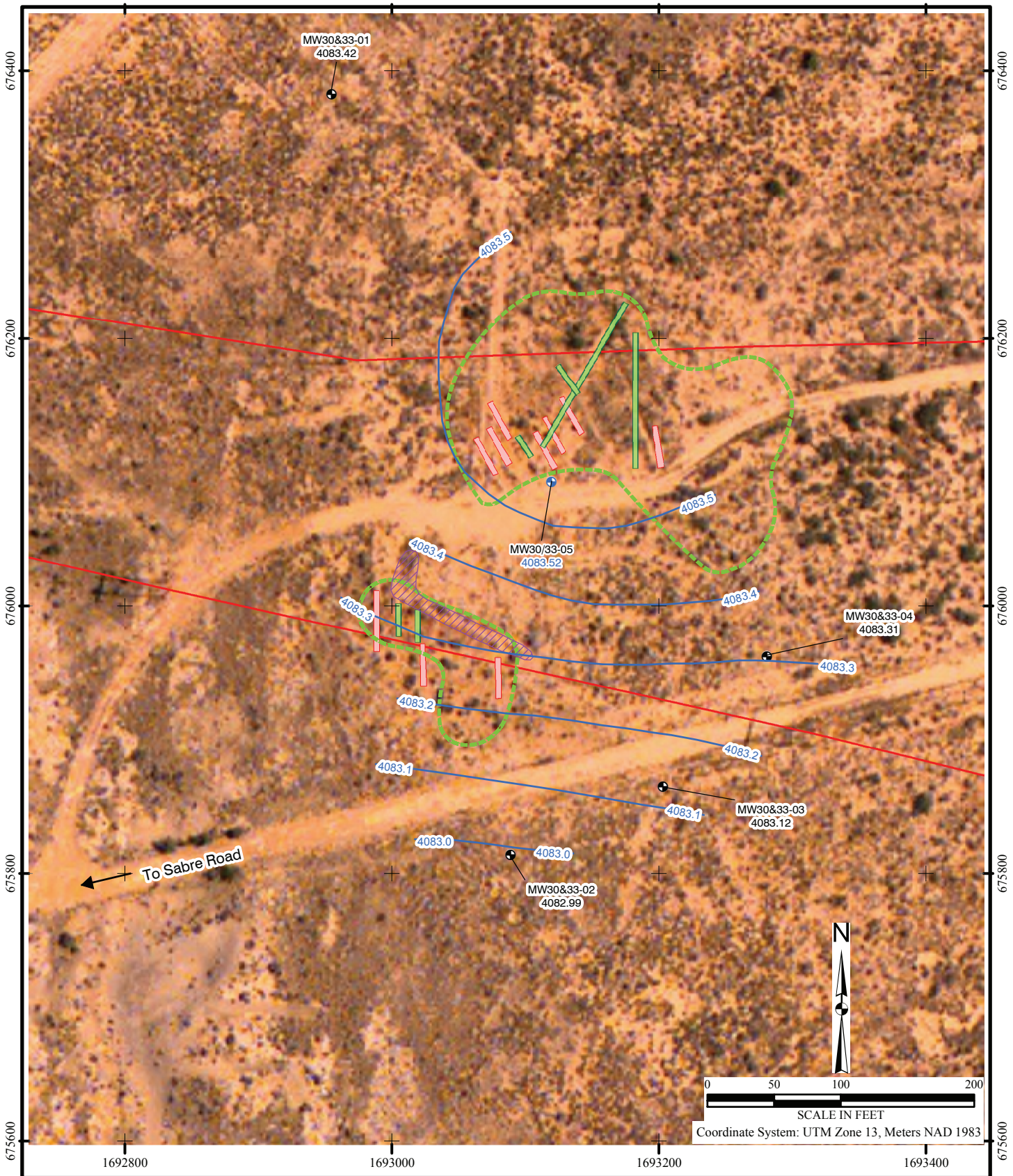
Project: AFC002-037-04-08-05
Revised: 05/15/07 PS
Source: Radian, 1992

Figure 3.2
DP-30/SD-33
Geologic Cross Section



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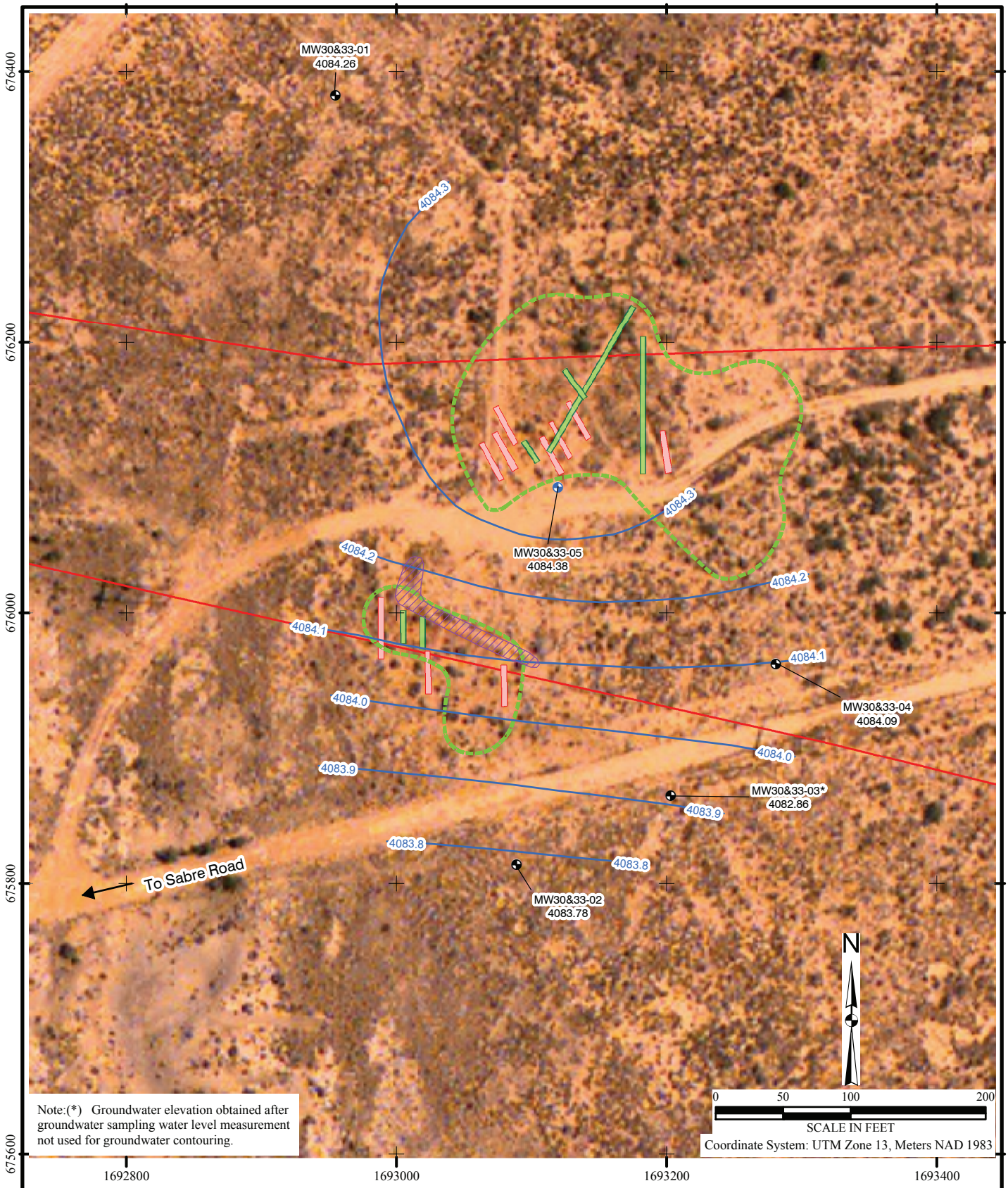
Revised: 05/18/07 PS
Map Source: Holloman AFB

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- 4083 — Groundwater Contour and Elevation
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Monitoring Well (Existing)
- Supp RFI Well

Figure 3.3
DP-30/SD-33
Groundwater Potentiometric Surface Map
July 2006



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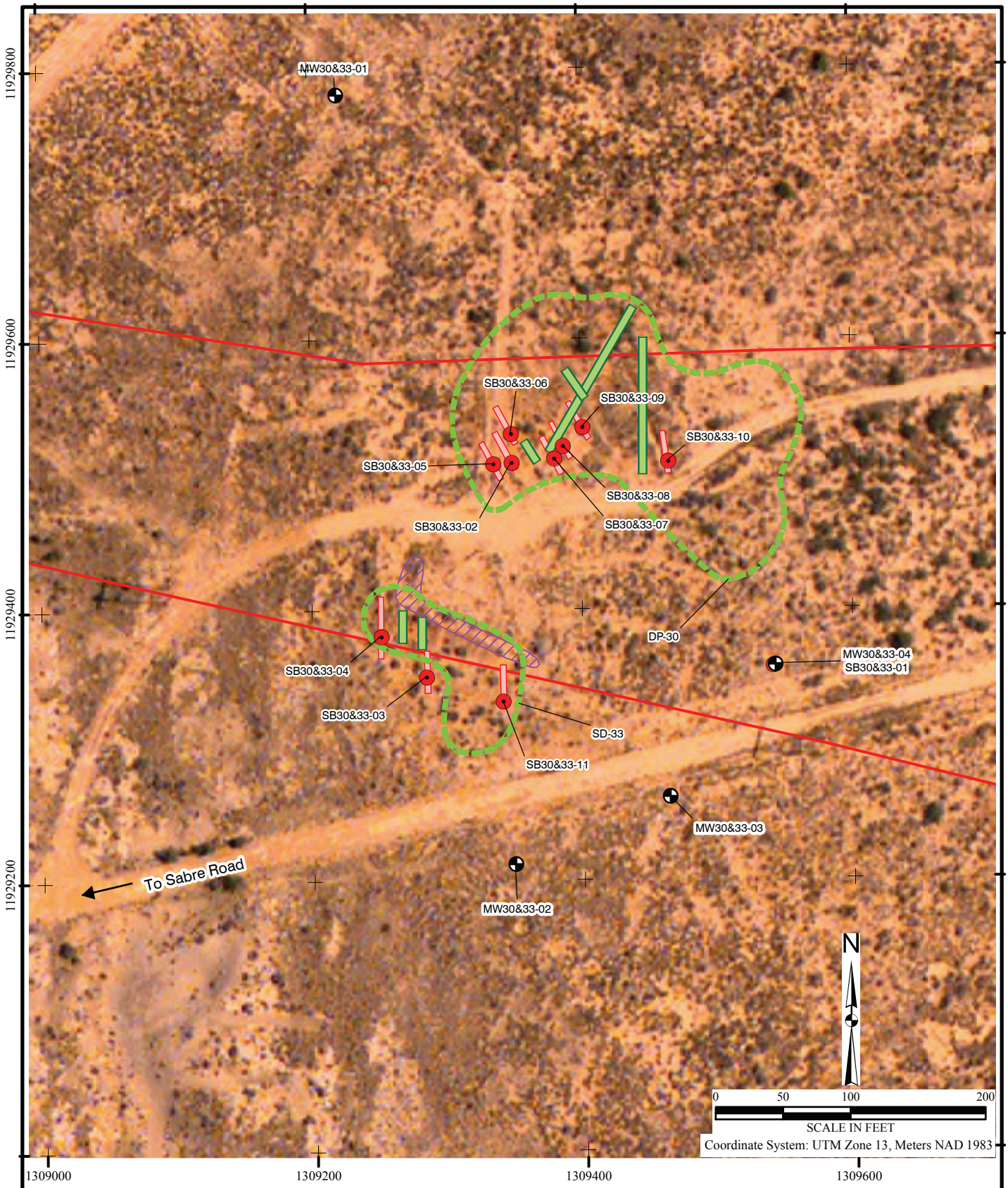
Revised: 05/16/07 PS
Map Source: Holloman AFB

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- 4084 — Groundwater Contour and Elevation
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Monitoring Well (Existing)
- Supp RFI Well

Figure 3.4
DP-30/SD-33
Groundwater Potentiometric Surface Map
January 2007



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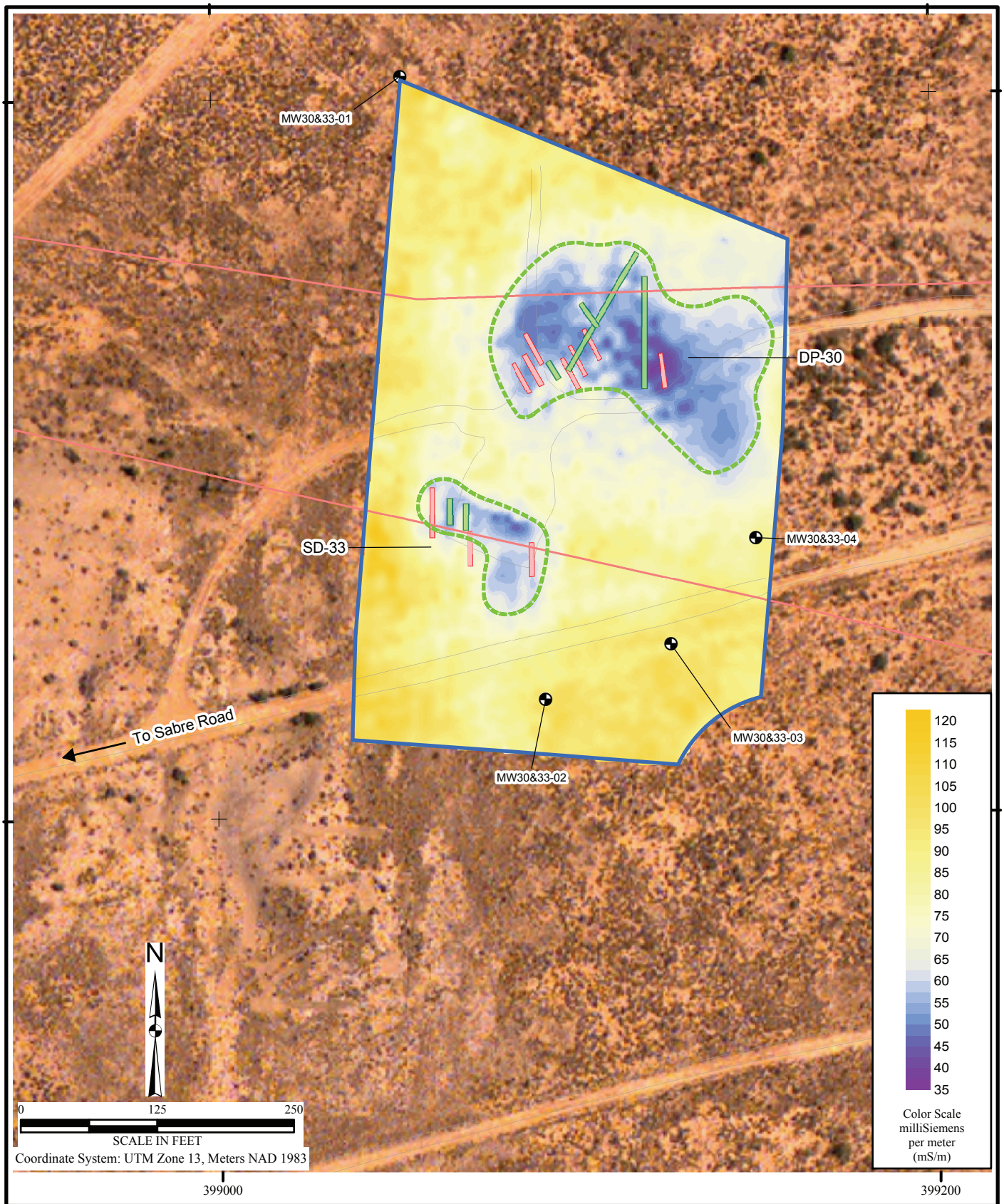
Revised: 11/10/06 TB
Map Source: Holloman AFB

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Monitoring Well (Existing)
- Soil Boring

Figure 3.5
DP-30/SD-33
Previous Soil and Groundwater Sample Locations



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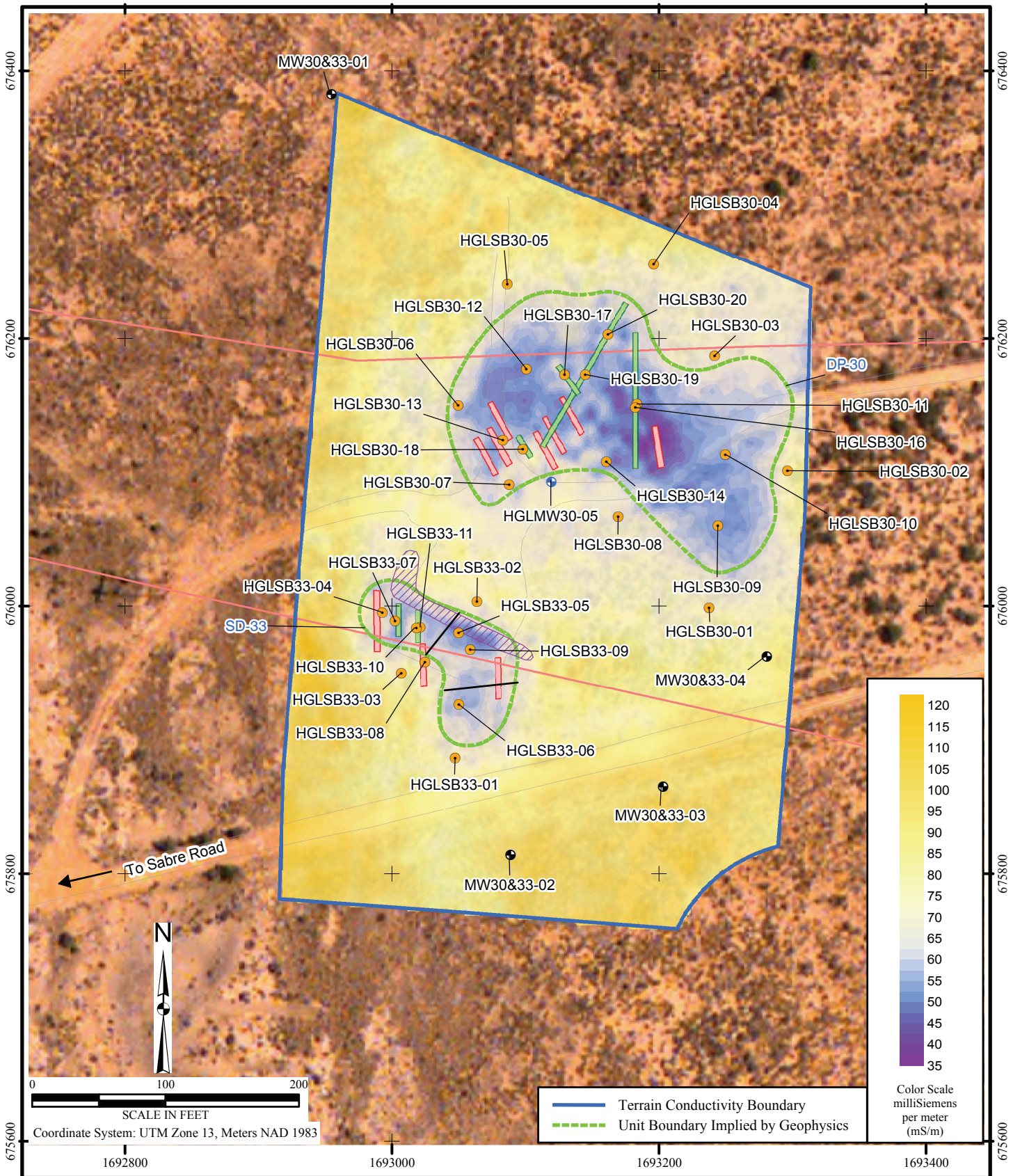
Project: AFC002-037-04-08-05
Revised: 05/15/07 PS
Map Source: Holloman AFB

Legend

- Monitoring Well (Existing)
- Electric Line (Above Ground)
- Supp RFI Observed Trenches
- RI Observed Trenches
- Terrain Conductivity Survey Boundary
- Unit Boundary Implied by Geophysics

Figure 3.6
Terrain Conductivity Survey
DP-30/SD-33



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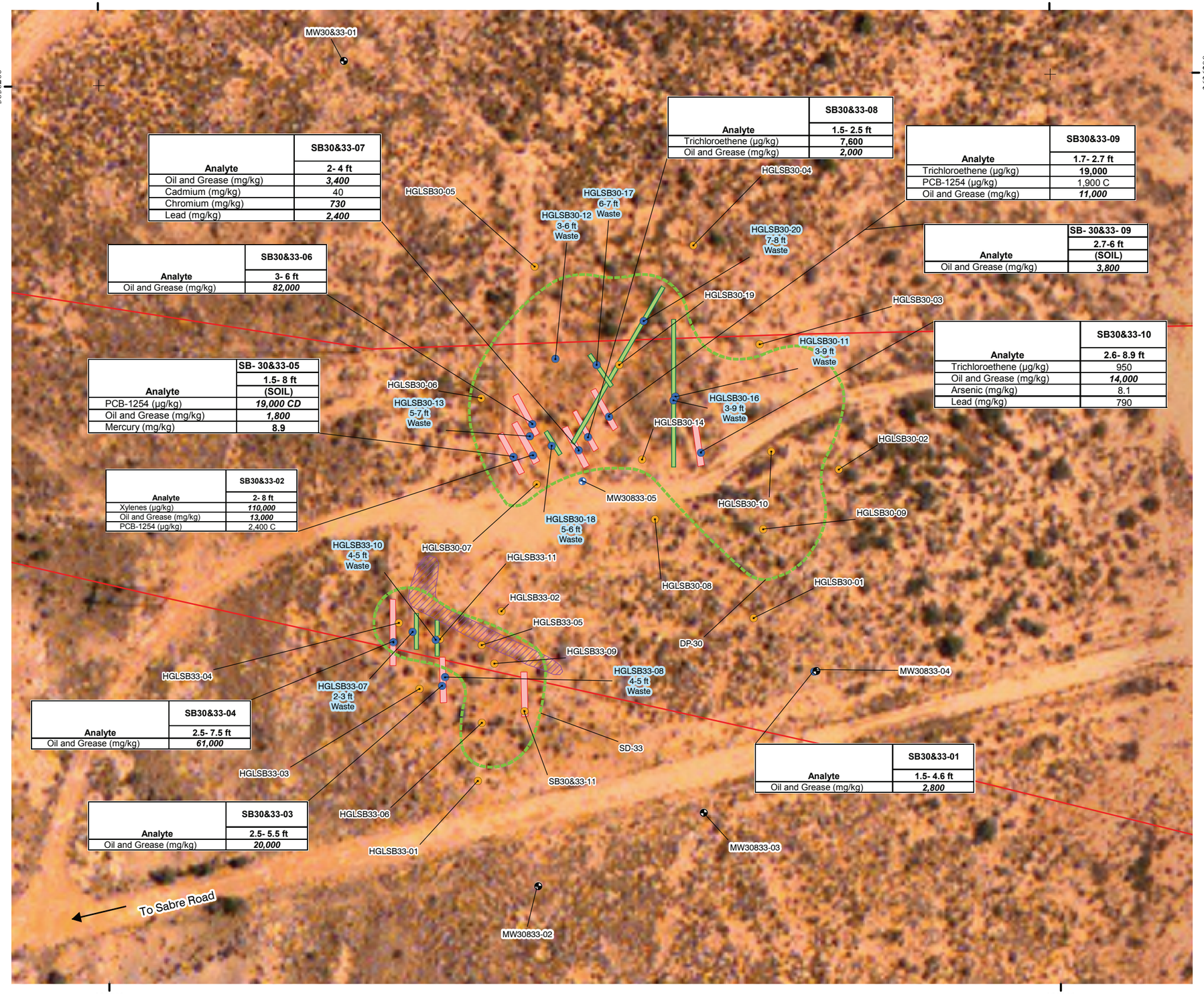
Project: AFC002-037-04-08-05
Revised: 05/16/07 PS
Map Source: Holloman AFB

Legend

- RI Observed Trenches
- Supp RFI Observed Trenches
- Soil Berm
- Electric Line (Above Ground)
- Monitoring Well (Existing)
- Supp RFI Well
- Supplemental RFI Boring

Figure 3.7
Supplemental RFI Soil Borings and LTM Monitoring Well Network



Analyte	SB30&33-07 2- 4 ft
Oil and Grease (mg/kg)	***3,400***
Cadmium (mg/kg)	40
Chromium (mg/kg)	***730***
Lead (mg/kg)	***2,400***

Analyte	SB30&33-08 1.5- 2.5 ft
Trichloroethene (µg/kg)	**7,600**
Oil and Grease (mg/kg)	***2,000***

Analyte	SB30&33-09 1.7- 2.7 ft
Trichloroethene (µg/kg)	**19,000**
PCB-1254 (µg/kg)	1,900 C
Oil and Grease (mg/kg)	***11,000***

Analyte	SB30&33-06 3- 6 ft
Oil and Grease (mg/kg)	***82,000***

Analyte	SB- 30&33- 09 2.7-6 ft (SOIL)
Oil and Grease (mg/kg)	***3,800***

Analyte	SB- 30&33- 05 1.5- 8 ft (SOIL)
PCB-1254 (µg/kg)	***19,000 CD***
Oil and Grease (mg/kg)	***1,800***
Mercury (mg/kg)	**8.9**

Analyte	SB30&33-10 2.6- 8.9 ft
Trichloroethene (µg/kg)	950
Oil and Grease (mg/kg)	***14,000***
Arsenic (mg/kg)	8.1
Lead (mg/kg)	790

Analyte	SB30&33-02 2- 8 ft
Xylenes (µg/kg)	***110,000***
Oil and Grease (mg/kg)	***13,000***
PCB-1254 (µg/kg)	2,400 C

Analyte	SB30&33-04 2.5- 7.5 ft
Oil and Grease (mg/kg)	***61,000***

Analyte	SB30&33-01 1.5- 4.6 ft
Oil and Grease (mg/kg)	***2,800***

Analyte	SB30&33-03 2.5- 5.5 ft
Oil and Grease (mg/kg)	***20,000***

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 3.8 DP-30/SD-33 Waste Material and Soil Within Waste Interval Analyte Exceedances

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Monitoring Well (Existing)
- Supplemental RFI Monitoring Well
- Soil Boring (1991 RI)
- Soil Borings Not Encountering Waste (1991 RI and 2006 Supplemental RFI Borings)
- Soil Borings Encountering Waste 2006 Borings Prefixed by HGL

Notes:
Blue shaded borings and depths indicates locations of waste and associated top and bottom of the waste.
Regular text indicates analyte concentration exceeding NMED residential SSL
Bolded text indicates analyte concentration exceeding NMED residential and industrial SSL
Bolded and italicized text indicates analyte concentration exceeding NMED residential, industrial, and construction SSL
mg/kg = milligrams per kilograms
µg/kg = micrograms per kilograms

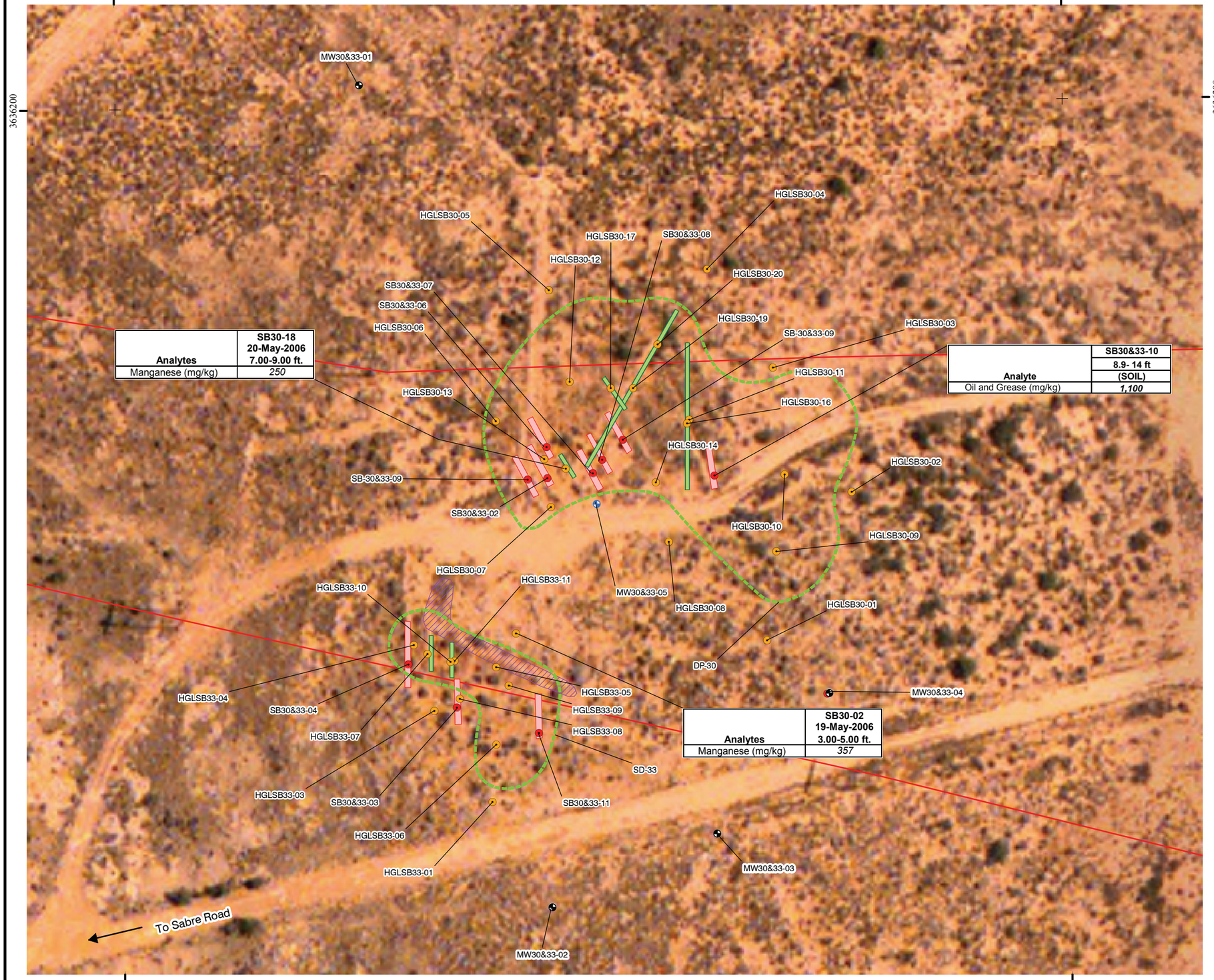
N

0 35 70 140
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/DP-30_SD-33_SS-39_SD-27_Supp_RFI DP30_SD33_Waste_Tags.mxd
Project: AFC002-037-04-11-02
Revised: 05/29/07 PS
Map Source: Holloman AFB

Figure 3.9
DP-30/SD-33
Soils Below/Beyond Waste Pits
Analyte Exceedances



Analytes	SB30-18 20-May-2006 7.00-9.00 ft.
Manganese (mg/kg)	*250*

Analyte	SB30&33-10 8.9- 14 ft (SOIL)
Oil and Grease (mg/kg)	***1,100***

Analytes	SB30-02 19-May-2006 3.00-5.00 ft.
Manganese (mg/kg)	*357*

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Monitoring Well (Existing)
- Supplemental RFI Monitoring Well
- Soil Boring
- Supplemental RFI Boring

Notes:
Bolded text indicates analyte concentration exceeding NMED residential and industrial SSL
Italicized text indicates analyte concentration exceeding NMED construction worker SSL
mg/kg = milligrams per kilogram

N

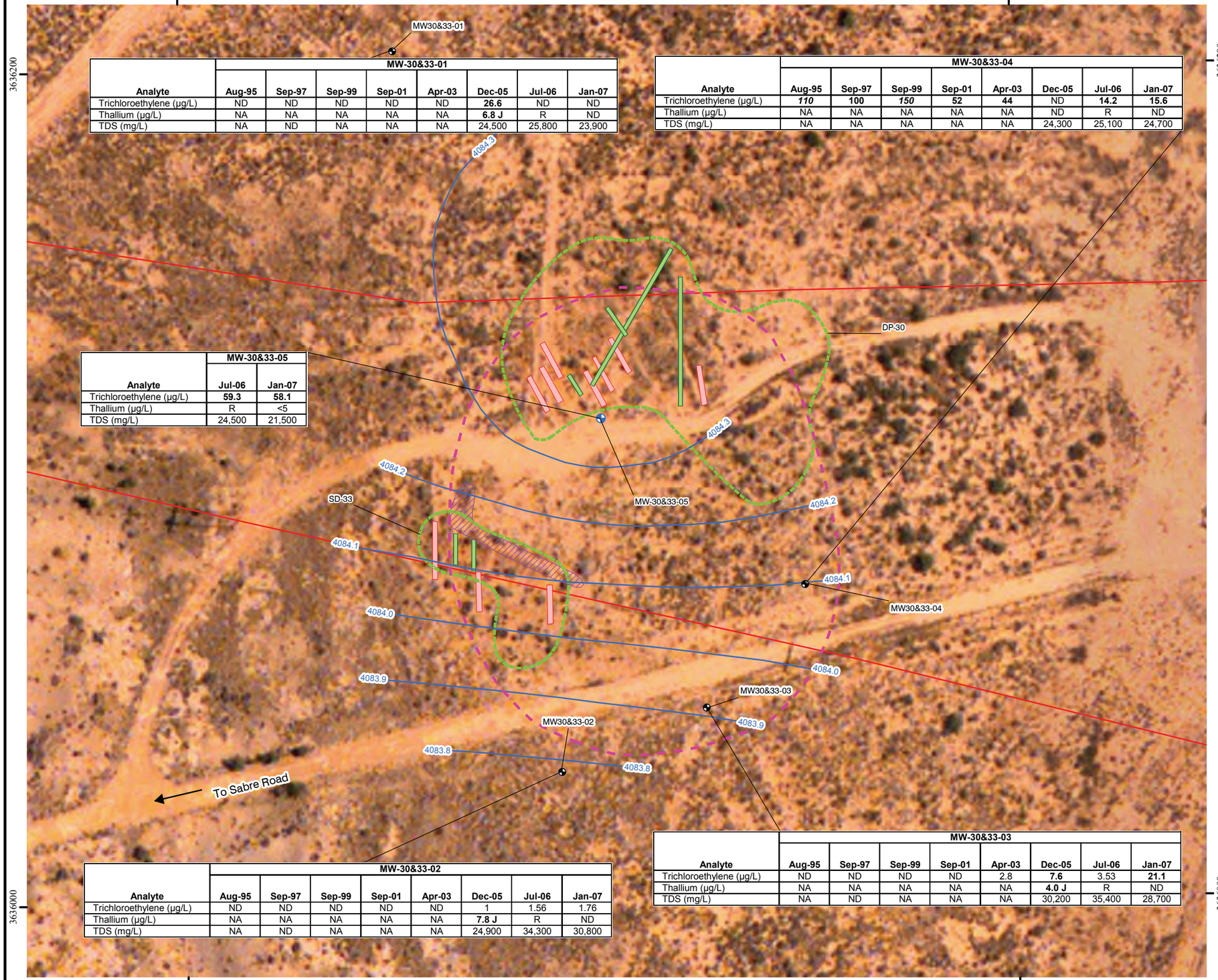
0 35 70 140
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/
DP-30_SD-33_SS-39_SD-27_Supp_RFI
DP30_SD33_Soil_Tags.mxd
Project: AFC002-037-04-11-02
Revised: 05/29/07 PS
Map Source: Holloman AFB

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 3.10 DP-30/SD-33 Groundwater Analyte Exceedances



Analyte	MW-30&33-01 Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Jul-06	Jan-07
Trichloroethylene (µg/L)	ND	ND	ND	ND	ND	**26.6**	ND	ND
Thallium (µg/L)	NA	NA	NA	NA	NA	**6.8 J**	R	ND
TDS (mg/L)	NA	ND	NA	NA	NA	24,500	25,800	23,900

Analyte	MW-30&33-04 Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Jul-06	Jan-07
Trichloroethylene (µg/L)	***110***	**100**	***150***	**52**	**44**	ND	**14.2**	**15.6**
Thallium (µg/L)	NA	NA	NA	NA	NA	ND	R	ND
TDS (mg/L)	NA	NA	NA	NA	NA	24,300	25,100	24,700

Analyte	MW-30&33-05 Jul-06	Jan-07
Trichloroethylene (µg/L)	**59.3**	**58.1**
Thallium (µg/L)	R	<5
TDS (mg/L)	24,500	21,500

Analyte	MW-30&33-02 Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Jul-06	Jan-07
Trichloroethylene (µg/L)	ND	ND	ND	ND	ND	1	1.56	1.76
Thallium (µg/L)	NA	NA	NA	NA	NA	**7.8 J**	R	ND
TDS (mg/L)	NA	ND	NA	NA	NA	24,900	34,300	30,800

Analyte	MW-30&33-03 Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Jul-06	Jan-07
Trichloroethylene (µg/L)	ND	ND	ND	ND	2.8	**7.6**	3.53	**21.1**
Thallium (µg/L)	NA	NA	NA	NA	NA	**4.0 J**	R	ND
TDS (mg/L)	NA	ND	NA	NA	NA	30,200	35,400	28,700

Legend

- Supp RFI Observed Trenches
- RI Observed Trenches
- Soil Berm
- Below-Ground Electric
- Unit Boundary Implied by Geophysics
- Inferred TCE 5 µg/L Contour Interval (January 2007)
- 4084 — Groundwater Contour and Elevation
- Monitoring Well (Existing)

Notes:
Bolded value indicates analyte concentration exceeding U.S. EPA MCL
Bolded and italicized value indicates analyte concentration exceeding U.S. EPA MCL and NMGWQ standard
NA = not analyzed
ND = not detected
R = data rejected
mg/L = milligrams per liter
µg/L = microgram per liter

N

0 40 80 160
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/ DP-30_SD-33_SS-39_SD-27_Supp_RFI DP30_SD33_GW_Jan07_Tags.mxd
Project: AFC002-037-04-11-02
Revised: 05/25/07 PS
Map Source: Holloman AFB

TABLES

Table 3.1
1991 Remedial Investigation Waste Material and Soil within Waste Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background[1]	NMED Soil Screening Levels[2] Residential	Industrial	Construction Worker	SB- 30&33- 01 91JULHO30&33-001 1.5- 4.6 ft (WASTE)	SB- 30&33- 02 91JULHO30&33-003 2- 8 ft (WASTE)	SB-30&33- 03 91JULHO30&33-005 2.5- 5.5 ft (WASTE)	SB- 30&33- 04 91JULHO30&33-007 2.5- 7.5 ft (WASTE)
SW8240 - Volatile Organics (µg/kg)								
Benzene	NA	10,300	25,800	174,000		47 J		
Chlorobenzene	NA	194,000	245,000	245,000		15 J		
Chloromethane	NA	21,800	53,400	284,000				
1,1-Dichloroethane	NA	1,400,000	1,420,000	1,420,000				
Ethyl benzene	NA	128,000	128,000	128,000	330	35,000	< 1700	
Methyl ethyl ketone	NA	31,800,000	48,700,000	48,700,000				
Methylene chloride	NA	182,000	490,000	2,630,000	1,100 B	300 B	1,900 B	2,900 B
Tetrachloroethene	NA	12,500	31,600	134,000	130 J	200	510 J	
Toluene	NA	252,000	252,000	252,000	240	8,900 B		
1,1,1-Trichloroethane	NA	563,000	563,000	563,000				
1,1,2-Trichloroethane	NA	11,900	30,200	194,000				
Trichloroethene	NA	638	1,560	33,600		140 J		
Xylenes	NA	82,000	82,000	82,000	2,400	***110,000***	780 JB	
SW8240 - Volatile Organics, TIC List (µg/kg)								
C4- Benzene	NA	10,300	25,800	174,000			9,100	
1,2-Dichlorobenzene	NA	37,400	37,400	37,400				
Heptanoic acid, methyl ester	NA	--	--	--				
C1-Naphthalene	NA	79,500	300,000	262,000				
SW8270- Semivolatile Organics (µg/kg)								
Anthracene	NA	22,000,000	100,000,000	86,000,000				
Benzo(b)fluoranthene	NA	6,210	23,400	212,000				
Benzo(k)fluoranthene	NA	62,100	234,000	2,120,000				
Benzoic Acid	NA	100,000,000[3]	100,000,000[3]	100,000,000[3]				1,300 J
bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000			41,000	1,300 JB
Dibutylphthalate	NA	6,100,000[3]	100,000,000[3]	68,000,000[3]				52 J
Fluorene	NA	2,660,000	26,500,000	10,200,000				
2- Methylnaphthalene	NA	--	--	--			7,800 J	80 J
4- Methylphenol (p- cresol)	NA	--	--	--		27,000	100,000	850 J
Naphthalene	NA	79,500	300,000	262,000		1,300 J	1,300 J	110 J
Phenanthrene	NA	1,830,000	20,500,000	6,990,000				
Phenol	NA	18,300,000	100,000,000	69,900,000		3,000 J	16,000	
Pyrene	NA	2,290,000	30,900,000	9,010,000				
EPA 413.2- Oil and Grease (mg/kg)	NA	200[7]	200[7]	--	***2,800***	***13,000***	***20,000***	***61,000***
SW8080 - Organochlorine Pesticides and PCBs (µg/kg)								
Aldrin	NA	284	1,120	6,990			28 C	
alpha- BHC	NA	902	3,990	30,000			5.9 J	
delta - BHC	NA	--	--	--	1,600 X	220 X	1,500 X	
gamma-BHC	NA	4,370	19,300	80,900				
Chlordane	NA	16,200	71,900	130,000				
4,4'- DDD	NA	24,400	111,000	807,000			68 C	
4,4'-DDE	NA	17,200	78,100	570,000	39 X		37 C	
4,4'- DDT	NA	17,200	78,100	138,000			39 X	82 J
Dieldrin	NA	304	1,200	10,200	4.6 J		29 C	
Endosulfan Sulfate	NA	367,000[4]	4,100,000[4]	1,400,000[4]			340 XY	250 J
Endrin	NA	18,300	205,000	69,900			13 X	
Endrin Aldehyde	NA	18,300[5]	205,000[5]	69,900[5]	4.3 J			
Endrin Ketone	NA	18,300[5]	205,000[5]	69,900[5]	11 J			
Heptachlor epoxide	NA	53[3]	630[3]	210[3]				
PCB-1254	NA	1,120	8,260	4,280		**2,400 C**		
SW8150 - Chlorinated Herbicides (µg/kg)								
2,4,5- T	NA	610,000[3]	20,000,000[3]	6,800,000[3]			150	
2,4-D	NA	690,000[3]	20,000,000[3]	8,500,000[3]				
2,4- DB	NA	490,000[3]	16,000,000[3]	5,500,000[3]		410	61 J	
Dicamba	NA	1,800,000[3]	61,000,000[3]	21,000,000[3]		49	44	
Dichloroprop	NA	--	--	--		640	640	
Dinoseb	NA	61,000[3]	2,000,000[3]	680,000[3]				
MCPA	NA	31,000[3]	1,000,000[3]	340,000[3]	27,000		12,000 J	
MCPP	NA	61,000[3]	2,000,000[3]	680,000[3]	23,000			
SW6010 - Metals (mg/kg)								
Antimony	7.3	31.3	454	124	<23	<11	<26	<24
Beryllium	1.3	156	2,250	56.2	<0.46	0.64	<0.51	0.61
Cadmium	1.0	39	564	154	2.5	1.8	6.8	4.5
Chromium	24.6	210[3]	450[3]	500[3]	18	19	44	21
Copper	21.2	3,130	45,400	12,400	19	49	120	51
Nickel	18.1	1,560	22,700	6,190	6.0	12	18	9.9
Silver	0.73	391	5,680	1,550	<2.3	1.5	3.5	<2.4
Zinc	48.7	23,500	100,000	92,900	80	200	260	170
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	2.0	3.1	1.9	1.8
SW7421 - Lead (mg/kg)	12.3	400	800	800	140	21	68	69
SW7471 - Mercury (mg/kg)	--	6.11[6]	68.4[6]	23.8[6]	<0.060	0.069	0.22	<0.066
SW7740 - Selenium (mg/kg)	10.5	391	5,680	1,550	<0.58	0.66	<0.53	<0.55
SW9310 - Gross Alpha and Gross Beta (pCi/g)								
Gross Alpha	NA	--	--	--	8.2	14	7.8	11
Gross Beta	NA	--	--	--	14	21	8.9	14

NOTE: Table presents only constituents detected in waste material at this site.
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Endosulfan SSLs used as a surrogate for endosulfan sulfate
(5) Endrin SSLs used as a surrogate for endrin aldehyde and endrin ketone
(6) Methylene mercury SSLs used as a surrogate for mercury
(7) Unknown oil TPH SSLs provided (NMED, 2006a)

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
ft = feet
pCi/g = picocuries per gram
-- = not detected; not applicable
NA = not analyzed
NMED = New Mexico Environment Department
ND = Not detected, at the reported detection limit.
TIC = Tentatively identified compound.
< = Analyte not detected at or above reported detection limit
SSL = soil screening level

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italiciced* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Laboratory Qualifiers
X = SW8080 -- Presence of analyte confirmed by second column analysis, but quantitation was not confirmed.
Y= SW8080– Endosulfan Sulfate calibration check standard outside accpetance limits. Samples were reanalyzed for this compound if detected in primary or secondary analyses.
B = Analyte detected in laboratory blank analysis, no blank subtraction performed.
C = Presence and quantitation of analyte confirmed by second column analysis.
D = Secondary dilution required for this analyte.
Validation Qualifiers
J = Detected below the detection limit.

Table 3.1 (continued)
1991 Remedial Investigation Waste Material and Soil within Waste Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background[1]	NMED Soil Screening Levels[2] Residential	Industrial	Construction Worker	SB- 30&33-05 91JULHO30&33-009 1.5- 8 ft bgs (SOIL)	SB- 30&33- 06 91JULHO30&33-011 3- 6 ft (WASTE)	SB- 30&33- 07 91JULHO30&33-013 2- 4 ft (WASTE)	SB- 30&33- 08 91JULHO30&33-015 1.5- 2.5 ft (WASTE)
SW8240 - Volatile Organics (µg/kg)								
Benzene	NA	10,300	25,800	174,000			130 J	< 110
Chlorobenzene	NA	194,000	245,000	245,000	38 J			< 110
Chloromethane	NA	21,800	53,400	284,000			11,000	
1,1-Dichloroethane	NA	1,400,000	1,420,000	1,420,000				32 J
Ethyl benzene	NA	128,000	128,000	128,000	< 140		87 J	3.7 J
Methyl ethyl ketone	NA	31,800,000	48,700,000	48,700,000	< 2,700			
Methylene chloride	NA	182,000	490,000	2,630,000	120 JB	200 B	26,000 B	250 B
Tetrachloroethene	NA	12,500	31,600	134,000			180 J	90 J
Toluene	NA	252,000	252,000	252,000	13 J	15 JB	230 JB	11 JB
1,1,1-Trichloroethane	NA	563,000	563,000	563,000				450
1,1,2-Trichloroethane	NA	11,900	30,200	194,000				
Trichloroethene	NA	638	1,560	33,600			200 J	***7,600***
Xylenes	NA	82,000	82,000	82,000	43 J	50 J	1,300 J	12 J
SW8240 - Volatile Organics, TIC List (µg/kg)								
C4- Benzene	NA	10,300	25,800	174,000				
1,2-Dichlorobenzene	NA	37,400	37,400	37,400				140
Heptanoic acid, methyl ester	NA	--	--	--				300
C1-Naphthalene	NA	79,500	300,000	262,000		5,800		
SW8270- Semivolatile Organics (µg/kg)								
Anthracene	NA	22,000,000	100,000,000	86,000,000				
Benzo(b)fluoranthene	NA	6,210	23,400	212,000	550 J			
Benzo(k)fluoranthene	NA	62,100	234,000	2,120,000	550 J			
Benzoic Acid	NA	100,000,000[3]	100,000,000[3]	100,000,000[3]				
bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000	1,800 JB		1,700 B	< 11,000
Dibutylphthalate	NA	6,100,000[3]	100,000,000[3]	68,000,000[3]				
Fluorene	NA	2,660,000	26,500,000	10,200,000				
2- Methylnaphthalene	NA	--	--	--				
4- Methylphenol (p- cresol)	NA	--	--	--		49,000		
Naphthalene	NA	79,500	300,000	262,000				
Phenanthrene	NA	1,830,000	20,500,000	6,990,000				
Phenol	NA	18,300,000	100,000,000	69,900,000				
Pyrene	NA	2,290,000	30,900,000	9,010,000	360 J			
EPA 413.2- Oil and Grease (mg/kg)	NA	200[7]	200[7]	--	***1,800***	***82,000***	***3,400***	***2,000***
SW8080 - Organochlorine Pesticides and PCBs (µg/kg)								
Aldrin	NA	284	1,120	6,990		19 X	1.2 X	
alpha- BHC	NA	902	3,990	30,000			0.50 J	
delta - BHC	NA	--	--	--		250 X	20 X	90 X
gamma-BHC	NA	4,370	19,300	80,900		1.2 C	< 0.54	
Chlordane	NA	16,200	71,900	130,000				
4,4'- DDD	NA	24,400	111,000	807,000	< 5.4	5.8 X	5.0 C	
4,4'-DDE	NA	17,200	78,100	570,000		5.7 X	2.9 C	
4,4'- DDT	NA	17,200	78,100	138,000	< 11		0.48 J	
Dieldrin	NA	304	1,200	10,200	< 5.4		4.7 X	
Endosulfan Sulfate	NA	367,000[4]	4,100,000[4]	1,400,000[4]	< 16			
Endrin	NA	18,300	205,000	69,900	< 5.4		0.65 X	
Endrin Aldehyde	NA	18,300[5]	205,000[5]	69,900[5]			3.0 X	
Endrin Ketone	NA	18,300[5]	205,000[5]	69,900[5]			1.1 J	
Heptachlor epoxide	NA	53[3]	630[3]	210[3]				
PCB-1254	NA	1,120	8,260	4,280	***19,000 CD***			1,200 C
SW8150 - Chlorinated Herbicides (µg/kg)								
2,4,5- T	NA	610,000[3]	20,000,000[3]	6,800,000[3]				
2,4-D	NA	690,000[3]	20,000,000[3]	8,500,000[3]				250
2,4- DB	NA	490,000[3]	16,000,000[3]	5,500,000[3]				
Dicamba	NA	1,800,000[3]	61,000,000[3]	21,000,000[3]				
Dichloroprop	NA	--	--	--		310		
Dinoseb	NA	61,000[3]	2,000,000[3]	680,000[3]			32	110
MCPA	NA	31,000[3]	1,000,000[3]	340,000[3]				
MCPP	NA	61,000[3]	2,000,000[3]	680,000[3]				
SW6010 - Metals (mg/kg)								
Antimony	7.3	31.3	454	124	<19	<19	12	<22
Beryllium	1.3	156	2,250	56.2	0.49	0.61	0.44	0.54
Cadmium	1.0	39	564	154	3.0	<0.95	**40**	8.1
Chromium	24.6	210[3]	450[3]	500[3]	48	17	**730**	142
Copper	21.2	3,130	45,400	12,400	140	34	140	58
Nickel	18.1	1,560	22,700	6,190	13	9.7	34	13
Silver	0.73	391	5,680	1,550	27	4.9	4.3	<2.2
Zinc	48.7	23,500	100,000	92,900	280	100	420	290
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	1.9	1.8	4.0	2.8
SW7421 - Lead (mg/kg)	12.3	400	800	800	150	8.6	**2,400**	380
SW7471 - Mercury (mg/kg)	--	6.11[6]	68.4[6]	23.8[6]	**8.9**	0.14	0.70	0.29
SW7740 - Selenium (mg/kg)	10.5	391	5,680	1,550	<0.51	<0.50	<0.49	0.90
SW9310 - Gross Alpha and Gross Beta (pCi/g)								
Gross Alpha	NA	--	--	--	15	7.0	14	14
Gross Beta	NA	--	--	--	18	21	19	19

NOTE: Table presents only constituents detected in waste material at this site.
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Endosulfan SSLs used as a surrogate for endosulfan sulfate
(5) Endrin SSLs used as a surrogate for endrin aldehyde and endrin ketone
(6) Methylene mercury SSLs used as a surrogate for mercury
(7) Unknown oil TPH SSLs provided (NMED, 2006a)

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
ft = feet
pCi/g = picocuries per gram
-- = not detected; not applicable
NA = not analyzed
NMED = New Mexico Environment Department
ND = Not detected, at the reported detection limit.
TIC = Tentatively identified compound.
< = Analyte not detected at or above reported detection limit
SSL = soil screening level

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italiciced* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Laboratory Qualifiers
X = SW8080 -- Presence of analyte confirmed by second column analysis, but quantitation was not confirmed.
Y= SW8080-- Endosulfan Sulfate calibration check standard outside accpetance limits. Samples were reanalyzed for this compound if detected in primary or secondary analyses.
B = Analyte detected in laboratory blank analysis, no blank subtraction performed.
C = Presence and quantitation of analyte confirmed by second column analysis.
D = Secondary dilution required for this analyte.
Validation Qualifiers
J = Detected below the detection limit.

Table 3.1 (continued)
1991 Remedial Investigation Waste Material and Soil within Waste Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background[1]	NMED Soil Screening Levels[2] Residential	Industrial	Construction Worker	SB- 30&33- 09 91JULHO30&33-017 1.7- 2.7 ft (WASTE)	SB- 30&33- 09 91JULHO30&33-018 2.7- 6 ft bgs (SOIL)	SB- 30&33- 10 91JULHO30&33-019 2.6- 8.9 ft (WASTE)
SW8240 - Volatile Organics (µg/kg)							
Benzene	NA	10,300	25,800	174,000			220
Chlorobenzene	NA	194,000	245,000	245,000			
Chloromethane	NA	21,800	53,400	284,000			
1,1-Dichloroethane	NA	1,400,000	1,420,000	1,420,000			
Ethyl benzene	NA	128,000	128,000	128,000	< 680	3.8 J	31,000
Methyl ethyl ketone	NA	31,800,000	48,700,000	48,700,000			
Methylene chloride	NA	182,000	490,000	2,630,000	590 JB	630 B	890 B
Tetrachloroethene	NA	12,500	31,600	134,000	170 J	< 110	
Toluene	NA	252,000	252,000	252,000	< 680	13 JB	2,400 B
1,1,1-Trichloroethane	NA	563,000	563,000	563,000	2,500	< 110	
1,1,2-Trichloroethane	NA	11,900	30,200	194,000			190
Trichloroethene	NA	638	1,560	33,600	***19,000***	< 110	**950**
Xylenes	NA	82,000	82,000	82,000			37,000
SW8240 - Volatile Organics, TIC List (µg/kg)							
C4- Benzene	NA	10,300	25,800	174,000			
1,2-Dichlorobenzene	NA	37,400	37,400	37,400			
Heptanoic acid, methyl ester	NA	--	--	--			
C1-Naphthalene	NA	79,500	300,000	262,000			
SW8270- Semivolatile Organics (µg/kg)							
Anthracene	NA	22,000,000	100,000,000	86,000,000			< 12,000
Benzo(b)fluoranthene	NA	6,210	23,400	212,000			
Benzo(k)fluoranthene	NA	62,100	234,000	2,120,000			
Benzoic Acid	NA	100,000,000[3]	100,000,000[3]	100,000,000[3]			
bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000			
Dibutylphthalate	NA	6,100,000[3]	100,000,000[3]	68,000,000[3]			
Fluorene	NA	2,660,000	26,500,000	10,200,000			< 12,000
2- Methylnaphthalene	NA	--	--	--			10,000 J
4- Methylphenol (p- cresol)	NA	--	--	--			2,800 J
Naphthalene	NA	79,500	300,000	262,000			4,300 J
Phenanthrene	NA	1,830,000	20,500,000	6,990,000			< 12,000
Phenol	NA	18,300,000	100,000,000	69,900,000			
Pyrene	NA	2,290,000	30,900,000	9,010,000			
EPA 413.2- Oil and Grease (mg/kg)	NA	200[7]	200[7]	--	***11,000***	***3,800***	***14,000***
SW8080 - Organochlorine Pesticides and PCBs (µg/kg)							
Aldrin	NA	284	1,120	6,990	< 6.0	2.9 C	37 J
alpha- BHC	NA	902	3,990	30,000	7.5 C	3.6 X	
delta - BHC	NA	--	--	--	43 X	7.8 C	1,200 X
gamma-BHC	NA	4,370	19,300	80,900	< 6.0	2.0 X	< 59
Chlordane	NA	16,200	71,900	130,000			< 300 Z
4,4'- DDD	NA	24,400	111,000	807,000			
4,4'-DDE	NA	17,200	78,100	570,000	< 6.0	1.3 X	180 X
4,4'- DDT	NA	17,200	78,100	138,000	< 12	2.1 X	240 C
Dieldrin	NA	304	1,200	10,200	< 6.0	1.8 X	140 X
Endosulfan Sulfate	NA	367,000[4]	4,100,000[4]	1,400,000[4]			
Endrin	NA	18,300	205,000	69,900			
Endrin Aldehyde	NA	18,300[5]	205,000[5]	69,900[5]	< 12	0.45 J	
Endrin Ketone	NA	18,300[5]	205,000[5]	69,900[5]			
Heptachlor epoxide	NA	53[3]	630[3]	210[3]	< 6.0	2.3 X	940 X
PCB-1254	NA	1,120	8,260	4,280	**1,900 C**	< 11	
SW8150 - Chlorinated Herbicides (µg/kg)							
2,4,5- T	NA	610,000[3]	20,000,000[3]	6,800,000[3]			
2,4-D	NA	690,000[3]	20,000,000[3]	8,500,000[3]			
2,4- DB	NA	490,000[3]	16,000,000[3]	5,500,000[3]			< 54
Dicamba	NA	1,800,000[3]	61,000,000[3]	21,000,000[3]			
Dichloroprop	NA	--	--	--	160	< 35	
Dinoseb	NA	61,000[3]	2,000,000[3]	680,000[3]			
MCPA	NA	31,000[3]	1,000,000[3]	340,000[3]			29,000
MCPP	NA	61,000[3]	2,000,000[3]	680,000[3]			
SW6010 - Metals (mg/kg)							
Antimony	7.3	31.3	454	124	<21	<21	<18
Beryllium	1.3	156	2,250	56.2	0.65	<0.42	0.70
Cadmium	1.0	39	564	154	9.6	<1.0	8.4
Chromium	24.6	210[3]	450[3]	500[3]	59	4.4	61
Copper	21.2	3,130	45,400	12,400	49	<4.2	200
Nickel	18.1	1,560	22,700	6,190	17	<4.2	16
Silver	0.73	391	5,680	1,550	<2.1	<2.1	3.1
Zinc	48.7	23,500	100,000	92,900	180	9.4	790
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	3.9	1.1	**8.1**
SW7421 - Lead (mg/kg)	12.3	400	800	800	240	0.78	**790**
SW7471 - Mercury (mg/kg)	--	6.11[6]	68.4[6]	23.8[6]	0.26	<0.050	0.70
SW7740 - Selenium (mg/kg)	10.5	391	5,680	1,550	<0.53	<0.51	<0.57
SW9310 - Gross Alpha and Gross Beta (pCi/g)							
Gross Alpha	NA	--	--	--	12	3.8	9.2
Gross Beta	NA	--	--	--	20	6.3	15

NOTE: Table presents only constituents detected in waste material at this site.
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Endosulfan SSLs used as a surrogate for endosulfan sulfate
(5) Endrin SSLs used as a surrogate for endrin aldehyde and endrin ketone
(6) Methylene mercury SSLs used as a surrogate for mercury
(7) Unknown oil TPH SSLs provided (NMED, 2006a)

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
ft = feet
pCi/g = picocuries per gram
-- = not detected; not applicable
NA = not analyzed
NMED = New Mexico Environment Department
ND = Not detected, at the reported detection limit.
TIC = Tentatively identified compound.
< = Analyte not detected at or above reported detection limit
SSL = soil screening level

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italicized* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italicized* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Laboratory Qualifiers
X = SW8080 -- Presence of analyte confirmed by second column analysis, but quantitation was not confirmed.
Y= SW8080-- Endosulfan Sulfate calibration check standard outside accpetance limits. Samples were reanalyzed for this compound if detected in primary or secondary analyses.
B = Analyte detected in laboratory blank analysis, no blank subtraction performed.
C = Presence and quantitation of analyte confirmed by second column analysis.
D = Secondary dilution required for this analyte.
Validation Qualifiers
J = Detected below the detection limit.

Table 3.2
1991 Remedial Investigation Soil Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	NMED Soil Screening Levels [2] Residential	Industrial	Construction Worker	SB- 30&33-01 91JULHO30&33-002 8 - 10 ft bgs (SOIL)	SB- 30&33-02 91JULHO30&33-004 8- 12 ft bgs (SOIL)	SB-30&33-03 91JULHO30&33-006 6- 8 ft bgs (SOIL)	SB- 30&33-04 91JULHO30&33-008 8- 12 ft bgs (SOIL)	SB- 30&33-05 91JULHO30&33-010 8- 12 ft bgs (SOIL)
SW8240 - Volatile Organics (µg/kg)									
Benzene	NA	10,300	25,800	174,000		< 120			
Chlorobenzene	NA	194,000	245,000	245,000		< 120			< 140
Chloromethane	NA	21,800	53,400	284,000					
1,1-Dichloroethane	NA	1,400,000	1,420,000	1,420,000					
Ethyl benzene	NA	128,000	128,000	128,000	< 140	< 120	68 J		25 J
Methyl ethyl ketone	NA	31,800,000	48,700,000	48,700,000					2,100 J
Methylene chloride	NA	182,000	490,000	2,630,000	150 B	170	110 JB	130 J	170 B
Tetrachloroethene	NA	12,500	31,600	134,000	< 140	< 120	< 140		
Toluene	NA	252,000	252,000	252,000	< 140	6.7 JB			< 140
1,1,1-Trichloroethane	NA	563,000	563,000	563,000					
1,1,2-Trichloroethane	NA	11,900	30,200	194,000					
Trichloroethene	NA	638	1,560	33,600		< 120			
Xylenes	NA	82,000	82,000	82,000	< 140	< 120	180		120 JB
SW8240 - Volatile Organics, TIC List (µg/kg)									
Chlorofluoromethane	NA	--	--	--					
C1-Naphthalene	NA	79,500	300,000	262,000					
C1-Naphthalene2	NA	79,500	300,000	262,000					
C2-Naphthalene	NA	79,500	300,000	262,000					
C2-Naphthalene2	NA	79,500	300,000	262,000					
C2-Naphthalene3	NA	79,500	300,000	262,000					
SW8270- Semivolatile Organics (µg/kg)									
Anthracene	NA	22,000,000	100,000,000	86,000,000					
Benzo(b)fluoranthene	NA	6,210	23,400	212,000					< 1,200
Benzo(k)fluoranthene	NA	62,100	234,000	2,120,000					< 1,200
Benzoic Acid	NA	100,000,000[3]	100,000,000[3]	100,000,000[3]				< 6,300	
bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000			940 JB	850 JB	81 JB
Dibutylphthalate	NA	6,100,000[3]	100,000,000[3]	68,000,000[3]				< 1,300	
Fluorene	NA	2,660,000	26,500,000	10,200,000					
2- Methylnaphthalene	NA	--	--	--			< 1,300	< 1,300	
4- Methylphenol (p- cresol)	NA	--	--	--		590 J	< 1,300	< 1,300	
Naphthalene	NA	79,500	300,000	262,000		< 11,000	< 1,300	< 1,300	
Phenanthrene	NA	1,830,000	20,500,000	6,990,000					
Phenol	NA	18,300,000	100,000,000	69,900,000		< 11,000	< 1,300		
Pyrene	NA	2,290,000	30,900,000	9,010,000					< 1,200
EPA 413.2- Oil and Grease (mg/kg)	NA	200[7]	200[7]	--	35	47	< 16	< 15	< 14
SW8080 - Organochlorine Pesticides and PCBs (µg/kg)									
Aldrin	NA	284	1,120	6,990			< 0.67		
alpha- BHC	NA	902	3,990	30,000			< 0.67		
delta - BHC	NA	--	--	--	< 0.68	< 0.58	2.2 X		
gamma-BHC	NA	4,370	19,300	80,900					
Chlordane	NA	16,200	71,900	130,000					
4,4'- DDD	NA	24,400	111,000	807,000			< 0.67		0.020 J
4,4'-DDE	NA	17,200	78,100	570,000	< 0.68		< 0.67		
4,4'- DDT	NA	17,200	78,100	138,000			< 1.3	< 1.2	17 C
Dieldrin	NA	304	1,200	10,200	< 0.68		< 0.67		0.95 X
Endosulfan Sulfate	NA	367,000[4]	4,100,000[4]	1,400,000[4]			< 3.4 Y	0.095 J	10 X
Endrin	NA	18,300	205,000	69,900			< 0.67		0.17 J
Endrin Aldehyde	NA	18,300[5]	205,000[5]	69,900[5]	< 1.4				
Endrin Ketone	NA	18,300[5]	205,000[5]	69,900[5]	< 3.4				
Heptachlor epoxide	NA	53[3]	630[3]	210[3]					
PCB-1254	NA	1,120	8,260	4,280		210 C			130 C
SW8150 - Chlorinated Herbicides (µg/kg)									
2,4,5- T	NA	610,000[3]	20,000,000[3]	6,800,000[3]			< 14		
2,4-D	NA	690,000[3]	20,000,000[3]	8,500,000[3]					
2,4- DB	NA	490,000[3]	16,000,000[3]	5,500,000[3]		< 53	< 62		
Dicamba	NA	1,800,000[3]	61,000,000[3]	21,000,000[3]		< 16	< 18		
Dichloroprop	NA	--	--	--		< 38	< 44		
Dinoseb	NA	61,000[3]	2,000,000[3]	680,000[3]					
MCPA	NA	31,000[3]	1,000,000[3]	340,000[3]	< 17,000		< 7,000		
MCPP	NA	61,000[3]	2,000,000[3]	680,000[3]	< 13,000				
SW6010 - Metals (mg/kg)									
Antimony	7.3	31.3	454	124	<26	<39	<24	<38	<39
Beryllium	1.3	156	2,250	56.2	<0.51	<0.78	<0.48	<0.77	<0.78
Cadmium	1.0	39	564	154	<1.3	<1.9	<1.2	<1.9	<2.0
Chromium	24.6	210[3]	450[3]	500[3]	6.6	7.5	6.2	23	<3.9
Copper	21.2	3,130	45,400	12,400	<5.1	<7.8	<4.8	<7.7	<7.8
Nickel	18.1	1,560	22,700	6,190	<5.1	<7.8	<4.8	8.4	<7.8
Silver	0.73	391	5,680	1,550	<2.6	<3.9	<2.4	<3.8	<3.9
Zinc	48.7	23,500	100,000	92,900	14	14	15	23	16
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	2.1	1.6	2.1	2.1	1.4
SW7421 - Lead (mg/kg)	12.3	400	800	800	1.1	1.3	0.91	2.3	0.87
SW7471 - Mercury (mg/kg)	--	6.11[6]	68.4[6]	23.8[6]	<0.060	<0.053	<0.060	<0.057	<0.053
SW7740 - Selenium (mg/kg)	10.5	391	5,680	1,550	<0.52	<0.56	<0.64	<1.1	<0.52
SW9310 - Gross Alpha and Gross Beta (pCi/g)									
Gross Alpha	NA	--	--	--	5.9	6.4	5.7	11	7.2
Gross Beta	NA	--	--	--	12	10	12	12	9.5

NOTE: Table presents only constituents detected in soil at this site.
(1) (Radian, 1992 and 1993). Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Endosulfan SSLs used as a surrogate for endosulfan sulfate
(5) Endrin SSLs used as a surrogate for endrin aldehyde and endrin ketone
(6) Methylene mercury SSLs used as a surrogate for mercury
(7) Unknown oil TPH SSLs provided (NMED, 2006a)

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
pCi/g = picoCuries per gram
ft = feet
-- = not detected; not applicable
NA = not analyzed
< = Analyte not detected at reported detection limit

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italiciced* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Laboratory Qualifiers
B = analyte detected in associated blank analyses
D = lab-specific qualifier (no information provided)
C = lab-specific qualifier (no information provided)
X = lab-specific qualifier (no information provided)
Y = lab-specific qualifier (no information provided)
Validation Qualifiers
J = positive detection with reported concentration between the method detection limit and the reporting limit

Table 3.2 (continued)
1991 Remedial Investigation Soil Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	NMED Soil Screening Levels[2] Residential	Industrial/ Occupational	Construction Worker	SB- 30&33- 06 91JULHO30&33- 012 6- 10 ft bgs (SOIL)	SB- 30&33- 07 91JULHO30&33- 014 4- 8 ft bgs (SOIL)	SB- 30&33- 08 91JULHO30&33- 016 2.5- 4 ft bgs (SOIL)	SB- 30&33- 10 91JULHO30&33- 020 8.9- 14 ft bgs (SOIL)
SW8240 - Volatile Organics (µg/kg)								
Benzene	NA	10,300	25,800	174,000		< 110	3.4 J	2.4 J
Chlorobenzene	NA	194,000	245,000	245,000			9.7 J	
Chloromethane	NA	21,800	53,400	284,000		< 220		
1,1-Dichloroethane	NA	1,400,000	1,420,000	1,420,000			< 110	
Ethyl benzene	NA	128,000	128,000	128,000		< 110	3.6 J	< 120
Methyl ethyl ketone	NA	31,800,000	48,700,000	48,700,000				
Methylene chloride	NA	182,000	490,000	2,630,000	640 B	86 JB	850 B	500 B
Tetrachloroethene	NA	12,500	31,600	134,000		< 110	< 110	
Toluene	NA	252,000	252,000	252,000	9.5 JB	7.1 JB	19 JB	6.4 JB
1,1,1-Trichloroethane	NA	563,000	563,000	563,000			< 110	
1,1,2-Trichloroethane	NA	11,900	30,200	194,000				< 120
Trichloroethene	NA	638	1,560	33,600		< 110	97 J	< 120
Xylenes	NA	82,000	82,000	82,000	< 120	< 110	12 J	6.4 J
SW8240 - Volatile Organics, TIC List (µg/kg)								
Chlorofluoromethane	NA	--	--	--			240	
C1-Naphthalene	NA	79,500	300,000	262,000				5,100
C1-Naphthalene2	NA	79,500	300,000	262,000				3,600
C2-Naphthalene	NA	79,500	300,000	262,000				520
C2-Naphthalene2	NA	79,500	300,000	262,000				1,900
C2-Naphthalene3	NA	79,500	300,000	262,000				590
SW8270- Semivolatile Organics (µg/kg)								
Anthracene	NA	22,000,000	100,000,000	86,000,000				550 J
Benzo(b)fluoranthene	NA	6,210	23,400	212,000				
Benzo(k)fluoranthene	NA	62,100	234,000	2,120,000				
Benzoic Acid	NA	100,000,000[3]	100,000,000[3]	100,000,000[3]				
bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000		6,800 B	1,400 B	
Dibutylphthalate	NA	6,100,000[3]	100,000,000[3]	68,000,000[3]				
Fluorene	NA	2,660,000	26,500,000	10,200,000				210 J
2- Methylnaphthalene	NA	--	--	--				1,400
4- Methylphenol (p- cresol)	NA	--	--	--	< 12,000			< 1,200
Naphthalene	NA	79,500	300,000	262,000				< 1,200
Phenanthrene	NA	1,830,000	20,500,000	6,990,000				470 J
Phenol	NA	18,300,000	100,000,000	69,900,000				
Pyrene	NA	2,290,000	30,900,000	9,010,000				
EPA 413.2- Oil and Grease (mg/kg)	NA	200[7]	200[7]	--	< 14	180	< 13	***1,100***
SW8080 - Organochlorine Pesticides and PCBs (µg/kg)								
Aldrin	NA	284	1,120	6,990	< 0.6	0.98 C		< 0.62
alpha- BHC	NA	902	3,990	30,000		< 0.55		
delta - BHC	NA	--	--	--	< 0.6	1.5 C	< 0.56	< 0.62
gamma-BHC	NA	4,370	19,300	80,900	< 0.6	0.75 C		0.75 C
Chlordane	NA	16,200	71,900	130,000				59 C
4,4'- DDD	NA	24,400	111,000	807,000	< 0.6	< 0.55		
4,4'-DDE	NA	17,200	78,100	570,000	< 0.6	1.9 C		< 0.62
4,4'- DDT	NA	17,200	78,100	138,000		< 1.1		< 0.62
Dieldrin	NA	304	1,200	10,200		0.19 J		< 0.62
Endosulfan Sulfate	NA	367,000[4]	4,100,000[4]	1,400,000[4]				
Endrin	NA	18,300	205,000	69,900		0.25 J		
Endrin Aldehyde	NA	18,300[5]	205,000[5]	69,900[5]		1.7 X		
Endrin Ketone	NA	18,300[5]	205,000[5]	69,900[5]		0.75 J		
Heptachlor epoxide	NA	53[3]	630[3]	210[3]				< 0.62
PCB-1254	NA	1,120	8,260	4,280			< 11	
SW8150 - Chlorinated Herbicides (µg/kg)								
2,4,5- T	NA	610,000[3]	20,000,000[3]	6,800,000[3]				
2,4-D	NA	690,000[3]	20,000,000[3]	8,500,000[3]			< 67	
2,4- DB	NA	490,000[3]	16,000,000[3]	5,500,000[3]				22 J
Dicamba	NA	1,800,000[3]	61,000,000[3]	21,000,000[3]				
Dichloroprop	NA	--	--	--	< 39			
Dinoseb	NA	61,000[3]	2,000,000[3]	680,000[3]		< 8.2	< 8.3	
MCPA	NA	31,000[3]	1,000,000[3]	340,000[3]				< 15,000
MCPP	NA	61,000[3]	2,000,000[3]	680,000[3]				
SW6010 - Metals (mg/kg)								
Antimony	7.3	31.3	454	124	<22	<10	<20	***<76***
Beryllium	1.3	156	2,250	56.2	<0.43	0.52	1.0	<1.5
Cadmium	1.0	39	564	154	<1.1	<0.52	<1.0	<3.8
Chromium	24.6	210[3]	450[3]	500[3]	6.4	14	18	15
Copper	21.2	3,130	45,400	12,400	<4.3	4.5	12	<15
Nickel	18.1	1,560	22,700	6,190	<4.3	7.8	11	<15
Silver	0.73	391	5,680	1,550	<2.2	<1.0	<2.0	<7.6
Zinc	48.7	23,500	100,000	92,900	12	30	46	28
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	1.1	3.5	3.9	2.0
SW7421 - Lead (mg/kg)	12.3	400	800	800	1.1	7.6	59	1.9
SW7471 - Mercury (mg/kg)	--	6.11[96]	68.4[96]	23.8[96]	<0.053	<0.050	<0.050	<0.056
SW7740 - Selenium (mg/kg)	10.5	391	5,680	1,550	<0.52	<0.54	<0.50	<0.49
SW9310 - Gross Alpha and Gross Beta (pCi/g)								
Gross Alpha	NA	--	--	--	6.8	8.8	12	11
Gross Beta	NA	--	--	--	9.1	22	24	10

NOTE: Table presents only constituents detected in soil at this site.
(1) (Radian, 1992 and 1993). Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Endosulfan SSLs used as a surrogate for endosulfan sulfate
(5) Endrin SSLs used as a surrogate for endrin aldehyde and endrin ketone
(6) Methylene mercury SSLs used as a surrogate for mercury
(7) Unknown oil TPH SSLs provided (NMED, 2006a)

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
pCi/g = picoCuries per gram
ft = feet
-- = not detected; not applicable
NA = not analyzed
< = Analyte not detected at reported detection limit

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italicized* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italicized*, and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Laboratory Qualifiers
B = analyte detected in associated blank analyses
D = lab-specific qualifier (no information provided)
C = lab-specific qualifier (no information provided)
X = lab-specific qualifier (no information provided)
Y = lab-specific qualifier (no information provided)
Validation Qualifiers
J = positive detection with reported concentration between the method detection limit and the reporting limit

Table 3.3
1991 Remedial Investigation Groundwater Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	US EPA MCL[2]	NMGWQ Standard [2][3]	MW-30&33-01 (upgradient)	MW-30&33-02	MW-30&33-03	MW-30&33-04
SW8240 - Volatile Organics (µg/L)							
1,1,1 - Trichloroethane	NA	200	60	<5.0	<5.0	<5.0	0.59 J
Ethyl benzene	NA	700	750	<5.0	<5.0	<5.0	0.74 J
Methylene chloride	NA	--	100	5.3 B	0.72 JB	5.0 B	2.8 JB
Tetrachloroethene	NA	5	20	<5.0	<5.0	<5.0	0.56 J
Toluene	NA	1,000	750	0.16 J	0.28 J	0.19 J	6.4
Trichloroethene	NA	5	100	<5.0	<5.0	<5.0	1.6 J
Xylenes	NA	10,000	620	<5.0	<5.0	<5.0	2.0 J
SW8240 - Volatile Organics, TIC List (µg/L)							
Hexane	NA	--	--	8	ND	ND	ND
SW8270 - Semivolatile Organics (µg/L)							
bis(2-Ethylhexyl)phthalate	NA	6	--	*<9.6*	***37 B***	1.7 JB	*<9.6*
SW8150 - Chlorinated Herbicides (µg/L)							
2,4- DB	NA	--	--	<0.87	0.010 J	<0.87	<0.87
SW6010 - Metals (µg/L)							
Antimony	89.6	6	--	**140**	<100	***<200***	<100
Beryllium	3.8	4	--	<2	<2	<4	**5.4**
Cadmium	8.3	5	10	<5	<5	***<10***	*6.5*
Chromium	234	100	50	<10	<10	<20	50
Copper	38.6	1,300[4]	1,000	<20	<20	<40	60
Nickel	43.6	--	200	21	28	<40	65
Zinc	253.4	--	10,000	<20	<20	<40	110
EPA 160.1 - Total Dissolved Solids (mg/L)	43,600	--	1,000	*19,000*	*28,000*	*31,000*	*40,000*
EPA 300.0 - Chloride (mg/L)	19,600	--	250	*6,800*	*12,000*	*13,000*	*15,000*
EPA 300.0 - Sulfate (mg/L)	7,470	--	600	*4,200*	*4,700*	*5,200*	***8,200***
EPA 340.2 - Fluoride (mg/L)	4.7	4	1.6	*1.9*	1.5	1.4	1.3
EPA 353.1 - Nitrate-Nitrite (mg/L)	98	10	10[5]	***12***	7.5	***41***	***120***
EPA 365.2 - Total Phosphorus (mg/L)	0.75	--	--	0.28	0.15	0.28	0.50
SW7421 - Lead (µg/L)	19.9	15[4]	50	<6 Z	<6 Z	8.4 Z	***24 Z***
SW7740 - Selenium (µg/L)	79.3	50	50	12	27	29	*59*
SW9310 - Gross Alpha and Gross Beta (pCi/L)							
Gross Alpha	NA	15	--	**39**	- 8.2	**42**	**50**
Gross Beta	NA	--	--	-5.5	74	6.4	110

Note: Table presents only constituents detected in groundwater at this site.

(1) Radian, 1992 and 1993. Background provided for reference only.

(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L

(3) NMAC 20.6.2.3103

(4) Action Level

(5) NMGWQ human health standard for Nitrate was used; a value for Nitrite was not listed

RFI = RCRA Facility Investigation

RCRA = Resource Conservation and Recovery Act

AFB = Air Force Base

US EPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

NMGWQ = new Mexico Groundwater Quality

mg/L = milligrams per liter

-- = No value available

NA = not analyzed

µg/L = micrograms per liter

Z = SW6010, SW7421-- Analyte detected in method blank.

pCi/L = picoCuries per liter

J = positive detection with reported concentration between the method detection limit and the reporting limit

B = analyte detected in associated blank analyses

Bolded value indicates analyte concentration exceeds U.S. EPA MCL

Italicized value indicates analyte concentration exceeds NMGWQ standard

Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 3.4
Groundwater Long Term Monitoring Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	U.S. EPA MCL[2]	NMGWQ Standard[2][3]	MW-30/33-01 (upgradient)						MW-30/33-02					
				Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05
VOCs (µg/L)															
Acetone	NA	--	--	--	--	< 5	< 5	NA	--	--	3.1 J	< 5	< 5	NA	--
Bromodichloromethane	NA	--	--	--	--	< 3	< 5	NA	--	--	--	<3	< 5	NA	--
Bromoform	NA	--	--	--	--	< 3	< 5	NA	--	--	0.73 J	< 3	< 5	NA	--
Chloroform	NA	--	100	--	--	< 3	< 5	< 1	2	--	0.76 J	< 3	< 5	.32 (J)	--
1,1-Dichloroethane	NA	--	25	--	--	< 3	< 5	< 1	5.8	--	--	< 3	< 5	< 1	--
1,1-Dichloroethylene	NA	7	5	--	--	< 3	< 5	NA	--	--	--	< 3	< 5	NA	--
cis-1,2-Dichloroethylene	NA	70	--	--	--	< 3	< 5	NA	--	--	--	< 3	< 5	NA	--
Methylene chloride	NA	--	100	--	19 UB	< 3	< 5	NA	--	--	3.8 UB	< 3	< 5	NA	--
1,1,1-Trichloroethane	NA	200	60	--	--	< 3	< 5	NA	--	--	--	< 3	< 5	NA	--
Trichloroethylene	NA	5	100	--	--	< 3	< 5	< 1	**26.6**	--	--	< 3	< 5	< 1	1
Metals (µg/L)															
Arsenic	72.3	10	100	--	--	**12.4 B (J)**	9.0 B	**18.3**	8.9 J	--	--	**11.7 B (J)**	6.4 B	**12.4**	**12.9**
Barium	929.3	2,000	1,000	--	--	12.4 B (J)	9.7 B	7.92 J	12.9 J	--	22	22.4 B (J)	16.3	15.9	15.3 J
Cadmium	8.3	5	10	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	--
Calcium	--	--	--	NA	NA	NA	NA	NA	792,000	NA	NA	NA	NA	NA	971,000
Chromium	234	100	50	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	--
Cobalt	20	--	50	NA	NA	NA	NA	NA	1.9 J	NA	NA	NA	NA	NA	0.73 J
Iron	--	--	1,000	--	--	< 21	< 1,000	< 200	ND	--	--	< 21	< 1,000	74.7 UJ	--
Magnesium	--	--	--	NA	NA	NA	NA	NA	1,360,000	NA	NA	NA	NA	NA	1,510,000
Manganese	--	--	200	--	--	0.5 B	NA	NA	4.3 J	--	--	< 0.2	NA	NA	5.3 J
Nickel	43.6	--	200	NA	NA	NA	NA	NA	1.3 J	NA	NA	NA	NA	NA	--
Potassium	--	--	--	NA	NA	NA	NA	NA	4,140 J	NA	NA	NA	NA	NA	21,000
Selenium	79.3	50	50	--	10	21.8 B (J)	17.6	17.6	ND	--	23	27 B (J)	14.5	33.7	--
Sodium	--	--	--	NA	NA	NA	NA	NA	5,560,000	NA	NA	NA	NA	NA	6,960,000
Thallium	94.3	2	--	NA	NA	NA	NA	NA	**6.8 J**	NA	NA	NA	NA	NA	**7.8 J**
Vanadium	434.4	--	--	NA	NA	NA	NA	NA	29.4 J	NA	NA	NA	NA	NA	27.2 J
Zinc	253.4	--	--	NA	NA	NA	NA	NA	3.3 J	NA	NA	NA	NA	NA	4.7 J
Organochlorine Pesticides[3] (µg/L)															
all	NA	--	--	--	--	NA	NA	NA	ND	--	--	NA	NA	NA	--
Chlorinated Herbicides (µg/L)															
all	NA	--	--	NA	--	NA	NA	NA	ND	NA	--	NA	NA	NA	--
TDS	NA	--	1,000	--	--	NA	NA	NA	*24,500*	NA	--	NA	NA	NA	*24,900*

Notes:

(1) Radian, 1993. Background provided for reference only.

(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L

(3) NMAC 20.6.2.3103

CRDL - Contract-required Detection Limit

IDL - Instrument Detection Limit

NA - not analyzed

ND - not detected at or above method reporting limit

VOCs - volatile organic compounds

µg/L - micrograms per liter

-- - not detected; not applicable

NMGWQ = New Mexico Groundwater Quality

NMAC = New Mexico Administrative Code

U.S. EPA = U.S. Environmental Protection Agency

Bolded value indicates analyte concentration exceeds U.S. EPA MCL

Italicized value indicates analyte concentration exceeds NMGWQ standard

Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Laboratory qualifiers--

assigned as a result of internal laboratory data assessment procedures

B - Value less than CRDL but greater than or equal to IDL

J - estimated value; less than CRDL but greater than or equal to IDL

UB - Qualifies as non-detct due to presence of analyte in associated laboratory blank

EPA Qualifiers--assigned as a result of independent data validation

(J) - Estimated value

(UJ) - Estimated value blow the reporting limit

(U) Compound was analyzed for but not detected.

2003 Validation Qualifiers

J - Estimated value detected less than the CRDL but greater than the reporting limit.

U - Compound was analyzed for but not detected. Analyte result was below the CRDL.

UJ - Estimated as a non-detect at the detection limit.

Bold values indicate analytes above the New Mexico Groundwater Quality Standards.

Table 3.4 (continued)
Groundwater Long Term Monitoring Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	US EPA MCL[2]	NMGWQ Standard[2][3]	MW-30/33-03						MW-30/33-04					
				Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Aug-95	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05
VOCs[4] (µg/L)															
Acetone	NA	--	--	--	--	< 5	< 5	NA	--	--	--	< 5	< 5	NA	--
Bromodichloromethane	NA	--	--	--	--	< 3	< 5	NA	--	--	--	1 J	< 5	NA	--
Bromoform	NA	--	--	--	--	< 3	< 5	NA	--	--	--	< 3	< 5	NA	--
Chloroform	NA	--	100	--	--	< 3	< 5	0.43 (J)	0.63 J	--	4.7	5	2.8 J	2.6	--
1,1-Dichloroethane	NA	--	25	--	--	< 3	< 5	0.42 (J)	1.1	22	25	*27*	13	9.3	--
1,1-Dichloroethylene	NA	7	5	--	--	< 3	< 5	NA	--	--	--	2 J	< 5	NA	--
cis-1,2-Dichloroethylene	NA	70	--	--	--	< 3	< 5	NA	--	--	2.9 J	2 J	< 5	NA	--
Methylene chloride	NA	--	100	--	3.7 UB	< 3	< 5	NA	--	--	--	< 3	< 5	NA	--
1,1,1-Trichloroethane	NA	200	60	--	--	< 3	< 5	NA	--	--	--	1 J	< 5	NA	--
Trichloroethylene	NA	5	100	--	--	< 3	< 5	2.8	7.6	***110***	***100***	***150***	**52**	**44**	--
Metals[4] (µg/L)															
Arsenic	72.3	10	100	--	--	4.3 B (J)	2.0 B	< 10	3.4 J	--	--	**14 B (J)**	9.3 B	**23.3**	**14.4**
Barium	929.3	2,000	1,000	--	24	26.3 B (J)	19.5	15.4	22.5 J	--	--	15.8 B (J)	14	10.9	12.3 J
Cadmium	8.3	5	10	NA	NA	NA	NA	NA	0.74 J	NA	NA	NA	NA	NA	--
Calcium	--	--	--	NA	NA	NA	NA	NA	990,000	NA	NA	NA	NA	NA	772,000
Chromium	234	100	50	NA	NA	NA	NA	NA	0.97 J	NA	NA	NA	NA	NA	0.61 J
Cobalt	20	--	50	NA	NA	NA	NA	NA	1.7 J	NA	NA	NA	NA	NA	--
Iron	--	--	1,000	--	--	< 110	< 1000	21.7 UJ	ND	--	300	< 110	< 1,000	200	--
Magnesium	--	--	--	NA	NA	NA	NA	NA	1,710,000	NA	NA	NA	NA	NA	1,220,000
Manganese	--	--	200	--	--	0.2 B	NA	NA	4.1 J	--	--	1.7 B	NA	NA	1.1 J
Nickel	43.6	--	200	NA	NA	NA	NA	NA	2.1 J	NA	NA	NA	NA	NA	2.0 J
Potassium	--	--	--	NA	NA	NA	NA	NA	11,100	NA	NA	NA	NA	NA	15,800
Selenium	79.3	50	50	--	35	24.4 B (J)	15.7	25.9	ND	--	14	21.3 B (J)	13.2	17.9	--
Sodium	--	--	--	NA	NA	NA	NA	NA	7,760,000	NA	NA	NA	NA	NA	5,570,000
Thallium	94.3	2	--	NA	NA	NA	NA	NA	**4.0 J**	NA	NA	NA	NA	NA	--
Vanadium	434.4	--	--	NA	NA	NA	NA	NA	18.0 J	NA	NA	NA	NA	NA	39.0 J
Zinc	253.4	--	--	NA	NA	NA	NA	NA	4.0 J	NA	NA	NA	NA	NA	1.5 J
Organochlorine Pesticides[4] (µg/L)															
all	NA	--	--	--	--	NA	NA	NA	--	--	--	NA	NA	NA	--
Chlorinated Herbicides (µg/L)															
all	NA	--	--	NA	--	NA	NA	NA	--	NA	--	NA	NA	NA	--
TDS	NA	--	1,000	NA	--	NA	NA	NA	*30,200*	NA	--	NA	NA	NA	*24,300*

Notes:
(1) Radian, 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103

CRDL - Contract-required Detection Limit
IDL - Instrument Detection Limit
NA - not analyzed
ND - not detected at or above method reporting limit
VOCs - volatile organic compounds
µg/L - micrograms per liter
-- - no value or standard was found
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
U.S. EPA = U.S. Environmental Protection Agency

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Laboratory qualifiers--
assigned as a result of internal laboratory data assessment procedures
B - Value less than CRDL but greater than or equal to IDL
J - estimated value; less than CRDL but greater than or equal to IDL
UB - Qualifies as non-detct due to presence of analyte in associated laboratory blank
EPA Qualifiers--assigned as a result of independent data validation
(J) - Estimated value
(UJ) - Estimated value blow the reporting limit
(U) Compound was analyzed for but not detected.
2003 Validation Qualifiers
J - Estimated value detected less than the CRDL but greater than the reporting limit.
U - Compound was analyzed for but not detected. Analyte result was below the CRDL.
UJ - Estimated as a non-detect at the detection limit.
Bold values indicate analytes above the New Mexico Groundwater Quality Standards.

Table 3.5
Waste and Subsurface Soil Analytical Sampling Scheme
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Sample ID	Sample Location	Sample Depth	Additional Information	Collection Date	VOCs	SVOCs	TPH	TAL Metals	TDS	Herbicides	Organoph Pesticides	Organochl Pesticides	PCBs	TCLP VOCs	TCLP SVOCs	TCLP Metals	RCRA Toxicity	Ignitability	Corosivity	Reactivity (S and CN)	pH
DP-30 SOILS																					
HGLSB30-01-0809	SB30-01	8 - 9	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-02-0305	SB30-02	3 -5	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-03-0203	SB30-03	2 - 3	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-04-0204	SB30-04	2 - 4	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-05-0709	SB30-05	7 - 9	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-06-0809	SB30-06	8 - 9	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-07-0304	SB30-07	3 - 4	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-08-0809	SB30-08	8 - 9	BSS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-11-0309	SB30-11	3 - 9	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSB30-12-0306	SB30-12	3 - 6	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSB30-12-0709		7 - 9	USS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-13-0507	SB30-13	5 - 7	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSB30-13-1012		10 - 12	USS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-16-0910	SB30-16	9 - 10	USS for SB30-11	19-May-06	X	X	X	X		X	X	X	X								
HGLSB30-17-0607	SB30-17	6 - 7	Waste Sample	20-May-06								X		X	X	X	X	X	X	X	X
HGLSB30-17-0809		8 - 9	USS	20-May-06	X	X	X	X		X	X	X	X								
HGLSBDUP07		8 - 9	USS	20-May-06	X	X	X	X		X	X	X	X								
HGLSB30-18-0506	SB30-18	5 - 6	Waste Sample	20-May-06								X		X	X	X	X	X	X	X	X
HGLSB30-18-0709		7 - 9	USS	20-May-06	X	X	X	X		X	X	X	X								
HGLSB30-20-0708	SB30-20	7 - 8	Waste Sample	20-May-06								X		X	X	X	X	X	X	X	X
HGLSB30-20-0809		8 - 9	USS	20-May-06	X	X	X	X		X	X	X	X								
SD-33 SOILS																					
HGLSB33-01-0809	SB33-01	8 - 9	BSS	18-May-06	X	X	X	X		X	X	X	X								
HGLSB33-02-0809	SB33-02	8 - 9	BSS	18-May-06	X	X	X	X		X	X	X	X								
HGLSB33-03-0809	SB33-03	8 - 9	BSS	18-May-06	X	X	X	X		X	X	X	X								
HGLSB33-07-0203	SB33-07	2 - 3	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSB33-07-0405		4 - 5	USS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB33-08-0405	SB33-08	4 - 5	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSB33-08-1012		10 - 12	USS	19-May-06	X	X	X	X		X	X	X	X								
HGLSBDUP-04		10 - 12	USS	19-May-06	X	X	X	X		X	X	X	X								
HGLSB33-10-0405	SB33-10	4 - 5	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSBDUP-05		4 - 5	Waste Sample	19-May-06								X		X	X	X	X	X	X	X	X
HGLSB33-11-0607	SB33-11	6 - 7	Soil Sample	19-May-06	X	X	X	X		X	X	X	X								
GROUNDWATER																					
MW30&33-01	MW30&33-01	NA	Upgradient Well	15-Jul-06	X			X[1]	X												
MW30&33-02	MW30&33-02	NA	Downgradient Well	15-Jul-06	X			X[1]	X												
MW30&33-03	MW30&33-03	NA	Downgradient Well	15-Jul-06	X			X[1]	X												
MW30&33-04	MW30&33-04	NA	Downgradient Well	14-Jul-06	X			X[1]	X												
MW30&33-05	MW30&33-05	NA	Adjacent to DP-30	14-Jul-06	X			X[1]	X												
GROUNDWATER COMPLIANCE LONG TERM MONITORING																					
MW30&33-01-011707	MW30&33-01	NA	Upgradient Well	17-Jan-07	X			X[1]	X												
MW30&33-02	MW30&33-02	NA	Downgradient Well	17-Jan-07	X			X[1]	X												
MW30&33-03	MW30&33-03	NA	Downgradient Well	17-Jan-07	X			X[1]	X												
MW30&33-04	MW30&33-04	NA	Downgradient Well	17-Jan-07	X			X[1]	X												
MW30&33-05	MW30&33-05	NA	Adjacent to DP-30	17-Jan-07	X			X[1]	X												

Notes:
(1) Total and dissolved

ft = feet
bgs = below ground surface
VOCs = volatile organic compounds
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
TAL = target analyte list
PCBs = polychlorinated biphenyls
TCLP = toxicity characteristic leaching potential
RCRA = Resource Conservation and Recovery Act
S = sulfide
CN = cyanide
BSS = boundary soil sample
USS = underlying soil sample
TDS = total dissolved solids

Table 3.6
DP-30 and SD-33 Waste Analytical Characterization
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analyte [1]	Toxicity Regulatory Level[2]	DP-30 (GREASE TRAP) SB30-11 19-May-2006 3.00-9.00 ft. Val	Q	SB30-12 19-May-2006 3.00-6.00 ft. Val	Q	SB30-13 19-May-2006 5.00-7.00 ft. Val	Q	SB30-17 20-May-2006 6.00-7.00 ft. Val	Q	SB30-18 20-May-2006 5.00-6.00 ft. Val	Q	SB30-20 20-May-2006 7.00-8.00 ft. Val	Q
TCLP Semi-Volatile Organic Compounds (µg/L)													
Cresols, m & p	200,000[3]	10.1	U	10.1	U	11.5	J	10.1	U	10.1	U	10.1	U
TCLP Metals (mg/L)													
Barium	100	1.01		0.487		1.01		0.839		1.37		0.838	
Cadmium	1	0.0027	U	0.0027	U	0.0027	U	0.026	J	0.0027	U	0.0027	U
Lead	5	0.037	U	0.037	U	0.037	U	0.037	U	0.183		0.037	U
Mercury	0.2	0.0001	U	0.0001	U	0.0002		0.0002		0.0001		0.0001	U
pH (pH Units)													
pH	--	7.65		6.05		7.42		7.19		7.19		7.83	
Reactivity (S and CN)	--	non-reactive		non-reactive		non-reactive		non-reactive		non-reactive		non-reactive	
Ignitability	--	non-ignitable		non-ignitable		non-ignitable		non-ignitable		non-ignitable		non-ignitable	
Corrosivity	--	non-corrosive		non-corrosive		non-corrosive		non-corrosive		non-corrosive		non-corrosive	

Analyte [1]	Toxicity Regulatory Level[2]	SD-33 (COOKING GREASE DISPOSAL PITS) SB33-07 19-May-2006 2.00-3.00 ft. Val	Q	SB33-08 19-May-2006 4.00-5.00 ft. Val	Q	SB33-10 19-May-2006 4.00-5.00 ft. Val	Q	Val[4]	Q[4]
TCLP Metals (mg/L)									
Barium	100	0.984		1.28		1.24		0.783	
Cadmium	1	0.0027	U	0.007	J	0.0027	U	0.0027	U
pH (pH Units)									
pH	--	6.34		6.88		7.07		7.62	
Reactivity (S and CN)	--	non-reactive		non-reactive		non-reactive		non-reactive	
Ignitability	--	non-ignitable		non-ignitable		non-ignitable		non-ignitable	
Corrosivity	--	non-corrosive		non-corrosive		non-corrosive		non-corrosive	

Notes
mg/L = milligrams per liter
TCLP = toxicity characteristic leaching potential
Val = reported result
Q = data qualifier
U = non-detect result
J = estimated positive detection
ft = feet
-- = not applicable
S = sulfide
CN = cyanide
CFR = Code of Federal Regulations

(1) TCLP VOCs were analyzed for and not detected
(2) Obtained from Table 1, 40 CFR 261.24
(3) m-Cresol regulatory level used as surrogate for cresols, m & p
(4) duplicate

Table 3.7
DP-30 Soil Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	NMED Soil Screening Levels[1]			BOUNDARY ASSESSMENT SAMPLES													
					SB30-01 19-May-2006 8.00-9.00 ft.		SB30-02 19-May-2006 3.00-5.00 ft.		SB30-03 19-May-2006 2.00-3.00 ft.		SB30-04 19-May-2006 2.00-4.00 ft.		SB30-05 19-May-2006 7.00-9.00 ft.		SB30-06 19-May-2006 8.00-9.00 ft.		SB30-07 19-May-2006 3.00-4.00 ft.		SB30-08 19-May-2006 8.00-9.00 ft.	
		Residential	Industrial	Construction	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q
Volatile Organic Compounds (ug/kg)																				
Chloromethane	NA	21,800	53,400	284,000	0.0929	U	0.0929	U	0.0929	U	0.0929	U	0.0929	U	0.0929	U	0.229	U	0.0929	U
Methylene chloride	NA	182,000	490,000	2,630,000	7.81		50	U	50	U	50	U	50	U	50	U	50	U	50	U
n-Butylbenzene	NA	62,100	62,100	62,100	0.0979	U	0.0979	U	0.0979	U	0.0979	U	0.0979	U	0.0979	U	0.116	U	0.0979	U
n-Propylbenzene	NA	62,100	62,100	62,100	0.0421	U	0.0421	U	0.0421	U	0.0421	U	0.0421	U	0.0421	U	0.101	U	0.0421	U
Pesticides (ug/kg)																				
alpha-Chlordane	NA	16,200[4]	71,900[4]	130,000[4]	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
gamma-Chlordane	NA	16,200[4]	71,900[4]	130,000[4]	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U
beta-BHC (beta-Hexachlorocyclohexane)	NA	3,160	14,000	53,900	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
Dieldrin	NA	304	1,200	10,200	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U
alpha-Endosulfan	NA	367,000[5]	4,100,000[5]	1,400,000[5]	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
beta-Endosulfan	NA	367,000[5]	4,100,000[5]	1,400,000[5]	2.1	U	2.1	UJ	2.1	U	2.1	U	2.1	U	2.1	U	2.6		2.1	U
Endosulfan sulfate	NA	367,000[5]	4,100,000[5]	1,400,000[5]	1.4	U	21	J	1.4	U	4.1		1.4	U	1.1		23.1		1.4	U
Endrin aldehyde	NA	18,300[6]	205,000[6]	69,900[6]	3.1	U	3.1	U	3.1	U	2.5		3.1	U	3.1	U	3.1	U	3.1	U
Endrin Ketone	NA	18,300[6]	205,000[6]	69,900[6]	1.8	U	1.8	U	1.8	U	2.1		1.8	U	1.8	U	1.8	U	1.8	U
Heptachlor	NA	1,080	4,260	36,300	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Methoxychlor	NA	310,000[7]	10,000,000[7]	3,400,000[7]	2	U	17.7		2	U	2	U	2	U	1.6		28.4		2	U
p,p'-DDD	NA	24,400	111,000	807,000	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
p,p'-DDE	NA	17,200	78,100	570,000	1.6	U	1.6	U	1.6	U	1.7		1.6	U	1.6	U	1.6	U	1.6	U
p,p'-DDT	NA	17,200	78,100	138,000	2.9	U	13.1		2.9	U	2.9	U	1		2.2		2.9	U	2.9	U
Herbicides (ug/kg)																				
Naled	NA	120,000[7]	4,100,000[7]	1,400,000[7]	33	U	33	UJ	33	UJ	33	U	33	U	45	UJ	33	U	33	UJ
Polychlorinated Biphenyls (ug/kg)																				
PCB-1254 (Aroclor 1254)	NA	1,120	8,260	4,280	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
PCBs, Total	NA	220[6]	2,900[6]	830[6]	4.6	U	4.6	U	4.6	U	4.6	U	4.6	U	4.6	U	4.6	U	4.6	U
Other Compounds (mg/kg)																				
Gasoline (C6 - C10)	NA	NA[8]	NA[8]	NA[8]	0.121	U	0.121	U	0.121	U	0.121	U	0.121	U	0.121	U	0.121	U	0.121	U
Diesel Fuel	NA	520[8]	1,120[8]	NA[8]	7.28	U	7.28	U	7.28	U	7.28	U	7.28	U	7.28	U	7.28	U	7.28	U
Metals (mg/kg)																				
Aluminum	NA	77,800	100,000	14,400	5,420		2,310		2,750		1,820		3,920		3,300		566	J	3,620	
Antimony	7.3	31.3	454	124	0.992	U	0.992	U	0.992	U	0.992	U	0.992	U	0.992	U	0.992	U	0.992	UJ
Arsenic	6.9	3.9	17.7	85.2	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U
Barium	84.4	15,600	100,000	60,200	46.9		153		40.3		25.9		23.3		28.3		9.15		29.9	
Beryllium	1.3	156	2,250	56.2	0.227	J	0.967	J	0.091	J	0.045	J	0.146	J	0.137	J	0.008	U	0.235	J
Cadmium	1.0	39.0	564	154	0.301	J	1.63		0.0795	U	0.0795	U	0.164	J	0.147	J	0.0795	U	0.316	J
Calcium	NA	NA	NA	NA	131,000		85,700		166,000		169,000		155,000		143,000		188,000		154,000	
Chromium, Total	24.6	210[7]	450[7]	500[7]	5.72		18.3		2.48		1.62		3.92		3.62		0.278		3.77	
Cobalt	NA	1,520	20,500	61	2.02		7.01		1.21		0.858	J	1.26		1.28		0.348	J	1.59	
Copper	21.2	3,130	45,400	12,400	2.91		14.5		2.83		2.67		2.68		2.55		1.69		3.83	
Iron	NA	23,500	100,000	92,900	4,680		1,780		2,280		1,600		3,320		3,050		459	J	3,880	
Lead	12.3	400	800	800	2.57		18.6		0.65	U	0.65	U	0.65	U	0.67	J	0.65	U	0.65	U
Magnesium	NA	NA	NA	NA	3,060		10,200		1,680		1,610		3,060		3,050		643		3,960	
Manganese	NA	3,590	48,400	150	76.2		357		32.5		23.5		50.5		34.8		6.12		60.1	
Mercury	NA	6.11[9]	68.4[9]	23.8[8]	0.0088	U	0.0088	U	0.0088	U	0.0088	U	0.0088	U	0.0088	U	0.0088	U	0.0088	U
Nickel	18.1	1,560	22,700	6,190	3.97	J	14.9		2.21	J	1.48	J	2.53	J	2.45	J	0.591	J	2.64	J
Potassium	NA	NA	NA	NA	1,550		6,130		900		676		1,050		971		1,540		1,290	
Silver	0.73	391	5,680	1,550	1.16		0.422		1.65		1.62		1.37		1.2		1.68		1.34	
Sodium	NA	NA	NA	NA	1,280		514		628		758		1,020		613		1,140		1,050	
Vanadium	NA	78.2	1,140	310	16.7		30.6		5.61	J	4.72	J	9.55	J	14.4		1.76	J	10.1	
Zinc	48.7	23,500	100,000	92,900	24.1		70	J	20.8		22.9		26.8		24.8		17.4		20.7	J

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Duplicate
(4) Chlordane screening values used as a surrogate for alpha- and gamma-chlordane
(5) Endosulfan screening levels used as a surrogate for alpha- and beta-Endosulfan
(6) Endrin screening levels used as a surrogate for endrin aldehyde and endrin ketone
(7) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(8) Obtained from Table 2a (NMED, 2006a)
(9) Methyl mercury screening criteria used as a surrogate for mercury

NMED = New Mexico Environment Department
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
ft = feet
Val = validated result
Q = qualifier
NA = not analyzed
U = non-detect result, value presented indicates reporting limit
J = positive detection with reported concentration between the method dection limit and the reporting limit
-- = not applicable

Underlined value indicates analyte concentration exceeds NMED construction worker SSL

Table 3.7 (continued)
DP-30 Soil Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

					SOIL SAMPLES UNDERLYING WASTE															
					SB30-12 19-May-2006 7.00-9.00 ft.		SB30-13 19-May-2006 10.00-12.00 ft.		SB30-16 19-May-2006 9.00-10.00 ft.		SB30-17 20-May-2006 8.00-9.00 ft.				SB30-18 20-May-2006 7.00-9.00 ft.		SB30-20 20-May-2006 8.00-9.00 ft.	
		NMED Soil Screening Levels[1]																	
Analytes	Background[1]	Residential	Industrial	Construction	Val	Q	Val	Q	Val	Q	Val	Q	Val[3]	Q[3]	Val	Q	Val	Q
Volatile Organic Compounds (ug/kg)																				
Chloromethane	NA	21,800	53,400	284,000	0.0929	U	0.0929	U	0.0929	U	9.44	J	18.6		13.7		0.229	U
Methylene chloride	NA	182,000	490,000	2,630,000	50	U	50	U	50	U	50	U	50	U	50	U	50	U
n-Butylbenzene	NA	62,100	62,100	62,100	0.0979	U	0.0979	U	0.0979	U	2.23	J	1.59		0.116	U	0.116	U
n-Propylbenzene	NA	62,100	62,100	62,100	0.0421	U	0.0421	U	0.0421	U	1.15	J	0.101	U	0.101	U	1.16	J
Pesticides (ug/kg)																				
alpha-Chlordane	NA	16,200[4]	71,900[4]	130,000[4]	2.3	U	2.3	U	39.1		2.5		4.1		2.3	U	3,140	
gamma-Chlordane	NA	16,200[4]	71,900[4]	130,000[4]	2.1	U	2.1	U	49.3		2.2		2.1	U	2.1	U	3,820	
beta-BHC (beta-Hexachlorocyclohexane)	NA	3,160	14,000	53,900	2.3	U	2.3	U	1.7		2.3	U	2.3	U	2.3	U	2.3	U
Dieldrin	NA	304	1,200	10,200	2.1	U	2.1	U	2.9		2.1	U	2.1	U	2.1	U	2.1	U
alpha-Endosulfan	NA	367,000[5]	4,100,000[5]	1,400,000[5]	2	U	2	U	2	U	2	U	2	U	2	U	1,580	
beta-Endosulfan	NA	367,000[5]	4,100,000[5]	1,400,000[5]	2.1	U	2.1	UJ	2.1	U	2.1	U	2.1	U	2		2.1	U
Endosulfan sulfate	NA	367,000[5]	4,100,000[5]	1,400,000[5]	1.4	U	1.4	UJ	1.4	U	1.4	U	1.5		18		1.4	U
Endrin aldehyde	NA	18,300[6]	205,000[6]	69,900[6]	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U
Endrin Ketone	NA	18,300[6]	205,000[6]	69,900[6]	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Heptachlor	NA	1,080	4,260	36,300	1.5	U	1.5	U	0.9		1.5	U	1.5	U	1.5	U	41.1	
Methoxychlor	NA	310,000[7]	10,000,000[7]	3,400,000[7]	2	U	2	U	2	U	2	U	2	U	11.9		2	U
p,p'-DDD	NA	24,400	111,000	807,000	1.3	U	1.3	U	18.5		1.6		1.3	U	1.3	U	682	
p,p'-DDE	NA	17,200	78,100	570,000	1.6	U	1.6	U	2.8		1.6	U	1.6	U	1.6	U	1.6	U
p,p'-DDT	NA	17,200	78,100	138,000	2.9	U	2.9	U	2.9	U	1.6		2.2		2.9	U	2.9	U
Herbicides (ug/kg)																				
Naled	NA	120,000[7]	4,100,000[7]	1,400,000[7]	88		25	J	33	UJ	33	U	33	UJ	33	U	54	UJ
Polychlorinated Biphenyls (ug/kg)																				
PCB-1254 (Aroclor 1254)	NA	1,120	8,260	4,280	0.6	UJ	13.8		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
PCBs, Total	NA	220[6]	2,900[6]	830[6]	4.6	UJ	13.8		4.6	U	4.6	U	4.6	U	4.6	U	4.6	U
Other Compounds (mg/kg)																				
Gasoline (C6 - C10)	NA	NA[8]	NA[8]	NA[8]	0.121	U	0.121	U	1.71		0.121	U	0.121	U	0.121	U	0.121	U
Diesel Fuel	NA	520[8]	1,120[8]	NA[8]	7.28	U	12.8	J	161		7.28	U	7.28	U	7.28	U	71	
Metals (mg/kg)																				
Aluminum	NA	77,800	100,000	14,400	2,970		3,770		5,190		2,950		5,390		9,130		8,000	
Antimony	7.3	31.3	454	124	0.992	U	0.992	U	0.992	U	0.992	U	1.49	J	4.51	J	0.992	U
Arsenic	6.9	3.9	17.7	85.2	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U	3.84		0.228	U
Barium	84.4	15,600	100,000	60,200	25.2		35.6		49		37.6		37.4		76.2		183	
Beryllium	1.3	156	2,250	56.2	0.116	J	0.128	J	0.181	J	0.116	J	0.008	U	0.008	U	0.439	J
Cadmium	1.0	39.0	564	154	0.131	J	0.177	J	0.234	J	0.097	J	0.0795	U	0.0795	U	0.769	
Calcium	NA	NA	NA	NA	143,000		149,000		163,000		150,000		155,000		32,600		79,000	
Chromium, Total	24.6	210[7]	450[7]	500[7]	3.17		3.61		5.61		2.92		2.83		13		9.81	
Cobalt	NA	1,520	20,500	61	1.2		1.93		2.06		1.23		1.14		5.25		3.03	
Copper	21.2	3,130	45,400	12,400	2.78		4.15		4.17		3.51		1.7		10.3		5.49	
Iron	NA	23,500	100,000	92,900	2,990		3,570		4,490		2,330		2,590		15,700		8,380	
Lead	12.3	400	800	800	0.65	U	5.71		5.93		0.763	J	10.4		6.36		8.83	
Magnesium	NA	NA	NA	NA	2,200		2,580		5,870		7,360		6,110		4,640		5,070	
Manganese	NA	3,590	48,400	150	50.9		49.6		118		42.3		66.7		250		143	
Mercury	NA	6.11[9]	68.4[9]	23.8[9]	0.0088	U	0.0336	J	0.0096	J	0.0144	J	0.0088	U	0.0088	U	0.0286	J
Nickel	18.1	1,560	22,700	6,190	2.2	J	3.28	J	5.08	J	2.35	J	2.21	J	10.6		7.17	J
Potassium	NA	NA	NA	NA	915		916		1,490		1,870		709		2,580		2,030	
Silver	0.73	391	5,680	1,550	1.19		1.28		1.4		1.35		0.0444	U	0.0444	U	0.555	
Sodium	NA	NA	NA	NA	272		863		637		308		297		472		421	
Vanadium	NA	78.2	1,140	310	9.09	J	9.48	J	11.3		7.19	J	4.19	J	22.6		19.1	
Zinc	48.7	23,500	100,000	92,900	22.3		21.9		23.6		26.7		8.12		39.2		40.2	

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Duplicate
(4) Chlordane screening values used as a surrogate for alpha- and gamma-chlordane
(5) Endosulfan screening levels used as a surrogate for alpha- and beta-Endosulfan
(6) Endrin screening levels used as a surrogate for endrin aldehyde and endrin ketone
(7) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(8) Obtained from Table 2a (NMED, 2006a)
(9) Methyl mercury screening criteria used as a surrogate for mercury

NMED = New Mexico Environment Department
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
ft = feet
Val = validated result
Q = qualifier
NA = not analyzed
U = non-detect result, value presented indicates reporting limit
J = positive detection with reported concentration between the method dection limit and the reporting limit
-- = not applicable

Underlined value indicates analyte concentration exceeds NMED construction worker SSL

Table 3.8
SD-33 Soil Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	NMED Soil Screening Levels[2]			BOUNDARY ASSESSMENT SAMPLES								SOIL SAMPLES UNDERLYING WASTE					
					SB33-01 18-May-2006 8-9 ft bgs		SB33-02 18-May-2006 8-9 ft bgs		SB33-03 18-May-2006 8-9 ft bgs		SB33-11 19-May-2006 6-7 ft bgs		SB33-07 19-May-2006 4-5 ft bgs		SB33-08 19-May-2006 10-12 ft bgs			
		Residential	Industrial	Construction Worker	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val[3]	Q[3]
Volatile Organic Compounds (µg/kg)																		
Ethylbenzene	NA	128,000	128,000	128,000	0.0376	U	0.0376	U	0.0376	U	0.0376	U	0.9	J	0.0376	U	0.0376	U
n-Propylbenzene	NA	62,100	62,100	62,100	0.0421	U	0.0421	U	0.0421	U	0.0421	U	1.01	J	0.0421	U	0.0421	U
p-Cymene (p-Isopropyltoluene)	NA	--	--	--	0.0679	U	0.0679	U	0.0679	U	0.0679	U	1.14	J	1.12	J	0.0679	U
Semi-Volatile Organic Compounds (µg/kg)																		
Bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000	191	U	191	U	191	U	191	U	191	U	971		191	U
Fluoranthene	NA	2,290,000	24,400,000	8,730,000	85.3	J	45.6	U	45.6	U	45.6	U	45.6	U	45.6	U	45.6	U
Organic Phosphorus Pesticides (µg/kg)																		
Dimethoate	NA	--	--	--	22	U	22	U	22	U	22	UJ	72	J	11	J	22	U
Polychlorinated Biphenyls (µg/kg)																		
PCB-1254 (Aroclor 1254)	NA	1,120	8,260	4,280	0.6	UJ	0.6	UJ	0.6	U	0.6	UJ	0.6	UJ	6.5	J	0.6	U
PCB-1260 (Aroclor 1260)	NA	1,120	8,260	4,280	0.6	UJ	0.6	UJ	0.6	U	0.6	UJ	0.6	UJ	0.6	UJ	3.6	
PCBs, Total	NA	220[4]	2,900[4]	830[4]	4.6	UJ	4.6	UJ	4.6	U	4.6	UJ	4.6	UJ	6.5	J	4.6	U
Other Compounds (mg/kg)																		
D-TPH	NA	520[5]	1,120[5]	NA[5]	7.28	U	7.28	U	7.28	U	7.28	U	7.28	U	43	J	7.28	U
Metals (mg/kg)																		
Aluminum	NA	77,800	100,000	14,400	3,420		5,260		4,190		4,660		11,600		4,530		5,170	
Barium	84.4	15,600	100,000	60,200	27.4		39.3		29.3		33.3		38.9		50.1		44.6	
Beryllium	1.3	156	2,250	56.2	0.109		0.188	J	0.15	J	0.188	J	0.492	J	0.18	J	0.198	J
Cadmium	1.0	39	564	154	0.0795	UJ	0.224	J	0.136	J	0.216	J	0.702		0.724		0.272	J
Calcium	NA	--	--	--	135,000		151,000		147,000		139,000		124,000		118,000		129,000	
Chromium, Total	24.6	210[4]	450[4]	500[4]	3.13		4.81		3.76		4.51		10.5		6.62		5.35	
Cobalt	NA	1,520	20,500	61	1.2		1.8		1.48		1.51		2.98		2.37		2.21	
Copper	21.2	3,130	45,400	12,400	2.3		3.14		2.98		3.75		4.92		19.2		4.37	
Iron	NA	23,500	100,000	92,900	3,000		4,270		3,720		4,470		9,130		4,870		4,280	
Lead	12.3	400	800	800	0.65	U	1.32		0.684	J	2.31		7.14		11.6		1.87	
Magnesium	NA	--	--	--	2,470		4,920		3,400		5,910		10,500		5,120		6,640	
Manganese	NA	3,590	48,400	150	47.9		47.9		37.4		46.9		101		73.1		76.5	
Mercury	NA	6.11[6]	68.4[6]	23.8[6]	0.0088	U	0.0088	U	0.0088	U	0.0088	U	0.0088	U	0.143		0.0088	U
Nickel	18.1	1,560	22,700	6,190	2.43	J	3.4	J	2.73	J	3.07	J	7.54	J	4.98	J	3.68	J
Potassium	NA	NA	NA	NA	1,010		1,350		1,210		1,520		2,950		1,540		1,420	
Silver	0.73	391	5,680	1,550	1.2		1.3		1.29		1.12		0.971		1.39		1.23	
Sodium	NA	--	--	--	994		1,270		1,210		822		1,010		1,140		1,090	
Vanadium	NA	78.2	1,140	310	6.26	J	10.8		10.1		11		21.1		10.4		12.6	
Zinc	48.7	23,500	100,000	92,900	14.1		19.6		16.9		18.4		31.6		49.3	J	19.9	

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Duplicate
(4) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(5) Diesel/jet fuel TPH SSLs obtained from Table 2a (NMED, 2006a)
(6) Methyl mercury screening criteria used as a surrogate for mercury

SWMU = Solid Waste Management Unit
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
µg/kg = micrograms per kilogram
Val = validated result
Q = qualifier
mg/kg = milligrams per kilogram
D-TPH = diesel-range total petroleum hydrocarbons
NA = not analyzed
-- = not applicable

Validation Qualifiers
U = non-detect result, value presented indicates reporting limit
J = positive detection with reported concentration between the method dection limit and the reporting limit

Table 3.9
Well Construction Summary Data
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

		Survey Data					Boring Information		Well Construction Information							
				Elevation (ft msl)										Screened Interval (ft bgs)		
Well ID	Installation Date	Northing[1]	Easting[1]	Top of Casing[2]	Top of Monument[2]	Ground[2]	Borehole Depth (ft bgs)	Borehole diameter (in)	Total Well Depth	PVC Diameter (in)	Length of Riser Pipe (ft)[3]	Screen Slot Size (in)	Length of Screen (ft)	Top	Bottom	Screen Material
MW30&33-01	8/28/1991	676382.234	1692954.762	4107.04	4106.52	4105.38	31	7.5	30.80	2	20.49	0.01	9.5	19.35	28.85	Sch 40 PVC
MW30&33-02	8/27/1991	675814.196	1693088.875	4106.32	4106.09	4104.37	32.5	7.5	31.45	2	23.72	0.01	9.5	22	31.75	Sch 40 PVC
MW30&33-03	8/28/1991	675864.760	1693203.048	4105.35	4105.15	4103.39	25	7.5	26.30	2	25.76	0.01	9.5	24	23.75	Sch 40 PVC
MW30&33-04	8/28/1991	675962.302	1693280.769	4104.50	4104.41	4102.92	30.5	7.5	30.95	2	30.50	0.01	9.5	29	28.75	Sch 40 PVC
MW30&33-05	6/12/2006	676092.849	1693119.469	4106.36	4106.43	4103.14	30.8	6.25	32.45	2	22.45	0.01	9.5	19.17	28.92	Sch 40 PVC

Notes:
(1) NAD 83 State Plane New Mexico C Grid
(2) NAVD 88
(3) Includes stickup

NAD 83 = North American Datum 1983
NAVD 88 = North American Vertical Datum 1988
PVC = polyvinyl chloride
Sch = Schedule
ft = feet
in = inches
bgs = below ground surface
msl = mean sea level
ID = identification

Table 3.10
Supplemental RFI and January 2007 LTM Groundwater Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	US EPA MCL[2]	NMGWQ Standard[2][3]	MW30-33-01 (upgradient well)) 15-Jul-2006 Val	Q	MW30-33-01 (upgradient well)) 17-Jan-2007 Val	Q	MW30-33-02 15-Jul-2006 Val	Q	MW30-33-02 17-Jan-2007 Val	Q	MW30-33-03 15-Jul-2006 Val	Q	MW30-33-03 17-Jan-2007 Val	Q
Volatile Organic Compounds (µg/L)															
1-Bromo-4-Fluorobenzene (4-Bromofluorobenzene)	NA	--	--	NA		48.5		NA		48.3		NA		48.4	
1,1-Dichloroethane	NA	--	25	0.0299	U	1	U	0.31	J	0.46	J	0.49	J	3.61	
1,1-Dichloroethene	NA	7	5	0.0736	U	1	U	0.0736	U	1	U	0.0736	U	0.54	J
1,3-Dichlorobenzene	NA	--	--	0.0672	U	1	U	0.0672	U	1	U	0.0672	U	1	U
Benzene	NA	5	10	0.0495	U	1	U	0.0495	U	1	U	0.0495	U	1	U
Carbon tetrachloride	NA	5	10	0.121	U	1	U	0.121	U	1	U	0.121	U	1	U
Chloroform	NA	--	100	0.0475	U	1	U	*0.48*	J	0.49	J	*0.26*	J	1.72	
Chloromethane	NA	--	--	0.23	U	1	U	0.23	U	1	U	0.23	U	1	U
cis-1,2-Dichloroethene	NA	70	--	0.101	U	1	U	0.101	U	1	U	0.101	U	0.35	J
Dibromofluoromethane	NA	--	--	NA		52.2		NA		52		NA		52.4	
m,p-Xylene (sum of isomers)	NA	10,000[4]	620[4]	0.04	J	1	U	0.0363	U	1	U	0.0363	U	1	U
Methyl ethyl ketone (2-Butanone)	NA	--	--	0.394	U	5	U	0.394	U	5	U	0.394	U	5	U
Methylene chloride	NA	--	100	0.689	U	5	U	0.689	U	5	U	0.689	U	5	U
Naphthalene	NA	--	--	0.417	U	5	UJ	0.417	U	5	U	0.417	U	5	U
Toluene-D8	NA	1,000	750	NA		46.8		NA		47.8		NA		47.8	
Trichloroethene (TCE)	NA	5	100	0.0495	U	1	U	1.56		1.76		*3.53*		**21.1**	
Metals (µg/L)															
Aluminum	NA	--	5,000	NA		860		NA		788		NA		54	
Arsenic	72.3	10	100	NA		5	U	NA		5	U	NA		5	U
Barium	929.3	2,000	1,000	NA		18		NA		18		NA		15	
Calcium	NA	--	--	NA		780,000		NA		996,000		NA		924,000	
Chromium, total	234	100	50	NA		5	U	NA		5	U	NA		5	U
Iron	NA	--	1,000	NA		786		NA		919		NA		129	
Lead	19.9	15	50	NA		5	U	NA		5	U	NA		5	U
Magnesium	NA	--	--	NA		1,180,000		NA		1,660,000		NA		1,510,000	
Manganese	NA	--	200	NA		38		NA		21	J	NA		1	J
Potassium	NA	--	--	NA		9,120		NA		11,400		NA		8,910	
Sodium	NA	--	--	NA		5,800,000		NA		7,570,000		NA		7,710,000	
Vanadium	434.4	--	--	NA		34		NA		26		NA		19	U
Filtered Metals (µg/L)															
Barium (Filtered)	85.2	2,000	1,000	R[6]		12	J	R[6]		13	J	R[6]		15	J
Beryllium (Filtered)	1.3	4	--	R[6]		2.5	U	R[6]		2.5	U	R[6]		2.5	U
Calcium (Filtered)	NA	--	--	R[6]		616,000		R[6]		964,000		R[6]		903,000	
Chromium, total (Filtered)	7.2	100	50	R[6]		5	UJ	R[6]		5	UJ	R[6]		5	UJ
Cobalt (Filtered)	10.9	--	50	R[6]		5	UJ	R[6]		5	UJ	R[6]		5	UJ
Iron (Filtered)	NA	--	1,000	R[6]		10	UJ	R[6]		10	UJ	R[6]		10	UJ
Magnesium (Filtered)	NA	--	--	R[6]		1,020,000		R[6]		1,580,000		R[6]		1,460,000	
Nickel (Filtered)	14.5	--	200	R[6]		5	UJ	R[6]		5	UJ	R[6]		5	UJ
Potassium (Filtered)	NA	--	--	R[6]		8,760		R[6]		9,420		R[6]		10,400	
Sodium (Filtered)	NA	--	--	R[6]		5,190,000		R[6]		7,250,000		R[6]		7,860,000	
Thallium (Filtered)	90.4	2	--	R[6]		5	UJ	R[6]		5	UJ	R[6]		5	UJ
Vanadium (Filtered)	222.4	--	--	R[6]		33	J	R[6]		23	UJ	R[6]		20	UJ
Zinc (Filtered)	29.7	--	10,000	R[6]		5	UJ	R[6]		5	UJ	R[6]		5	UJ
Other Compounds (mg/L)															
TDS	NA	--	1,000	*25,800*		*23,900*		*34,300*		*30,800*		*35,400*		*28,700*	

Notes

(1) Radian, 1993. Background provided for reference only.

(2) US EPA MCLs and NMGWQ standards are provided for reference only since TDS exceeds 10,000 mg/kg

(3) NMAC 20.6.2.3103

(4) Duplicate

(5) Total xylenes screening values used as surrogate for m,p-xylenes

(6) Dissolved metals data rejected (see Section 3.7.4 in text)

Bolded value indicates analyte concentration exceeds U.S. EPA MCL

Italicized value indicates analyte concentration exceeds NMGWQ standard

µg/L = micrograms per liter

mg/L = milligrams per liter

TDS = total dissolved solids

Val = analytical result

Q = data qualifier

J = estimated positive detection

U = non-detect result

R = rejected

NA = not analyzed

-- = not applicable

US EPA = U.S. Environmental Protection Agency

MCL = Maximum Contaminant Level

NMGWQ = New Mexico Groundwater Quality

NMAC = New Mexico Administrative Code

Table 3.10 (continued)
Supplemental RFI and January 2007 LTM Groundwater Analytical Results
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	US EPA MCL[2]	NMGWQ Standard[2][3]	MW30-33-04				MW30-33-05				
				15-Jul-2006		17-Jan-2007		15-Jul-2006		17-Jan-2007		
				Val	Q	Val	Q	Val	Q	Val	Q	Val[4] Q[4]
Volatile Organic Compounds (µg/L)												
1-Bromo-4-Fluorobenzene (4-Bromofluorobenzene)	NA	--	--	NA		49.3		NA		47.3		48.4
1,1-Dichloroethane	NA	--	25	3.38		3.44		11.5		11.1		11
1,1-Dichloroethene	NA	7	5	0.0736	U	1	U	1.44		1.92		1.81
1,3-Dichlorobenzene	NA	--	--	0.0672	U	1	U	0.07	J	1	U	1 U
Benzene	NA	5	10	0.0495	U	1	U	0.29	J	1	U	1 U
Carbon tetrachloride	NA	5	10	0.121	U	1	U	0.121	U	1	U	1 U
Chloroform	NA	--	100	1.29		1.29		0.48	J	0.52	J	0.53 J
Chloromethane	NA	--	--	0.23	U	1	U	0.23	U	1	U	1 U
cis-1,2-Dichloroethene	NA	70	--	0.17	J	1	U	7.5		7.68		7.62
Dibromofluoromethane	NA	--	--	NA		52.2		NA		51.1		52.1
m,p-Xylene (sum of isomers)	NA	10,000[4]	620[4]	0.0363	U	1	U	0.04	J	1	U	1 U
Methyl ethyl ketone (2-Butanone)	NA	--	--	0.394	U	5	U	0.59	J	5	U	5 U
Methylene chloride	NA	--	100	0.689	U	5	U	0.689	U	5	U	5 U
Naphthalene	NA	--	--	0.417	U	5	U	0.417	U	4.23	J	5 UJ
Toluene-D8	NA	1,000	750	NA		48.1		NA		46.9		47
Trichloroethene (TCE)	NA	5	100	**14.2**		**15.6**		**59.3**		**58.1**		**55.7**
Metals (µg/L)												
Aluminum	NA	--	5,000	NA		607		NA		1,020	J	1,440 J
Arsenic	72.3	10	100	NA		5	U	NA		5	U	5 U
Barium	929.3	2,000	1,000	NA		14		NA		27		31
Calcium	NA	--	--	NA		809,000		NA		843,000		812,000
Chromium, total	234	100	50	NA		5	U	NA		5	U	5 U
Iron	NA	--	1,000	NA		576		NA		*1,100*		*1,410*
Lead	19.9	15	50	NA		5	U	NA		5	U	5 U
Magnesium	NA	--	--	NA		1,380,000		NA		1,290,000		1,230,000
Manganese	NA	--	200	NA		10	J	NA		105		99
Potassium	NA	--	--	NA		5,700	U	NA		22,100		14,700
Sodium	NA	--	--	NA		6,250,000		NA		5,950,000		5,570,000
Vanadium	434.4	--	--	NA		31		NA		36		36
Filtered Metals (µg/L)												
Barium (Filtered)	85.2	2,000	1,000	R[6]		11	J	R[6]		17	J	18 J
Beryllium (Filtered)	1.3	4	--	R[6]		2.5	U	R[6]		2.5	U	2.5 U
Calcium (Filtered)	NA	--	--	R[6]		744,000		R[6]		771,000		754,000
Chromium, total (Filtered)	7.2	100	50	R[6]		5	UJ	R[6]		5	UJ	5 UJ
Cobalt (Filtered)	10.9	--	50	R[6]		5	UJ	R[6]		5	UJ	5 UJ
Iron (Filtered)	NA	--	1,000	R[6]		10	UJ	R[6]		10	UJ	10 UJ
Magnesium (Filtered)	NA	--	--	R[6]		1,290,000		R[6]		53		1,150,000
Nickel (Filtered)	14.5	--	200	R[6]		5	UJ	R[6]		9	UJ	7 UJ
Potassium (Filtered)	NA	--	--	R[6]		6,070		R[6]		13,300		11,900
Sodium (Filtered)	NA	--	--	R[6]		6,300,000		R[6]		5,860,000		5,320,000
Thallium (Filtered)	90.4	2	--	R[6]		5	UJ	R[6]		5	UJ	5 UJ
Vanadium (Filtered)	222.4	--	--	R[6]		26	J	R[6]		31	J	32 J
Zinc (Filtered)	29.7	--	10,000	R[6]		5	UJ	R[6]		5	UJ	5 UJ
Other Compounds (mg/L)												
TDS	NA	--	1,000	*25,100*		*24,700*		*24,500*		*21,500*		NA

Notes

(1) Radian, 1993. Background provided for reference only.

(2) US EPA MCLs and NMGWQ standards are provided for reference only since TDS exceeds 10,000 mg/kg

(3) NMAC 20.6.2.3103

(4) Duplicate

(5) Total xylenes screening values used as surrogate for m,p-xylenes

(6) Dissolved metals data rejected due to lack of comparability between sample and duplicate

Bolded value indicates analyte concentration exceeds U.S. EPA MCL

Italicized value indicates analyte concentration exceeds NMGWQ standard

µg/L = micrograms per liter
mg/L = milligrams per liter
TDS = total dissolved solids
Val = analytical result
Q = data qualifier
J = estimated positive detection
U = non-detect result
R = rejected

NA = not analyzed
-- = not applicable
US EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code

Table 3.11
DP-30/SD-33 Supplemental RFI Sample Delivery Group Summary
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Sample Identification:		SDG					
		6052304	6052223	6071808	D6E240388	D6F010162	7012209
Soil	HGLSB30-01-0809	X			X		
	HGLSB30-02-0305	X			X		
	HGLSB30-03-0203	X			X		
	HGLSB30-04-0204	X			X		
	HGLSB30-05-0709	X			X		
	HGLSB30-06-0809	X			X		
	HGLSB30-07-0304	X			X		
	HGLSB30-08-0809	X			X		
	HGLSB30-11-0309	X			X		
	HGLSB30-12-0306	X			X		
	HGLSB30-12-0709	X			X		
	HGLSB30-13-0507	X			X		
	HGLSB30-13-1012	X			X		
	HGLSB30-16-0910	X			X		
	HGLSB30-17-0607	X			X		
	HGLSB30-17-0809	X			X		
	HGLSB30-18-0506	X			X		
	HGLSB30-18-0709	X			X		
	HGLSB30-20-0708	X			X		
	HGLSB30-20-0809	X			X		
	HGLSB3301-0809		X			X	
	HGLSB33-02-0809		X			X	
	HGLSB33-03-0809		X			X	
	HGLSB33-07-0203		X		X		
	HGLSB33-07-0405		X		X		
	HGLSB33-08-0405		X		X		
	HGLSB33-08-1012		X		X		
	HGLSB33-10-0405		X		X		
	HGLSB33-11-0607		X		X		
	HGLSBDup04		X		X		
	HGLSBDup05		X		X		
	HGLSBDup07	X			X		
Groundwater	HGLMW30-33-01			X			
	HGLMW30-33-02			X			
	HGLMW30-33-03			X			
	HGLMW30-33-04			X			
	HGLMW30-33-05			X			
	HGLGWDUP11			X			
Groundwater Compliance Long Term Monitoring							
Groundwater	MW-30/33-01-011707						X
	MW-30/33-02-011707						X
	MW-30/33-03-011707						X
	MW-30/33-04-011707						X
	MW-30/33-05-011707						X
	MW-3/33 DUP						X

SDG = sample delivery group

Table 3.12
DP-30 and SD-33 Waste Material Characteristics
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

Boring Location	Year	Total Depth of Boring (ft)	DT Top of Waste (ft)	DT Bottom of Waste (ft)	Description of Waste	Geology beneath the waste	Sample Interval	Comments
SB-30&33-01	1991	10	1.3	4.6	Waste, sand & silt; black (N1) some woody material.	4.6-10 feet: sand: very pale orange, soft, moist, fine to very fine grained, poorly graded (SP)	2, 8	No pid hits where waste was found
SB-30&33-02	1991	12	3	8	3 feet: dark yellowish-orange (10YR 6/6) 4 feet: pale yellowish-brown (10YR 6/2) 5 feet: black (N1) 7 feet: moderate yellowish-brown	8-12 feet: silty sand: very pale orange, sand very fine to fine grained, poorly graded (SM)	4, 8	PID of 238ppm where waste was found
SB-30&33-03	1991	8	2.6	5.4	Waste: black (N1) composed of Silty Clay(?), wet, unidentifiable tape or plastic	5.4 to 8 feet: sand: greyish-orange, soft, moist, very poorly graded, fine sand (SP)	3, 6	PID of 21.2ppm where waste was found
SB-30&33-04	1991	12	2.6	7.2	Waste: dark yellow brown to dusky yellow brown, rusty sand, small tinsel type plastic. At 4 feet: waste: soft black (N1) saturated waste colloidal to sludgy, grey, hairy layers, medium grey to greyish-black	7.4 to 10 feet: sand: very light grey, hard, fine grained, black zones/mottling. Sand, as above: moist, hard	3, 8	PID of 19.4ppm where waste was found
SB-30&33-06	1991	10	2.5-4	5-6	2.5-4 feet: waste: pale yellowish-brown, bluish-white, dusky yellow	4-5 feet: silty sand: light brown grading into waste: black (N1), moderate yellowish-brown	2.5, 6	No PID's taken
SB-30&33-07	1991	8	2	4	At 2 feet: Clayey silt: moderate brown, low plasticity, gypsum crystals, small waste body at top, olive grey	4-8 feet: Clayey silt, same as above w/o waste	2, 4	No PID's taken
SB-30&33-08	1991	6	1.4	3.2	Waste: moderate brown with minor black zones composed of stained sand	3.2-6 feet: silt: very pale orange, hard, dry, non-plastic, crumbly	2-2.5, 4	No PID's taken
SB-30&33-09	1991	6	0.9	2.6	waste: dusky yellow brown to dark yellow brown, moist, sandy, plastic material common	silt: very pale orange, hard, dry, drumbly, non-plastic	1, 3	No PID's taken
SB-30&33-10	1991	14	2.6	8.8	waste: dark yellowish-brown, dry, silty and sandy, paper fragments; At 4 feet, waste same as above, sandy:dry. At 8 feet Waste: as above: with black soft sludge and plant material, to 8.9 feet grading to silt.	Silt: medium light grey, hard, dry, crumbly	3, 10	8 feet: 67 ppm
SB30-011	2006	10/borehole collapse	3.5	10	3.5-10 feet waste: very dark to black silty sand, with strong sweet odor and plastic bags	NA- borehole collapse	3.5-9	0.0
SB30-12	2006	10	3	6	3-6 feet waste: dark brown silty sand with waste material	6-10 feet: reddish brown to light brown silty sand	3-6, 7-9	0.0
SB30-13	2006	12	2	9	3-9 feet waste: very dark brown silty sand with sweet odor and plastic fragments	9-12 feet: light reddish brown silty sand	5-7, 10-12	0.0
SB30-16	2006	10	3	9	3-7 feet waste: very dark brown silty sand, sweet odor and plastic fragments; 8-9 feet waste: very dark brown silty sand with plastic fragments, waste material	9-10 feet: light grayish brown silty sand	9-10	3-7 feet: 0.0 ppm; 8-9 feet: 1.2 ppm; 9-10 feet: 2.5 ppm
SB30-17	2006	9.5	6	7	6-7 feet waste: very dark brown to black silty sand with plastic sheet fragments, and slightly sweet odor	7-9.5 feet: light gray silty sand with caliche	6-7, 8-9	0.0
SB30-18	2006	10	4.5	6	4-6 feet waste: very dark brown silty sand with clay, sweet odor, plastic fragments, metal shavings	6-10 feet: reddish brown silty sand with caliche		0.0
SB30-20	2006	9	7	8	7-8 feet waste: dark brown stained silty sand, plastic sheaths	8-9 feet: grayish light brown silty sand with caliceh	7-8, 8-9	0.0
SB-33-07	2006	5	2	4	2-4 feet: waste: blackish-brown stained silty sand, sweet odor noted	4-5 feet: silty sand, with gypsum crystals, medium brown	2-3, 4-5	0.0
SB33-08	2006	12	3	9.5	3-5 feet waste: dark brown stained fine-grained silty sand, sweet odor noted; 6-9.5 feet: light brown silty sand containing wood fragments, sweet odor noted	9.5-12 feet:reddish brown silty sand with gypsum crystals	4-5, 11-12	0.0
SB30-10	2006	5/borehole collapse	4	5	4-5 feet waste: very dark brown stained silty sand containing fragments of plastic sheeting, sweet odor noted	NA- borehole collapse	4-5	0.0

DT = depth to
ppm = parts per million
NA = not applicable
ft = feet

Table 3.13
DP-30/SD-33 Summary of Analyte Exceedances by Media
DP-30/SD-33 (SWMU 113) – Grease Trap/Cooking Grease Disposal Pits
Supplemental RFI
Holloman AFB, New Mexico

MEDIA	Soil			Groundwater [1]	
	Residential SSL	Industrial SSL	Construction Worker SSL	U.S. EPA MCLs[2]	NMGWQ[2]
DP-30					
Waste / Soil in Waste Interval	Total Xylenes, Unknown Oil, TCE, PCB-1254, Arsenic, Cadmium, Chromium, Lead, Mercury	Total Xylenes, Unknown Oil, TCE, PCB-1254, Chromium, Lead	Total Xylenes, PCB-1254,	--	--
Soil below/beyond waste interval	Unknown Oil	Unknown Oil	Manganese	--	--
SD-33					
Waste / Soil in Waste Interval	Unknown Oil	Unknown Oil	None	--	--
Soil below/beyond waste interval	None	None	None	--	--
DP-30/SD-33					
Groundwater	--	--	--	TCE	TCE

Notes:
(1) Current conditions, 2006 RFI and 2007 LTM
(2) U.S. EPA MCLs and NMGWQ standards are provided for reference only since TDS exceeds 10,000 mg/L

SSL = soil screening level
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
PCB = polychlorinated biphenyl
TCE = trichloroethene
TDS = total dissolved solids
RFI = Resource Conservation and Recovery Act Facility Investigation
LTM = long term monitoring
-- = not applicable

4.0 SS-39 (SWMUS 165, 177, 179, AND 181) – MISSILE FUEL SPILL AREA

4.1 LOCATION

ERP site SS-39, the Missile Fuel Spill Area, is located in the central portion of Holloman AFB along the Lost River drainage basin. Specifically, the site is located along the northern slope of the Lost River drainage basin immediately south of Building 1176. The location of SS-39, with respect to Holloman AFB, is shown on Figure 2.1. An aerial photograph of the site and immediate surroundings is presented as Figure 4.1.

4.2 SITE DESCRIPTION

SS-39 is primarily undeveloped and moderately vegetated with salt cedars, shrubs, and grasses. The area immediately north of the site is relatively flat and heavily improved with the construction of Building 1176 and two asphalt paved vehicle lots east and west of the building. This portion of the site is the only section that has been improved with site features. Although relatively flat, an overall area-wide southerly dip is present. The area immediately south of Building 1176 represents the only other developed portion of SS-39. Two concrete-lined, 1-foot wide drainage ditches (SWMU 181, Drainage Trough) extend south-southeast and southwestward from the southern corners of the building. Each ditch discharges to separate sumps (SWMU 177, Drainage Sump), as shown on Figure 4.1.

The central portion of the slope is moderately hummocky in topography, most likely reflecting former site grading activities, vegetation growth, and erosional features. Steeply incised rills and drainage swales are present throughout the area, trending in a north-south orientation toward the Lost River drainage basin. Concrete rubble, metal piping, and masonry fragments were observed sporadically across the area. Vegetation consisting of salt cedars, shrubs, grasses, and cacti are present throughout this area.

Near the base of the slope, the slope dip decreases until nearly flat with an overall southerly dip towards the center of the drainage basin. Vegetation, primarily grasses and shrubs, are present until the edge of the Lost River drainage basin, after which no vegetation is present. The edge of the basin typically marks the high water level within the drainage basin during and slightly after heavy rainstorms. An unpaved service road parallels the basin edge providing access to the lower portion of the site.

Photographs of the site are included in Appendix A.

4.3 WASTE HISTORY

SS-39, the Missile Fuel Spill Area, is located at the test sled launch area near Building 1176. The launch pad at the south end of the track was constructed with concrete drains and a water deluge system. Spilled oxidizers and fuels were delivered to separate drains, diluted with water and flushed into the Lost River. In 1975, catch basins were installed to collect the spilled liquid fuels. Oxidizer vent lines from the engines were also installed and designed to

discharge into the catch basins. Since 1975, no propellants have been intentionally released to the open drains. Surface and groundwater samples were collected from the Lost River in the vicinity of the test track in July of 1979. The results indicated that the test track had no observable impact upon the Lost River water quality. Waste propellants are currently collected, treated, and disposed in the treatment system located in Building 1176.

Fueling activities for tests at the Alpha Pad were completed on the track at the Alpha Pad before each sled launch. The fuels were brought on location by truck because no fuels were stored at the launch facility. Before sleds were removed from the track, the fuels were emptied from the sleds into the proper storage container (a process called de-tanking) and then the sleds were taken to Building 1176 where the remainder of the fuel was purged from the engines. Throughout the history of the test track, fuels have included at least the following: JP-4 (jet fuel); unsymmetrical dimethylhydrazine (UDMH); aniline; inhibited red fuming nitric acid (IRFNA); inhibited white fuming nitric acid (IWFNA); liquid oxygen; JPX (1:1 mixture of JP-4 and UDMH); dyes; solid rocket propellants; and other compounds. The drainage systems for the Alpha Pad and Building 1176 were designed to prevent accidents in the event of a fuel spill during the fueling and/or de-tanking activities.

The drainage systems collected and drained spilled oxidizers and propellants separately. At the test track, for example, fueling and de-tanking of oxidizers were all completed on the east half of the track and the same was done for propellants on the west half of the track. In the event of a spill, the propellants and/or oxidizers were collected in and drained through separate drainage systems. According to the former employees, fuel spills were very uncommon. Extreme precautions were necessary when handling fuels because of the reactive nature of the incompatible fuel types and the stringent safety precautions associated with the launch operations in general.

In addition to these fuels, solvents such as TCE were commonly used for sled maintenance in Building 1176. The management practices of these chemicals at Building 1176 were not extensively reviewed; however, interviews with past employees suggest that the washrack and drainage trenches could have received wastes.

4.4 SITE-SPECIFIC ENVIRONMENTAL SETTING

4.4.1 Topography

ERP site SS-39 is located on the northern slope of the Lost River drainage basin. The slope has an overall moderately southward dipping slope towards the Lost River drainage basin. Moderately to steeply incised swales and gullies cut into the slope east, west, and immediately downgradient of Building 1176. At the base of the slope, the topography becomes flat with a very slight southerly dip towards the center of the Lost River drainage basin.

4.4.2 Surface Water

No surface water bodies are present within or cross SS-39. During heavy rain events and the rainy season, surface water runoff collects within the Lost River drainage basin. Photographs of surface water present within the drainage basin are included in Appendix A. Numerous swales and gullies emanate from and cross SS-39. No surface water was observed within the gullies and drainage swales during supplemental RFI activities.

4.4.3 Geology

Site-specific geologic information was obtained from lithologic data collected during previous subsurface investigations and from this supplemental RFI. A cross-section of SS-39, as provided in the supplemental RRI workplan (HGL, 2005a) is included as Figure 4.2.

Based on lithologic logging activities, the soils underlying Building 1176 and SS-39 are composed primarily of well-sorted, fine-grained sand. To the west, in the vicinity of MW39-02, two 8 foot sequences of silt separated by a 2 foot thick sand lens were encountered to approximately 18 feet bgs. North of Building 1176, in the vicinity of MW39-01, a 8 foot thick sequence of silty sand was encountered at the surface. Both the silt and silty sand units appear to interfinger the sand unit. Within the Lost River drainage basin, sands with clay and interbedded clay lenses were encountered at the surface to approximately six feet bgs.

4.4.4 Hydrogeology

Groundwater occurs beneath SS-39 in a shallow unconfined aquifer ranging from 18 feet bgs at the top of the northern slope to less than 0.5 foot bgs in the Lost River drainage basin. Groundwater potentiometric surface maps generated from water level data obtained during the July 2006 and January 2007 sampling events are provided as Figures 4.3 and 4.4, respectively. During the July 2006 sampling event, the groundwater elevations of MW-39-06 and MW-39-06D were 4031.30 feet msl and 4033.89 feet msl, respectively, indicating upward groundwater flow is occurring in the vicinity of the cluster wells. During the January 2007 sampling event, water elevations were 4034.84 ft msl (MW-39-06) and 4034.38 feet msl (MW-39-06D), indicating a slightly downward groundwater flow is occurring in the vicinity of the cluster wells. The difference in groundwater flow between the clustered wells may be attributable to the flooding of the Lost River drainage basin after several rainstorms occurring two weeks prior to the January 2007 LTM event.

During the RI, field slug tests were conducted to estimate hydraulic conductivity. The hydraulic conductivities for the SS-39 wells installed during the RI were determined to be:

- MW39-01 - 1.24 ft/day;
- MW39-02 - 2.92 ft/day;
- MW39-03 - 2.51 ft/day; and
- MW39-04 - 0.97 ft/day

Using an average hydraulic conductivity of 1.91 ft/day, a hydraulic gradient of 0.0047 ft/ft, derived from the 2003 LTM event), and an estimated porosity of 30%, the linear groundwater flow velocity across the site was estimated to be 0.029 ft/day, or 10.9 ft/year.

4.5 PREVIOUS INVESTIGATIONS

The SS-39 waste history presented below has been taken from the NMED-approved 2005 Supplemental RCRA Facility Investigation Work Plan (HGL, 2005a). The locations of soil and groundwater samples collected during previous investigations are included as Figures 4.5 through 4.8.

4.5.1 Phase I Remedial Investigation

In 1991, an RI consisting of completing several soil borings and the installation and sampling of four groundwater monitoring wells, MW-39-01 through MW-39-04, was conducted. During the RI, two soil borings were completed with a DPT drill rig, five soil borings were completed with a hand auger, and the four groundwater monitoring wells were installed using a HSA drill rig. One well, MW-39-01, was installed upgradient of the site. The remaining wells were installed downgradient of the outfall of the Oxidizer Spill Drainpipe (MW-39-04), the Discharge Box (MW-39-03), and Building 1176 (MW-39-02). The monitoring well and soil boring locations are shown on Figure 4.5. Boring logs and well completion reports for these locations are provided in Appendix B.

The DPT soil borings, SB-39-01 and SB-39-02, were located at the ends of the drainage troughs for Building 1176, the suspected contamination sources. Hand auger borings, HA-39-04 and HA-39-05, were located in a sump at the end of a third drainage trough for Building 1176 on the east side of the Building. Hand auger boring HA-39-01 was located in the outfall for the oxidizer spill drainpipe. Hand auger boring HA-39-02 was located outside of the discharge box for the propellant spill drainpipe, and HA-39-03 is located inside the discharge box. The soil analyses included volatile organics, total metals, and petroleum hydrocarbons. Since the Alpha Pad is constructed of structural concrete and associated with active operations, no drilling was completed through the pad.

Soil analytical results obtained during the Phase I RI are provided on Table 4.1. Samples at SS-39 can be divided into two different groupings: those at or downgradient of the drainage sumps for Building 1176, and those at or downgradient of the outfalls for the oxidizer and propellant spill drainpipes. The highest metals concentrations in soils at SS-39 were in the area of the oxidizer and propellant spill drainpipe outfalls. Metals concentrations were highest in HA-39-02 and HA-39-03, in or near the discharge box for propellants, where lead was notably elevated at concentrations of 1,300 mg/kg in HA-39-02 and 1,100 mg/kg in HA-39-03, above NMED SSLs for all receptors. Other health-based SSL exceedances in the samples were primarily limited to cadmium and chromium for the construction worker, as these SSLs are lower, due to the particulate inhalation pathway, than the SSLs for residential receptors. Almost all of the organic constituents in soils at the site were detected in the drainage sumps for Building 1176, in SB-39-01 and SB-39-02. The organic compounds were predominantly chlorinated VOCs.

Figure 4.5 depicts the Phase I RI sampling locations with VOC results. TCE was detected in SB-39-01, 10 to 12 feet bgs, at a concentration of 40 mg/kg, exceeding the residential, industrial, and construction worker NMED SSLs. TCE was also detected at 10 to 12 feet bgs in boring SB-39-02 at a concentration of 11 mg/kg, exceeding the residential, industrial, and construction worker NMED SSLs. Tetrachloroethene (PCE) was detected in the soil sample colleted from 10 to 12 feet bgs in boring SB-39-02 at a concentration of 95 mg/kg, above all NMED SSLs. 1,1,1-Trichloroethane (TCA) was also detected in the 10 to 12 feet bgs sample from borings SB-39-01 and SB-39-02 at concentrations of 430 mg/kg and 87 mg/kg, respectively. The 1,1,1-TCA concentrations were below human health-based SSLs. Other VOCs were present, but below 1 mg/kg and below human health-based SSLs. Metals were not elevated in these samples.

In the borings completed at the propellant and oxidizer spill drainpipes discharge points (i.e., HA-39-01, HA-39-02, and HA-39-03), the only VOCs detected in addition to methylene chloride, a common laboratory contaminant, were toluene and 1,1-dichloroethene (1,1-DCE). Both VOCs were present at estimated concentrations below detection limits and below SSLs.

Petroleum hydrocarbons were detected in all of the soil samples submitted for TPH analysis. The highest petroleum hydrocarbons concentrations were detected in boring HA-39-04 (20,700 mg/kg) and from 10 to 12 feet bgs in boring SB-39-02 (2,620 mg/kg).

As part of the Phase I RI, the four installed wells (MW-39-01 through MW-39-04) were sampled and analyzed for VOCs, total metals, TDS, and anions. The RI groundwater sampling analytical results is provided on Table 4.2. Metals were not detected in the groundwater samples at concentrations above background and standards. VOCs were detected in the groundwater samples at elevated concentrations in the vicinity of Building 1176 (MW-39-02), indicating that these contaminants have migrated from the sumps to the underlying groundwater. 1,1,1-TCA was detected in MW-39-02 at a detection of 240 μg/L, which exceeds both the U.S. EPA MCL and the NMGWQ standard for 1,1,1-TCA. 1,1-DCE was detected in MW-39-02 at a concentration of 9.6 μg/L, also above the U.S. EPA MCL and the NMGWQ standard. TCE and carbon tetrachloride were detected at MW-39-02 at concentrations of 59 μg/L and 5.8 μg/L, above the U.S. EPA MCL but below NMGWQ standards. MCLs and NMGWQ standards are provided for reference only, as TDS in the area of the plume exceeds 10,000 mg/L.

1,1,1-TCA, PCE, and TCE were detected in MW-39-02, suggesting that soil contaminants have migrated to groundwater at this sump. VOCs were mostly not detected or present at concentrations below the detection limit in wells downgradient of the sump east of Building 1176 and the drainage outfalls from the Alpha Pad. Based on these results, the RI concluded that additional field investigation was warranted.

4.5.2 Phase II RCRA Facility Investigation

A Phase II RFI was performed at SS-39 to further delineate the contamination previously identified at the site (Radian, 1994). For the investigation, soil samples were collected from

eight borings located along the drainage ditches below the oxidizer and propellant outfalls, two borings at Building 1176 sumps, and five hand auger borings. Collected samples were analyzed for SVOCs and metals; VOCs were not analyzed. The results of sampling are provided on Tables 4.3 and 4.4 and depicted on Figure 4.6. Analytes were not unusually elevated and did not exceed SSLs (Radian, 1994).

During the Phase II effort, groundwater samples were collected from 15 temporary sampling locations using direct push methods, and screened in the field for chlorinated compounds. Eight groundwater samples were submitted to an off-site laboratory for confirmatory analysis. The results of these analyses are provided on Table 4.5, and depicted on Figure 4.7. The data indicate that TCE was present above the NMGWQ standard and EPA MCL for TCE at four locations, and above the EPA MCL for TCE at an additional two locations. PCE was not detected above standards. 111-TCA and 1,1-dichloroethane was also detected above standards at one location, 177-HO3.

Additionally, surface soil samples, vegetation samples, and jackrabbit tissue, blood and urine samples were collected in the area, and surface water samples were collected from the Lost River drainage basin to support an ecological risk assessment. The assessment concluded that there was no unacceptable risk to ecological receptors (Radian, 1994).

The October 1994 Phase I RFI report for Table 2 SWMUs presented the results for SS-39. This report proposed NFA for the site and a Decision Document (Radian, 1994) was submitted in September 1995, but was not signed by NMED. The site was added to the LTM program in 1997 and LTM has been conducted since 1997 in conjunction with LTM at the other subject sites.

4.5.3 Supplemental Groundwater Investigation

In response to an NMED request, a supplemental groundwater investigation was performed using DPT methods in May and June 1998. The purpose of the additional investigation was to delineate the extent of TCE previously detected during the Phase II, Table 2 RFI. Sixteen groundwater samples were collected and analyzed for VOCs. Sixteen DPT or hand-augered borings were installed three feet below the watertable (encountered between 1 to 18 feet bgs). The locations of the 16 1998 soil borings are depicted on Figure 4.8. Soil samples were collected for lithologic logging and visual inspection. The generated boring logs are included in Appendix B.

Based on the boring logs, depth to water in the DPT locations closest to the Lost River drainage basin is very shallow. Depth to water was 2.5 feet bgs at SS3916 and SS3915, 0.8 feet bgs in SS3902, 1.5 feet bgs in SS39024, 1.8 feet bgs in SS3905, and 2.7 feet bgs in SS3912. Results of this investigation are summarized in Table 4.6. TCE was detected above the reporting limit in groundwater samples from eight of the sixteen borings (SS3901, SS3902, SS3904, SS3907, SS3908, SS3912, SS3913, and SS3914), at concentrations ranging from 1.1 μg/L (SS39-12) to 280 μg/L (SS39-7). Maximum TCE concentrations (27 μg/L to 280 μg/L) were detected in DPT sampling points located 300 to 500 feet south-southwest of Building 1176. A TCE isopleth map developed from the supplemental groundwater

investigation data and the 1997 LTM data is provided as Figure 4.8. As shown on the figure, the downgradient extent of the plume was delineated to U.S. EPA MCLs. With the exception of benzene in groundwater obtained from SS3909 at a concentration of 1.0 μg/L, no other VOCs were detected above reporting limits in the groundwater samples.

The supplemental groundwater investigation report recommended NFA for the site based on the data (Groundwater Technology Government Services, Inc. [GTI], 1998). The lateral extent of TCE had been determined and contaminant concentrations were below those detected during the RI investigations, where the risk was already determined to be acceptable due to the lack of the potable exposure pathway and the absence of adverse effects to terrestrial and aquatic species in the risk assessment.

4.5.4 Groundwater Long Term Monitoring

LTM began in 1997 and continued on a biennial basis until December 2005. After submittal of the Supplemental RFI workplan (HGL, 2005a) and the response to NOD (HGL, 2006a), NMED required groundwater LTM activities be conducted on a semi-annual basis (NMED, 2006b). The SS-39 LTM data through December 2005 is provided in Table 4.7. The data shows that TCE, carbon tetrachloride, and chloroform have been consistently detected in the monitoring well closest to the sump, MW-39-02, although at decreasing concentrations since 1999. During the December 2005 LTM event, TCE was also detected in well MW-39-03.

Only TCE has been detected above standards during the period of LTM. TCE has been above the U.S. EPA MCL (5 μg/L) but below the NMGWQ standard (100 μg/L) in 1997, 1999, and 2001. TCE was detected below both standards in 2003. The 2003 LTM report recommended continued sampling since only 4 rounds of monitoring have been conducted. During the 2005 LTM event, the target analyte list was expanded to include TDS. TDS concentrations were reported at concentrations ranging from 5,670 mg/L in the upgradient well MW-39-01, furthest from the basin, to 17,200 mg/L in MW-39-02.

Following review of the 2003 LTM report and previous site investigation reports, NMED determined that additional investigation was required at SS-39. These requirements are described in NMED correspondence of February 9, 2005 and are summarized below:

- An in-depth review of previous investigations;
- Installation of monitoring wells in the area of highest contaminant concentrations and at downgradient locations. The downgradient extent of the plume shall be defined where the concentration of TCE in the groundwater is less than 5 mg/L (likely should be 5 μg/L, the U.S. EPA MCL);
- A vertical extent well shall be installed in the area of highest contaminant concentrations;
- Compliance LTM for VOCs, perchlorate, and TDS conducted on a semi-annual basis over a two-year period.

In addition, NMED requested additional subsurface soil sampling to be conducted to address a lack of UDMH and aniline analytical data during previous investigations (NMED, 2006b). In addition, during the February 2006 NMED site visit, NMED requested the collection and analysis of sediment from the test track concrete collection basin (SWMU 167) located at the southern end of the test track (HGL, 2006d).

4.6 SUPPLEMENTAL RFI ACTIVITIES

Supplemental RFI activities were conducted at SS-39 between May and July 2006. All field sampling activities were conducted in general accordance with the NMED approved work plan (HGL, 2005a) as modified in the response to NOD (HGL, 2006a) and during the February 2006 NMED site visit (HGL, 2006d). Detailed descriptions of the supplemental RFI field activities conducted at SS-39 are discussed below. An analytical sample summary table is included as Table 4.8. Supplemental RFI sampling locations are depicted on Figure 4.9.

Soil cuttings, decontamination water, and purged groundwater generated during the supplemental RFI and January 2007 LTM event were handled in accordance with Holloman AFB SOP 9 (Field Management of Investigation-Derived Waste).

4.6.1 Sediment Sampling

A sediment grab sample was collected from the Concrete Collection Basin (SWMU 167) using a disposable polyethylene sample trowel. The collected sample was submitted for SVOCs, UDMH, and RCRA metals. During collection, the sediment was visually inspected and field screened with a PID. No staining, unusual odors, or PID readings were noted in the sediment.

The sediment analytical results are presented on Table 4.9. Three SVOCs (acetophenone, diethyl phthalate, and dimethyl phthalate) and six metals were detected in the sample. Of the SVOCs and metals detected, only lead was detected at a concentration exceeding SSLs. Lead was detected at 1,438 mg/kg, exceeding the NMED residential (400 mg/kg), industrial (800 mg/kg), and construction worker (800 mg/kg) SSLs. Aniline and UDMH were not detected in the sediment sample.

4.6.2 Subsurface Soil Assessment

4.6.2.1 Borehole Drilling

A subsurface soil investigation using a DPT drill rig was conducted to address the UDMH and aniline soil quality data gap identified by NMED in the supplemental workplan NOD (NMED, 2006a). As discussed in the Response to NOD (HGL, 2006a), supplemental RFI soil borings were located immediately adjacent to former borings SB3901, SB3902, HA3901 and HA3902 and advanced to a maximum depth of 10 feet bgs. The supplemental RFI soil borings were designated as SB3901R, SB3902R, HA3901R and HA3902R. In addition, a separate boring, designated SB39-17, was installed immediately downgradient of the western drainage trough (SWMU 181). Boring SB39-17 was included in the supplemental RFI at the

recommendation of HGL personnel during the February 12, 2006 NMED site visit (HGL, 2006d) upon visual inspection of the drainage trough (SWMU 177) emanating from the southwestern corner of Building 1176. Approximately 10 feet from Building 1176, the western drainage trough angles from a southerly direction to a southwesterly direction and represents an area that may have received overflow during high discharge flow events. Boring SB39-17 was installed on the downgradient edge where the trough angles and completed to a maximum depth of 10 feet bgs. The locations of the supplemental RFI borings are depicted on Figure 4.9.

During borehole advancement, soil samples were continuously collected using a decontaminated, 2-inch diameter, stainless-steel macrocore sampler fitted with disposable acetate liners. The samplers were hydraulically advanced through the subsurface in four foot increments. Upon achieving a four foot push, the sampler was removed from the subsurface and the acetate line extracted from the sampler. The liner was then opened and the contained soils were lithologically characterized, visually inspected, and field screened using a PID. No elevated PID readings or visual evidence of contamination were observed in the completed borings. Boring logs of the five borings are included in Appendix B.

Upon completion of soil sampling activities, generated soil cuttings were placed down the associated boreholes if VOCs were not detected with a PID. This is in accordance with Holloman AFB SOPs. The upper two feet of the borings were then backfilled with bentonite chips and finished to grade with like material.

4.6.2.2 Subsurface Soil Sampling

As requested by NMED (NMED, 2006a), specific soil intervals in each boring was collected and analyzed for UDMH, aniline, and RCRA metals. Subsurface soil samples were collected from 2 to 4 feet bgs and 8 to 10 feet bgs from all of the borings except in borings HA3901R and HA3902R, where borehole collapse resulted in the deeper samples being collected from a shallower soil interval (i.e., 8 to 8.5 feet bgs in HA39-01R and 8 to 9 feet bgs in HA39-02R). Subsurface soil samples collected from 2 to 4 feet bgs and 8 to 10 feet bgs were also collected from boring SB39-17.

Upon collection, the samples were appropriately labeled, placed on ice, and transported to the off-site laboratory using the laboratory courier service. Completed field sample data sheets for the soil samples submitted for laboratory analysis are located in Appendix D.

Soil analytical results are presented on Table 4.10. Constituents that exceeded SSLs are provided on Figure 4.10. UDMH and aniline were not detected in the soil samples. Of the seven metals detected, four (arsenic, cadmium, chromium, and lead) were detected above NMED residential SSLs but below industrial and construction worker SSLs. Arsenic was detected at 8.27 mg/kg in boring HA3901R from 2 to 4 feet bgs exceeding the arsenic NMED residential SSL of 3.90. Arsenic was not detected in the deeper soil sample collected from HA-39-01R. The arsenic concentration within the adjacent 1991 soil boring (HA-39-01) was only 1.6 mg/kg (Table 4.1), well below screening criteria. The variability in the arsenic concentration suggests natural variability in background arsenic concentrations.

Cadmium, chromium, and lead were detected at concentrations slightly above residential SSLs in only the 8 to 10 foot bgs soil interval obtained from boring SB3902R (associated with SWMU 177). None of the other RCRA metals were detected at elevated concentrations and no metals, including the three reported above screening criteria is SB3902R, were detected in the adjacent 1991 soil boring SB-39-02 at concentrations exceeding screening criteria (Table 4.1). Cadmium and lead were detected in boring SB3902R (8 to 10 feet bgs soil interval) at 50.7 mg/kg and 612 mg/kg, respectively, exceeding the NMED residential SSLs. However, cadmium and lead were only detected at 23.4 mg/kg and 177 mg/kg, respectively, in a duplicate sample collected from the same sample. The variation between the two cadmium and lead concentrations reflects the heterogeneous distribution of cadmium and lead in the subsurface soils. The average cadmium (i.e., 37.5 mg/kg) and lead (394.5 mg/kg), calculated from the original and duplicate samples, are below NMED residential SSLs. Based on the average concentrations its unlikely cadmium and lead represent site contaminants; however, both metals have been flagged as exceeding residential criteria on the soil analytical screening table (Table 4.10).

4.6.3 Monitoring Well Installation

4.6.3.1 Permanent Monitoring Wells

Four permanent monitoring wells, designated as MW-39-05, MW-39-06, MW-39-06D, and MW-39-07) were installed near the edge of the Lost River drainage basin in accordance with the workplan (HGL, 2005a). The four wells were installed in June 2006 using a DPT drill rig fitted with 4 ¼ HSAs. During advancement of the MW-39-06D borehole, continuous soil sampling was conducted using a 2 foot long, 2-inch diameter, stainless steel split spoon sampler for lithologic logging, field screening with a PID, and visual observations. The remaining three wells, MW39-05, MW39-06, and MW39-07 were lithologically logged from drill cuttings. Lithologic logging and field screening results and recorded visual observations are presented on drilling logs included in Appendix B. In addition, the obtained lithologic data was used to develop a geologic description of the site, presented in Section 4.4.4.

Upon achieving a maximum depth corresponding to 8 feet below the soil/groundwater interface at well locations MW-39-05, MW-39-06, and MW-39-07, borehole advancement was discontinued and a groundwater monitoring well constructed through the HSA casing. Monitoring wells MW-39-05 through MW-39-07 were drilled to maximum depths ranging between 13 and 14 feet bgs, allowing for the screened portions of the wells to be positioned straddling the SS-39 watertable. Monitoring well MW-39-06D was drilled to a maximum depth corresponding to 11 feet below the bottom of the MW-39-06 well (i.e., 25 feet bgs). The screened portion of MW-39-06D was positioned below MW-39-06 to evaluate the potential downward vertical migration of the TCE directly downgradient of the potential source area. The locations of the four monitoring wells are depicted on Figure 4.7.

All four wells were constructed of 2-inch diameter, 10-foot long, 0.010-slotted, Schedule 40 PVC well screen, Schedule 40 PVC riser pipe, and completed with above-ground steel monuments set within 2-foot by 2-foot by 6-inch concrete pads and surrounded by 3 concrete

filled bollards. The well construction data for the four supplemental RFI permanent wells and previously installed wells are provided on Table 4.11. Well construction logs for the four monitoring wells are included in Appendix C.

After installation, the newly installed monitoring wells were developed using an electronic submersible pump and dedicated, disposable tubing. During the development process, water quality parameters were monitored in five minute increments using a water quality meter and separate turbidity meter to determine when well development was achieved, as defined in the workplan. Water quality parameter measurements were collected every 5 minutes and development was achieved. Well development was considered achieved when three consecutive measurements of the monitored water quality parameters (i.e., temperature, pH, specific conductance, DO, ORP, and turbidity) were within:

- plus or minus (±) 1 °C;
- ± 0.1 pH units;
- ± 10% for specific conductance;
- ± 10% for DO;
- ± 10% for ORP; and
- Less than or equal to 10 NTUs or ± 10% difference.

Well development data sheets for the four wells are included in Appendix D.

4.6.3.2 Pre-Pack Temporary Wells

In addition to the newly installed permanent monitoring wells, NMED required the installation of several monitoring wells within the Lost River drainage basin to define the southern extent of the TCE plume (NMED, 2006a). The Lost River drainage basin is, however, subject to periodic flooding after large rain events. Repeated flooding would most likely compromise the long term structural integrity of any monitoring wells installed within the basin. In addition, the USAF and USACE allow no permanent structures to be constructed within the Lost River drainage basin (Livingston, 2006).

Consequently, as discussed and agreed to by NMED during the February 2006 site visit (HGL, 2006d), five pre-pack monitoring wells, designated MW-39-08 through MW-39-12, were utilized to collect groundwater samples from within the Lost River drainage basin during the supplemental RFI and January 2007 groundwater compliance LTM event.. The use of pre-pack wells allowed for the collection of groundwater samples from designated locations within the drainage basin while providing a temporary sampling location that helped minimize groundwater sample turbidity. A global positioning system was utilized to locate the designated pre-pack well locations for repeated sampling events. The locations of the pre-pack monitoring wells are depicted on Figure 4.7.

The pre-pack monitoring wells are constructed of a 2-inch diameter, 5-foot long, 0.010-slotted Schedule 40 PVC well screen wrapped with a stainless steel wire mesh containing a 0.25 inch thick filter pack. The screen is capped with a flush-jointed well cap and attached to a 2-inch

diameter, 5-foot long Schedule 40 PVC riser pipe. The pre-pack wells were installed through an open borehole drilled using a 3-inch, decontaminated stainless steel hand auger. The hand auger borings were completed to maximum depths ranging between 5 to 10 feet bgs during the supplemental RFI and January 2007 LTM event.

After installation, the pre-pack wells were allowed to sit undisturbed for a minimum of 12 hours prior to groundwater sampling. Before a groundwater sample was collected, approximately 0.25 to 0.5 gallons of groundwater was purged from each well. Once groundwater sampling activities were completed, the pre-pack wells were removed from the subsurface, decontaminated, and placed in dedicated storage containers. The abandoned boreholes were backfilled with the sediment removed during borehole advancement.

4.6.4 Groundwater Sampling

Groundwater sampling was conducted in July 2006 as part of the supplemental RFI in accordance with the workplan (HGL, 2005a) as modified in the response to NOD (HGL, 2006a). In addition, semi-annual groundwater compliance monitoring was conducted in January 2007 as agreed upon in the response to NOD (HGL, 2006a and NMED, 2007). As specified in the workplan and the response to NOD (HGL, 2005a and 2006a), the SS-39 TCE plume monitoring well network consisted of existing wells MW-39-02 and MW-39-03, newly installed permanent wells MW-39-05, MW-39-06, MW-39-06D, and MW-39-07; and pre-pack wells MW-39-08 through MW-39-12.

Prior to initiating groundwater sampling activities, synoptic water levels were obtained from the existing and newly installed (permanent and pre-pack) monitoring wells. Water level measurements were collected by lowering an audible sounding probe attached to a graduated tape into the well until the alarm sounded, indicating the air/water boundary in the well. The corresponding value on the tape, measured to the nearest 0.01 foot from the rim of the PVC casing was then recorded as “Depth to Water”. The alarm was then turned off, and the probe lowered to the bottom of the well. The corresponding measurement, to the nearest 0.01 foot was recorded as “Total Well Depth”. The probe and tape were then removed from the well and decontaminated. This process was repeated for all of the monitored wells. Water level and total well depth measurements were recorded on the individual sample data sheets located in Appendix D. During the synoptic water level events, vegetation was observed within well MW-39-03. Due to the compromised condition of well MW-39-03, MW-39-03 was not sampled. Although neither MW-39-01 nor MW-39-04 were part of the supplemental RFI and compliance LTM monitoring well network for the SS-39 TCE plume (HGL, 2005a), synoptic water level measurements were obtained from MW-39-01 and MW-39-04 in January 2007. Monitoring well MW-39-04 was measured dry during both sampling events. The water level data obtained from both events were used to prepare groundwater potentiometric surface maps included as Figures 5.3 (July 2006) and 5.4 (January 2007).

During the July 2006 sampling event, groundwater samples were collected using a peristaltic pump fitted with disposable tubing and low-flow purging and sampling methodology. In accordance with the workplan, water quality parameters were measured using an in-line water quality meter and separate turbidity meter. Groundwater purging was considered complete

when stabilization of the water quality parameters was achieved. During the January 2007 LTM event, disposable polyethylene bailers were used to purge and sample the SS-39 groundwater monitoring wells due to equipment issues. The use of disposable bailers was considered acceptable since use of bailers is consistent with previous LTM sampling methods employed at SS-39. During the purging process, groundwater quality parameters were measured after every 0.5 gallon to gallon of groundwater was removed the wells. Groundwater purging activities were considered complete when stabilization of the groundwater quality parameters occurred or three well casing volumes were removed. Groundwater parameter measurements obtained during the purging process were recorded on groundwater field sampling data sheets which have been included in Appendix D.

Upon completion of the purging process, groundwater samples were collected and analyzed by an off-site laboratory for VOCs, RCRA metals (total and dissolved), perchlorate, and TDS. During the July 2006 supplemental RFI groundwater sampling event, groundwater samples were also analyzed for UDMH and aniline. Since UDMH and aniline were not detected in the July 2006 groundwater samples, NMED agreed to suspend UDMH and aniline analyses for the January 2007 sampling event (HGL, 2006e). Groundwater field sampling report data sheets for the July 2006 and January 2007 sampling events are included in Appendix D.

Supplemental RFI and January 2007 compliance LTM groundwater analytical results are presented on Table 4.12. UDMH and aniline were not detected in the groundwater samples collected during the supplemental RFI groundwater sampling event. Fourteen VOCs, 7 metals, and perchlorate were detected in the SS-39 monitoring wells (including pre-pack wells).

Of the 14 VOCs detected, only TCE was detected above MCLs and NMWQC standards. The TCE groundwater analytical results along with historic groundwater TCE sampling results are depicted on Figure 4.11. Based on contaminant concentration contours, included on Figure 4.10, the highest TCE concentrations, exceeding both U.S. EPA MCL (5 μg/L) and NMGWQ standard (100 μg/L), were detected in wells MW-39-06 and MW-39-06D. In July 2006, the highest TCE concentration (366 μg/L) was detected in MW-39-06; during the January 2007 LTM event, the highest TCE concentration (464 μg/L) was detected in MW-39-06D. Changes in the TCE concentrations between the shallow and deep well may reflect changes in the local hydraulic head. In July 2006, a higher hydraulic head was present in the deeper well (MW-39-06D), indicating an upward groundwater flow. In January 2007, a higher hydraulic head was present in the shallower well, indicating a downward groundwater flow.

Arsenic (total) in MW-39-06D and lead (total) in MW-39-09 were detected at concentrations exceeding the U.S. EPA MCL. Neither metal was detected in the dissolved metals analysis from the corresponding well. Based on the lack of detections in the dissolved phase, the elevated total concentrations most likely reflected sample turbidity.

At the request of NMED, groundwater samples from SS-39 were analyzed for perchlorate and TDS. In July 2006, perchlorate concentrations ranged from 12 μg/L in MW-39-02 to

130 μg/L in several of the pre-pack wells within the Lost River drainage basin. The perchlorate concentrations within the basin ranged from 110 μg/L to 130 μg/L and decrease further away from the basin boundary and towards the site. During the January 2007 LTM event, TDS concentrations in the groundwater samples were very high and resulted in high perchlorate method detection limits (i.e., 75 μg/L to 600 μg/L). Perchlorate was not detected above these elevated detection limits during the January 2007 LTM event.

TDS concentrations ranged from 15,700 mg/kg in MW-39-02 to 141,000 mg/kg in MW-39-11, above the 10,000 mg/L TDS threshold for applicability of groundwater standards. These standards are therefore provided for reference only.

4.7 ASSESSMENT OF DATA RESULTS

A general description of the SS-39 data assessment results is provided below. Detailed information regarding the data and assessment findings and responses are included in the data validation packages included in Appendix E.

Eleven soil samples including one duplicate sample, one sediment sample, and eleven groundwater samples including one duplicate sample were submitted for laboratory analysis. The analytical data for the groundwater samples are presented in SDG 6071315, 6071441, 6071730, 6071808, D6G140204, D6G14155, D6G15155, D6G18345, D6G18347, and D6G22231. The analytical data for the soil and sediment samples are presented in SDG 6052223, 6052304, and D6E240388. Table 4.13 identifies the location of sample results by SDG.

4.7.1 Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limit met method or contractual requirements. All data reviewed were acceptable. The following minor issues were identified and resolved, including:

- The “J” flagging of several mercury soil results (in SDG 6052223) for being reported below the reporting limit but greater than the MDL.
- The ”J“ flagging of the TCE soil results in SDG 6071441 for being reported at concentration higher than the highest calibration standard. The laboratory reported this value instead of re-analyzing the sample at dilution. The “J” flag indicates an estimated value.
- The “J” flagging two SVOC and one silver sediment result (SDG 6052304) for being reported below the reporting limit but greater than the MDL.

- The "J" flagging of several VOC groundwater results in SDGs 6071441, 6071315 and 6071730 for being reported below the reporting limit but greater than the MDL.

- The "J" flagging of one G-TPH trip blank result in SDG 6071441 for being reported at a level less than the reporting limit but greater than the MDL.

- The "J" flagging of several metals groundwater results (SDG 6071730) for being reported below the reporting limit but greater than the MDL.

- The "J" flagging of one m,p-xylene and one barium groundwater result (SDG 6071808) for being reported below the reporting limit but greater than the MDL.

4.7.2 Precision and Accuracy

QC data, including MS / MSD, surrogates, and LCS recoveries were used to assess the precision and accuracy for the soil and groundwater samples. The following minor issues were identified and resolved, including:

- The "UJ" flagging of a cadmium and lead groundwater results in SDGs 6071441 and 6071315 for having recoveries out of criteria in the MS/MSD pair.

- The "J" flagging of a cadmium and chromium groundwater results, and the "UJ" flagging of a lead groundwater results in SDG 6071730 for having recoveries out of criteria in the MS/MSD pair.

- With respect to the groundwater compliance LTM samples, the "UJ" and "J" flagging of dissolved antimony, dissolved calcium, dissolved cobalt, dissolved copper, dissolved iron, dissolved magnesium, dissolved manganese, dissolved nickel, dissolved sodium, dissolved thallium, dissolved vanadium, dissolved zinc, dissolved silver, dissolved barium, dissolved cadmium, dissolved chromium, dissolved lead, and dissolved selenium (in SDG 7012209) due to matrix interference.

All soil and groundwater samples were properly preserved and analyzed within the required holding time. The following minor issues were identified and resolved, including:

- The "UJ" flagging of the UDMH groundwater samples in SDG D6G140204, for being shipped at room temperature. Samples are typically shipped at $4 \pm 2°C$, although there are no known promulgated requirements or published guidance from the U.S. EPA for this analyte. Because hydrazine is highly reactive with oxygen, oxidizers, and acids, and high concentrations may ignite spontaneously on contact with earth and wood, it was the data validator's professional judgment that samples should have been chilled or frozen.

All initial and continuing calibration QC criteria were reviewed and were acceptable. The following minor issues were identified and resolved, including:

- With respect to the groundwater compliance LTM samples, the "J" and "UJ" flagging of volatile organics groundwater results (in SDG 7012209), for having a percent difference greater than the acceptance criteria.

The frequency of analysis and %R of the second source calibration verifications were reviewed and determined to be acceptable. Surrogate spikes were added to all samples, QC checks, and blanks as required by the reference method. All data reviewed were acceptable.

4.7.3 Comparability

Comparability represents the confidence with which one data set can be compared to another. In accordance with the approved QAPP (HGL, 2005b), data are comparable when collection techniques, measurement methods, and reporting procedures are equivalent for the samples within a sample set. Implementation of appropriate procedures for sampling and shipping, as specified in the QAPP (HGL, 2005b), were performed. Within the data sets, it was concluded that results were comparable to each other.

4.7.4 Representativeness

Representativeness was assessed by use of field duplicate and blank samples. Method and field blank samples were analyzed to determine potential contamination from laboratory or shipping procedures. Overall, representativeness was considered satisfactory, except as noted below.

- For VOC analyses in SDG 6071441, 10 target analytes were detected in the method blank associated with the groundwater samples in QC Batch No. 28352, two of which were common laboratory contaminants. Seven target analytes were detected in the trip blank for groundwater samples, with toluene and methylene chloride as common laboratory contaminants. For the affected results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- G-TPH were detected in two of the three method blanks associated with all groundwater samples in SDG 6071441. These analytes are not common laboratory contaminants. For the affected results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- For VOC analyses in SDG 6071315, 20 target analytes were detected in the method blank associated with the groundwater samples, two of which (toluene and methylene chloride) were common laboratory contaminants. For the affected results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- For VOC analyses in SDG 6071730, nine target analytes were detected in the method blank associated with all groundwater samples, which were analyzed in QC Batch No. 28352, two of which were common laboratory contaminants. For the affected results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- For VOC analyses in SDG 6071808, eight target analytes were detected in the method blank associated with the groundwater samples in QC Batch No. 28352, none of which were common laboratory contaminants. Fourteen target analytes were detected in both the method blank associated with the only trip blank and the trip blank itself, of which only toluene was a common laboratory contaminant. For the affected results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- Dissolved metals data for the July 2006 groundwater sampling events were rejected because results between the sample and duplicate were not comparable, nor were the data representative when compared with historic or 2007 metals results. Filtration at the laboratory likely compromised the samples, as this was not an issue in the January 2007 round when samples were field filtered.

With respect to the groundwater compliance LTM data:

- For VOC analyses in SDG 7012209, several target analytes were detected in the method blank associated with the groundwater samples in QC Batch Nos. 34075 and 34077. The affected results are "U" qualified as analytical artifacts. In addition, three target analytes were detected in the trip blank associated all samples in this SDG. All methylene chloride results are qualified "U" based on method blank contamination. Several target analytes were detected in the equipment blanks associated with all samples in this SDG. All methylene chloride results are "U" qualified based on method blank contamination.

- For metals analyses in SDG 7012209, method blanks were contaminated with total and dissolved potassium and total sodium. The total potassium detection in sample MW-30/33-04-011707 was less than the associated action level and was qualified "U."

- An equipment blank in SDG 7012209, RB-011707 is associated with the samples collected on 01/17/07 and was free from contamination with the exception of total copper, total nickel, total potassium, and total vanadium. The total copper, total nickel, and total vanadium detections in several groundwater samples were less than the associated action level and were qualified "U."

- For metals analyses in SDG 7012209, total aluminum had a high relative percent difference in the field duplicate and sample MW-30/33-05-011707. The total aluminum in groundwater samples MW-3/33 DUP and MW-30/33-05-011707 are "J" qualified.

4.7.5 Completeness

Completeness is defined as the percentage of the total number of analytical results requested that are judged to be valid, including estimated (J-flagged) values, in accordance with the QAPP (HGL, 2005b). Completeness of the laboratory analysis for the SS-39 samples was determined to be 91.5%, which is below supplemental RFI DQOs. The rejection of the filtered metals data from the July 2006 supplemental RFI groundwater sampling event resulted in the below DQO completeness percentage. As discussed above, the rejected data was most likely attributed to laboratory filtering methods. Consequently, all future dissolved metals samples will be filtered in the field to prevent future issues with dissolve metals analysis.

4.7.6 Usability

Based on the data review and validation, the accepted analytical data were determined to be useable for their intended purpose.

4.8 NATURE AND EXTENT OF CONTAMINATION

4.8.1 Contaminant Distribution/Fate and Transport

A summary of analytes detected at concentrations exceeding screening criteria segregated by media is included as Table 4.14.

4.8.1.1 Soil and Sediment Contamination

Soil and sediment analyte exceedances detected at SS-39 are depicted on Figure 4.12. As shown on the figure, three sources of soil/sediment contamination have been identified. Based on contaminant distribution, it appears that material within the concrete catch basin (SWMU 167) has affected soils at SWMU 179, the outfall of SWMU 167. Elevated lead concentrations (1,430 mg/kg) were detected in the sediment of the catch basin and within or in the immediate vicinity of SWMU 179 (1,300 mg/kg and 1,100 mg/kg). TRPH, although not detected within the SWMU 167 catch basin, was detected within or adjacent to SWMU 179 at concentrations above SSLs. Besides lead and TRPH, arsenic was also detected above NMED SSLs in the same samples obtained from within or adjacent to SWMU 179. Shallow soil samples collected downgradient of the two impacted soil samples within the drainage swale do not contain metals at concentrations above SSLs; no analysis of TRPH was conducted on these samples.

The second soil contamination area appears to be highly localized in a drainage swale emanating from the Building 1176 parking lot. TRPH appears to be the sole contaminant and the likely source is runoff from the parking lot and not a RCRA-related release. None of the samples collected in the vicinity of the elevated TRPH detection were analyzed for TRPH.

The third source area is attributable to SWMU 177, the drainage sumps. Elevated concentrations of TCE, PCE, and TRPH were detected in the soils from 7 feet bgs to the top of the watertable, at 12 feet bgs. The TCE contamination is delineated vertically to the watertable. Based on the distribution of TCE in the groundwater, SWMU 177 is the likely

source of the identified TCE groundwater plume. Cadmium, chromium, and lead were also above residential SSLs in the unsaturated zone. SWMU 177 is no longer active.

4.8.1.2 Groundwater Contamination

Halogenated VOCs (i.e., TCE, PCE, vinyl chloride, 1,1-DCE, 1,1,1-trichloroethane, and carbon tetrachloride), non-halogenated VOCs, several metals, and perchlorate have been detected in the groundwater south of Building 1176. None of the non-halogenated VOCs have been detected above groundwater standards. Metals contamination is not evident, given that all dissolved metals concentrations are below standards.

As stated in the previous section, the source of the halogenated VOCs can be associated with SWMU 177 (Building 1176 drainage sumps). The majority of the halogenated VOCs have historically been detected immediately downgradient of this area. TCE concentrations within MW-39-02 have continued to decrease from 59 μg/L to 19.8 μg/L. During the January 2007 LTM event, TCE concentrations ranged between 2.01 μg/L in MW-39-12 to 464 μg/L in MW-39-06D. Based on the TCE concentrations detected (Figure 4.11), the current permanent and pre-pack monitoring well network delineates the TCE groundwater plume to below 5 μg/L (the U.S. EPA MCL), with the exception of wells MW-39—05, MW-39-08 and MW-39-11. Samples obtained via DPT methods in 1998 delineated the plume to levels below the MCL downgradient of these wells.

Perchlorate results are provided on Figure 4-12. During the July 2006 sampling event, perchlorate concentrations ranged from 12 μg/L to 130 μg/L, with the highest concentrations detected within the Lost River drainage basin. Based on the perchlorate distribution, the source of the perchlorate in this area appears to be the Lost River drainage basin and not SS-39.

TDS concentrations within the vicinity of the TCE groundwater plume range from 15,700 mg/L to 141,000 mg/L. Groundwater standards are therefore provided for reference only and do not apply.

4.8.2 Fate and Transport

4.8.2.1 Soil and Sediment

Based on the presence of contaminants in the catch basin (SWMU 167) in the vicinity of the test track, the discharge pipes from the basin (SWMU 167) to the outfalls are most likely acting as a conduit for sediment and surface water runoff containing arsenic, lead, and TRPH. According to the VSI conducted in the early 1980s, all of the Building 1176 SWMUs with the exception of SWMU 179, the Discharge Box, were deemed inactive (HGL, 2005a). However, the test track is active suggesting SWMU 167, the Concrete Collection Basin, is still active. Consequently, contaminated sediment, surface water, and releases of potentially hazardous constituents to the collection basin have the potential to discharge to the downgradient outfalls. Although soil sampling within the drainage swale to which the outfalls discharge indicates

metal contaminants have not migrated downgradient within the swale, no investigation of TRPH concentrations further down the swale have been conducted.

Besides elevated TRPH concentrations associated with the test track outfalls, elevated TRPH has been detected in a drainage swale adjacent to the eastern parking area of Building 1176. The presence of elevated TRPH in the drainage swale soils adjacent to Building 1176 indicates the swale may have received releases of TRPH unrelated to test track activities and reflects runoff from the parking lot, not a RCRA release.

The subsurface VOC and TRPH contamination associated with SWMU 177 occurs primarily to the underlying watertable interface, estimated at 12 feet bgs. The presence of VOCs in the groundwater downgradient of SWMU 177 suggests soil to groundwater migration of contaminants has occurred.

4.8.2.2 Groundwater

The TCE groundwater plume is migrating west-southwest to the Lost River drainage basin. The west-southwestward flow path may be associated with the presence of higher transmissive soils in the northern slope of the basin as opposed to the sediments underlying the basin, which have been observed to be predominantly clays, at least within the first 10 feet, during installation of the pre-pack monitoring wells. An increase in the daughter products of TCE degradation have not been observed since LTM began in 1997, suggesting TCE is not degrading at the site.

Perchlorate concentrations are highest within the Lost River drainage basin and decrease in groundwater samples collected upslope. The Lost River drainage basin receives surface water flow and groundwater discharge from a large portion of Holloman AFB and other DoD facilities; consequently, the source of perchlorate in groundwater is not considered to be attributable to SS-39.

4.9 CONCLUSIONS

Sediment/soil and groundwater contamination has been identified in the media collected from the vicinity of Building 1176. Metals contamination associated with test track activities have been well investigated and determined not to be migrating to the Lost River drainage basin. TRPH contamination within the drainage swale that receives discharges from the test track concrete collection basin has not been delineated downgradient of the upper swale reaches. TPPH adjacent to the Building 1176 parking lot can be attributed to parking lot runoff and not a RCRA release. Subsurface soil contamination has been detected only adjacent to SWMU 177 (the drainage sump) and in contact with the underlying groundwater, as evident from groundwater contamination detected downgradient of SWMU 177. Groundwater in this area is impacted with VOCs and perchlorate; however, only TCE can be attributed to the site. Based on current TCE concentrations, a TCE groundwater plume is migrating to the west-southwest along the northern edge of the Lost River drainage basin. The plume has been bounded on the downgradient edge by the current well network to within 5 μg/L except in the far south-southwestern, and west-southwestward directions, and to below 5 μg/L during previous DPT

events. TDS concentrations in the basin and beneath Building 1176 exceed the 10,000 mg/L threshold where groundwater standards would apply.

4.10 RECOMMENDATIONS

Based on the supplemental RFI results, improved operations and maintenance (O&M) of the concrete catch basin (SWMU 167) and drainage box (SWMU 179) will need to be adopted to prohibit future releases of hazardous materials to the downgradient media. In addition, the lead-impacted soils present in the Concrete Catch Basin (SWMU 167) should be removed to prevent further migration/discharge. The catch basin appears to be approximately 3 feet wide, 15 feet long and 0.5 feet deep. Assuming the entire depth is full, approximately 0.8 yd^3 of sediment will require removal and disposal. In addition, further investigation and subsequent removal of the TRPH in the shallow soil should be conducted within the drainage swale downgradient of the discharge box. No action is warranted for the TRPH associated with parking lot runoff.

No additional delineation of TCE in groundwater is warranted. The source of the groundwater contamination has been confirmed to be soils associated with SWMU 177, the drainage sumps. It is recommended that contaminated soils in the area of the two drainage sumps be removed to the top of the watertable to eliminate the source of VOCs to the groundwater. Until the removal action, it is recommended that LTM be suspended. Following the removal action, it is recommended that the six remaining semi-annual rounds of groundwater monitoring be performed for TCE only to assess the removal action and confirm plume stabilization. Perchlorate monitoring is not warranted, as it cannot be attributed to the site. Provided that the TCE plume stabilizes and removal actions are performed, NFA under NMED criterion 5 will be appropriate in the future.

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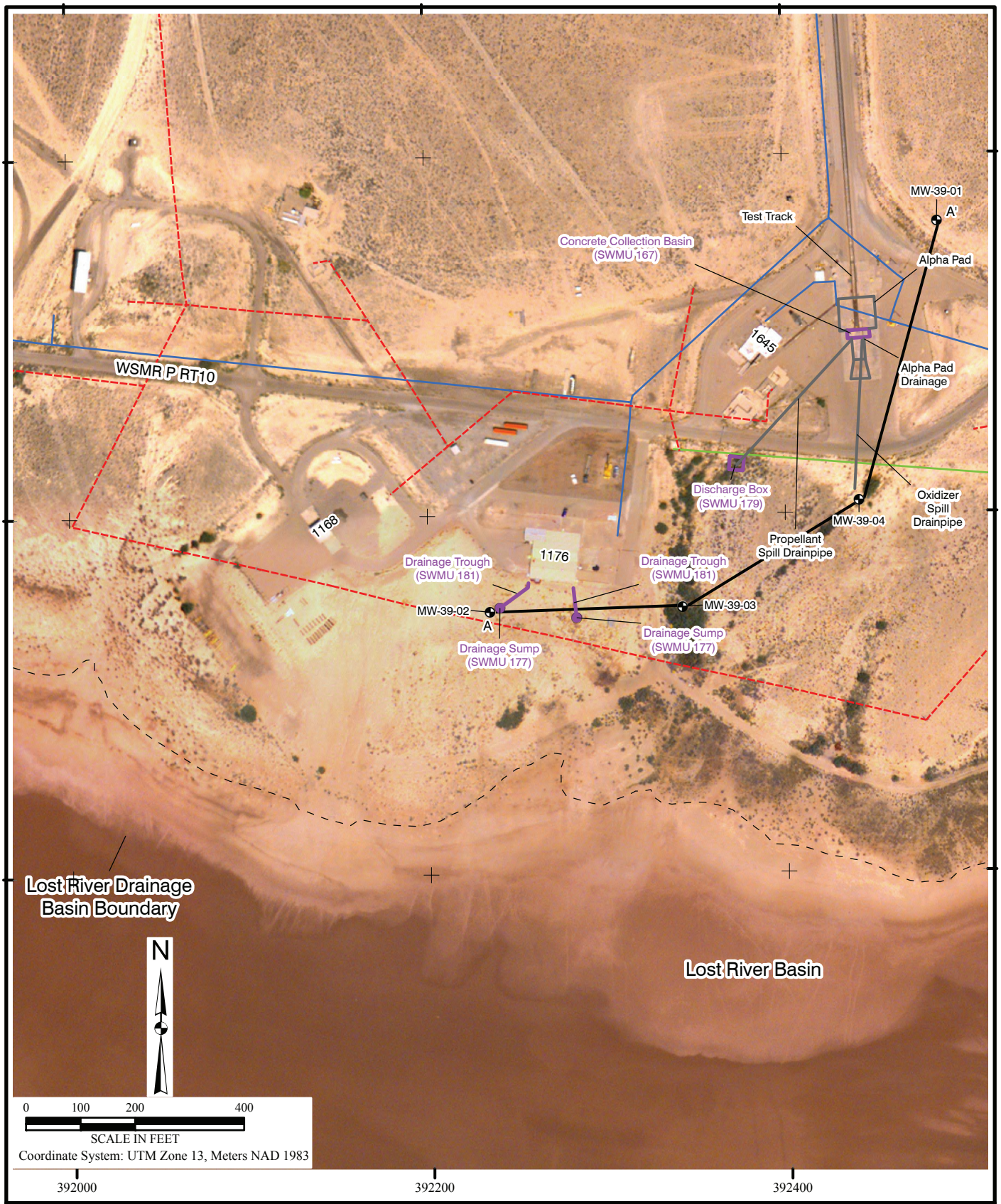
FIGURES



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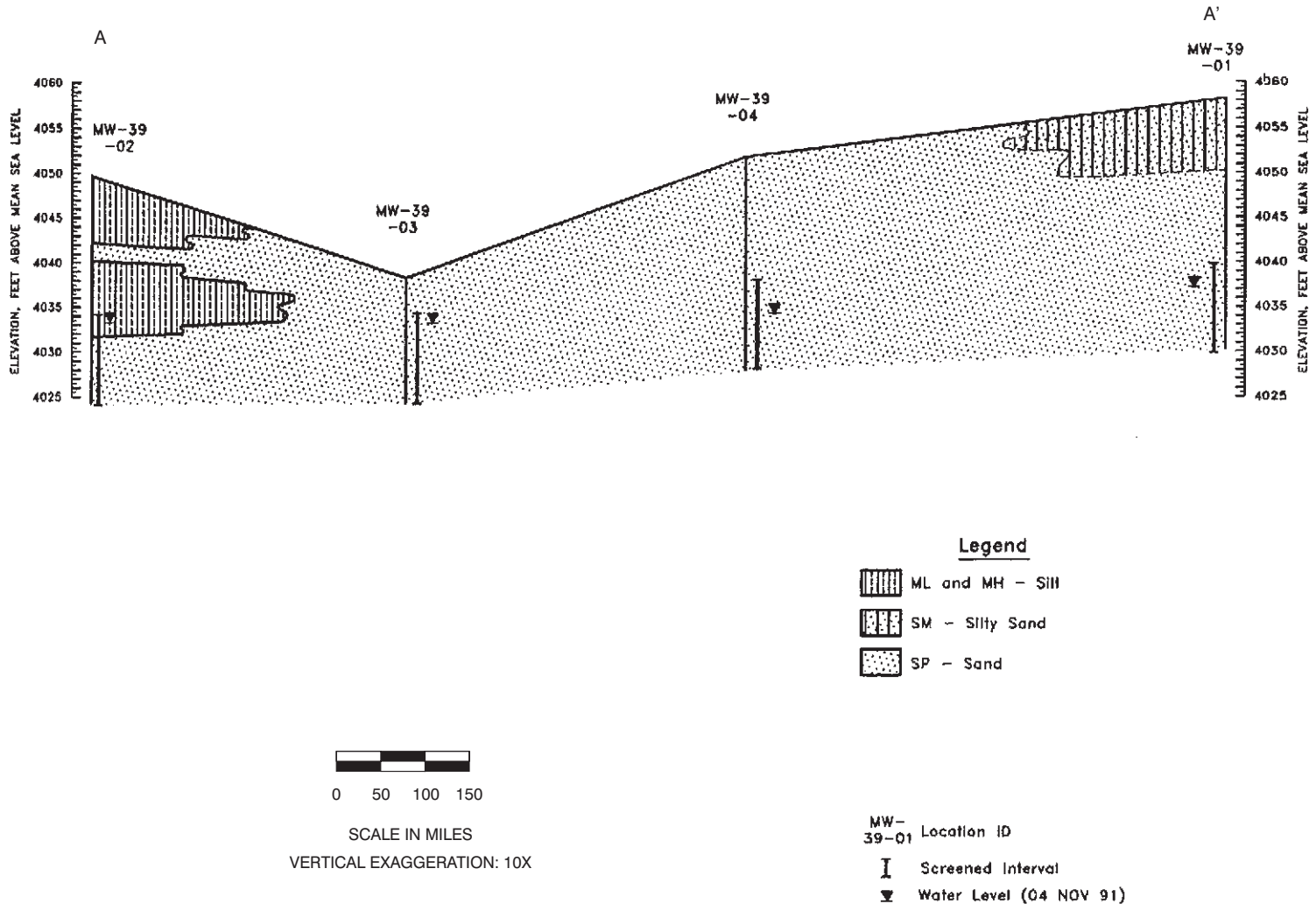
Project: AFC002-037-04-11-05
Revised: 05/16/07 PS
Map Source: Holloman AFB

Legend

- Below-Ground Electric
- Lost River Drainage Basin Boundary
- Potable Water
- Waste Water
- SWMU Boundary
- A — A' Line of Section
- Monitoring Well (Existing)

Figure 4.1
SS-39
Layout Map



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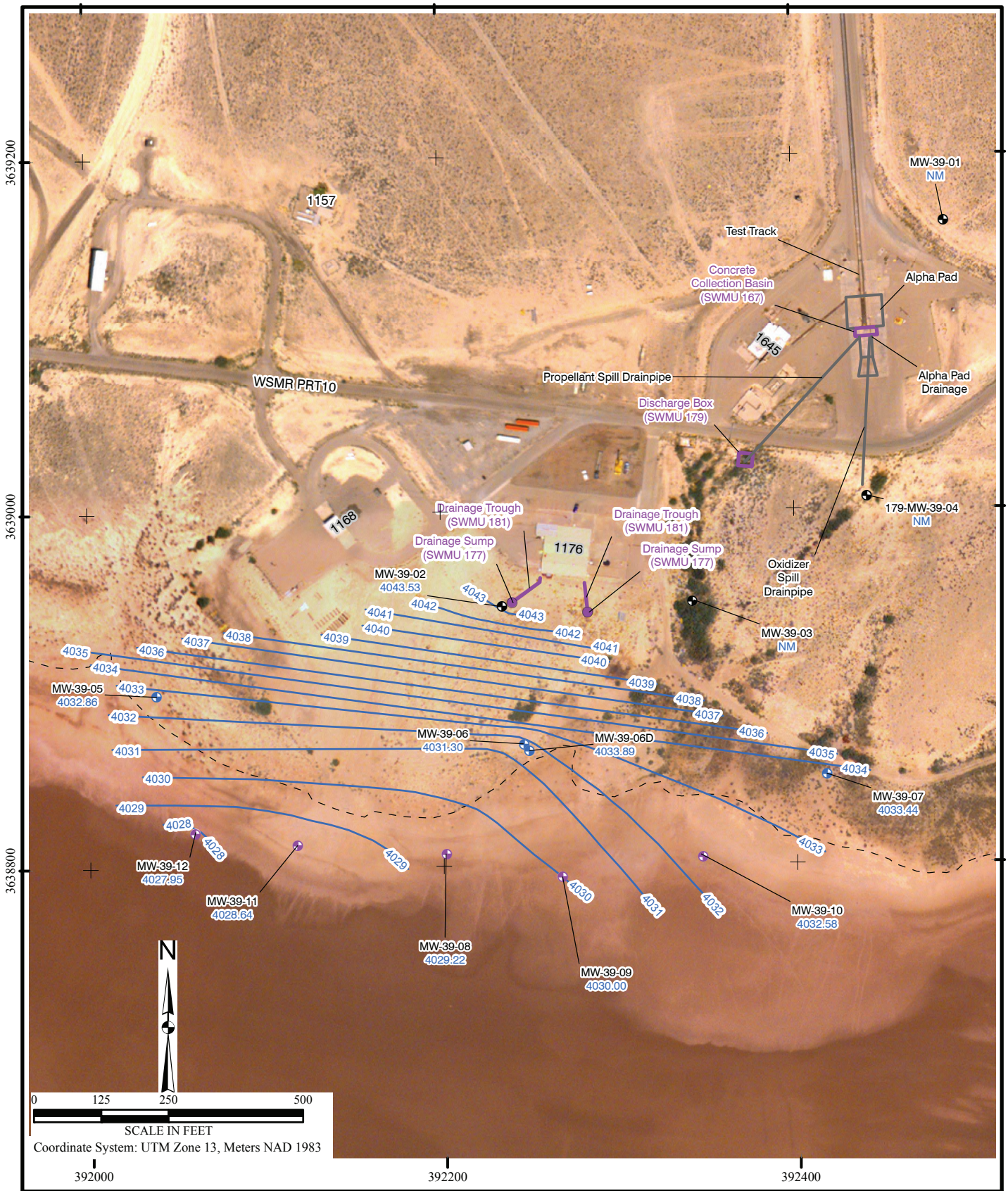
Revised: 05/16/07 PS
Source: Radian, 1992

Figure 4.2
SS-39
Geologic Cross Section



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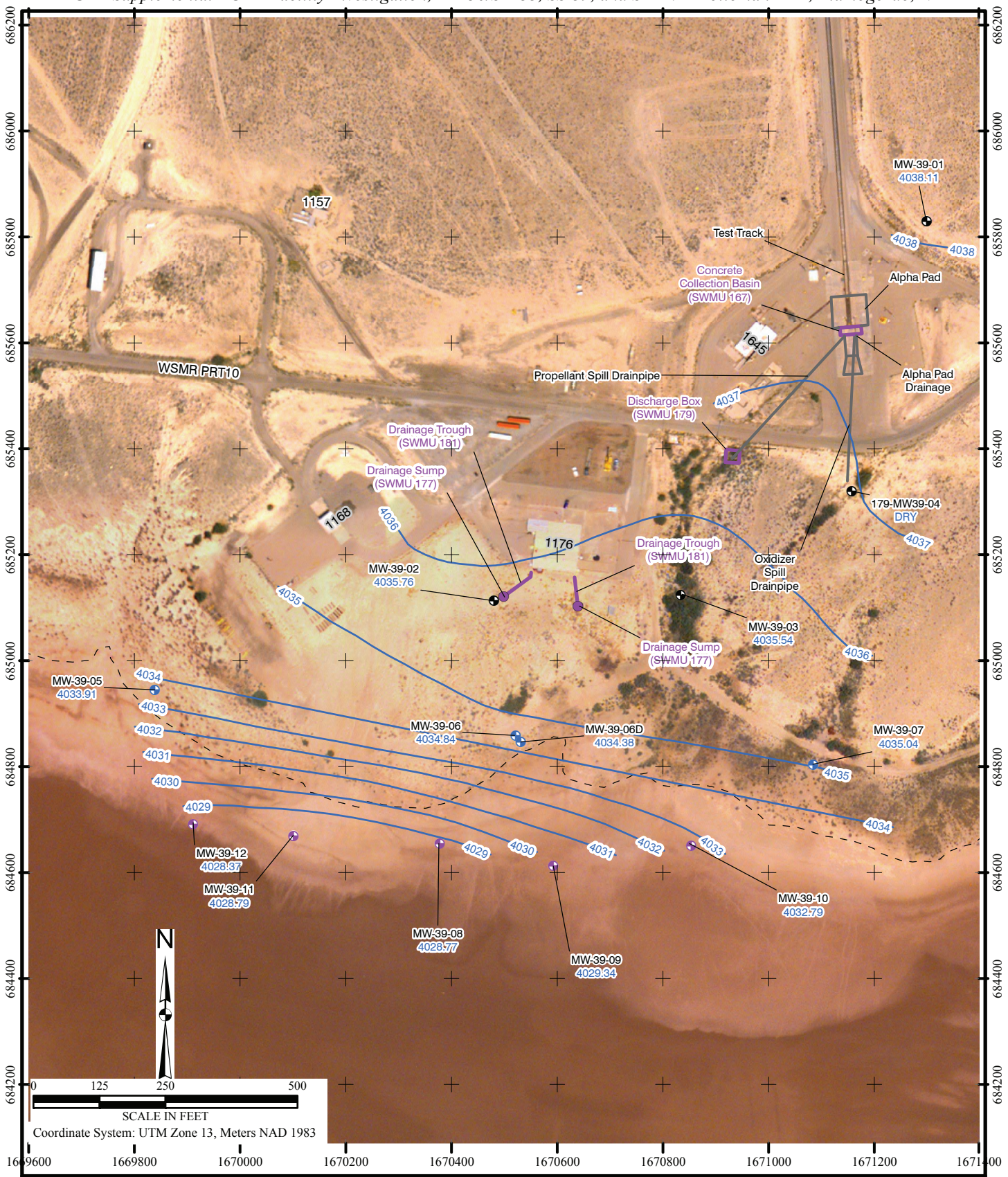
Project: AFC002-037-04-11-05
Revised: 05/18/07 PS
Map Source: Holloman AFB

Legend

- Monitoring Well (Existing)
- Pre-Pack Monitoring Well (Supp RFI)
- Permanent Monitoring Well (Supp RFI)
- SWMU Boundary
- 4028 — Groundwater Elevation Contour (ft msl)
- 4032.86 — Groundwater Elevation

Figure 4.3 Groundwater Potentiometric Surface Map July 2006



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Project: AFC002-037-04-11-05
Revised: 05/17/07 PS
Map Source: Holloman AFB

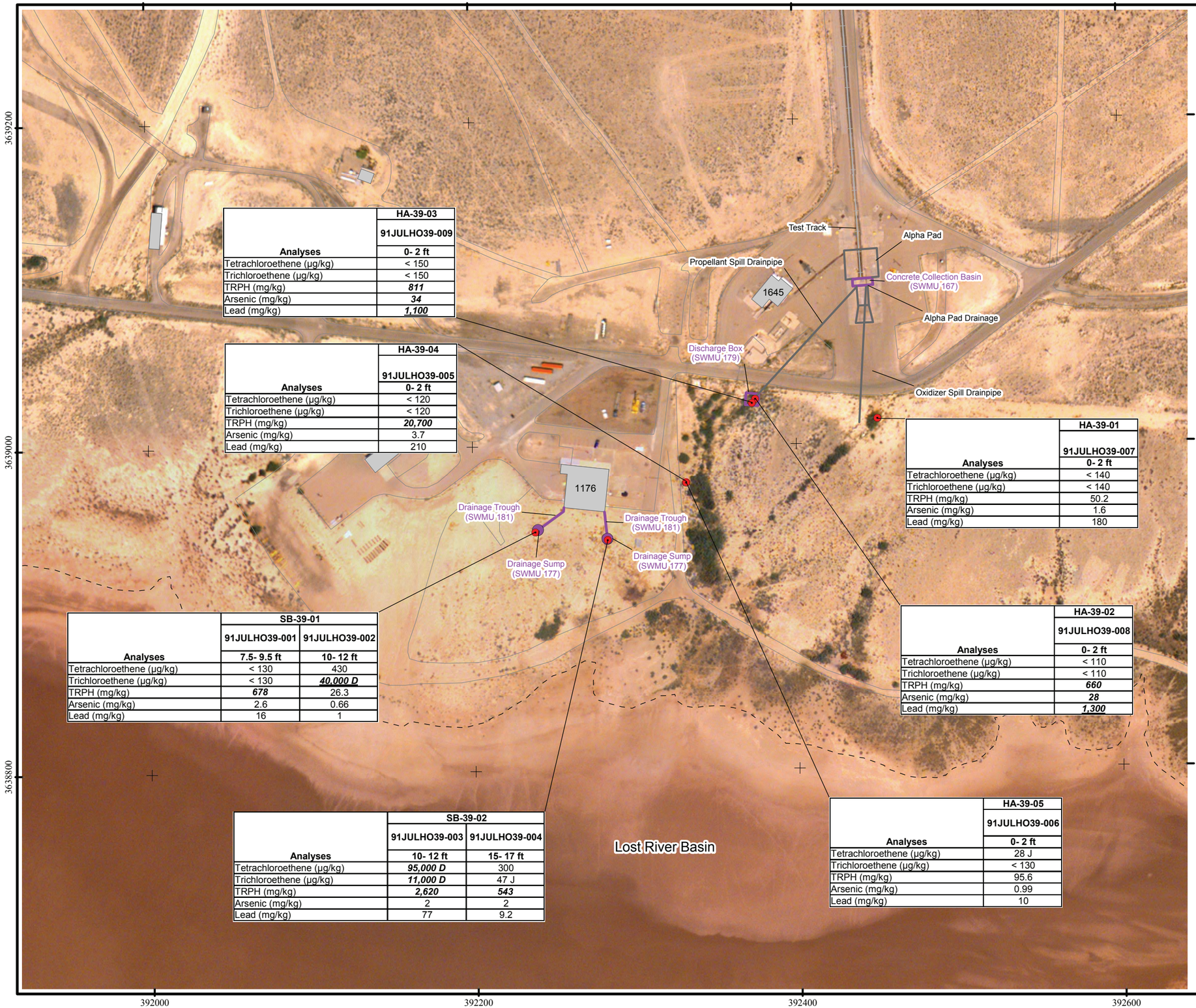
Legend

- Monitoring Well (1997 Data)
- Pre-Pack Monitoring Well (Supp RFI)
- Permanent Monitoring Well (Supp RFI)
- SWMU Boundary
- Lost River Drainage Basin Boundary
- 4028 — Groundwater Elevation Contour (ft msl)
- 4032.86 — Groundwater Elevation

Figure 4.4 Groundwater Potentiometric Surface Map January 2007

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 4.5
Phase I Soil Sampling Locations with VOC Results 1991 SS-39



Analyses	HA-39-03 91JULHO39-009 0- 2 ft
Tetrachloroethene (µg/kg)	< 150
Trichloroethene (µg/kg)	< 150
TRPH (mg/kg)	***811***
Arsenic (mg/kg)	***34***
Lead (mg/kg)	***1,100***

Analyses	HA-39-04 91JULHO39-005 0- 2 ft
Tetrachloroethene (µg/kg)	< 120
Trichloroethene (µg/kg)	< 120
TRPH (mg/kg)	***20,700***
Arsenic (mg/kg)	3.7
Lead (mg/kg)	210

Analyses	HA-39-01 91JULHO39-007 0- 2 ft
Tetrachloroethene (µg/kg)	< 140
Trichloroethene (µg/kg)	< 140
TRPH (mg/kg)	50.2
Arsenic (mg/kg)	1.6
Lead (mg/kg)	180

Analyses	SB-39-01 91JULHO39-001 7.5- 9.5 ft	SB-39-01 91JULHO39-002 10- 12 ft
Tetrachloroethene (µg/kg)	< 130	430
Trichloroethene (µg/kg)	< 130	***40,000 D***
TRPH (mg/kg)	***678***	26.3
Arsenic (mg/kg)	2.6	0.66
Lead (mg/kg)	16	1

Analyses	HA-39-02 91JULHO39-008 0- 2 ft
Tetrachloroethene (µg/kg)	< 110
Trichloroethene (µg/kg)	< 110
TRPH (mg/kg)	***660***
Arsenic (mg/kg)	***28***
Lead (mg/kg)	***1,300***

Analyses	SB-39-02 91JULHO39-003 10- 12 ft	SB-39-02 91JULHO39-004 15- 17 ft
Tetrachloroethene (µg/kg)	***95,000 D***	300
Trichloroethene (µg/kg)	***11,000 D***	47 J
TRPH (mg/kg)	***2,620***	***543***
Arsenic (mg/kg)	2	2
Lead (mg/kg)	77	9.2

Analyses	HA-39-05 91JULHO39-006 0- 2 ft
Tetrachloroethene (µg/kg)	28 J
Trichloroethene (µg/kg)	< 130
TRPH (mg/kg)	95.6
Arsenic (mg/kg)	0.99
Lead (mg/kg)	10

Legend

- Soil Boring (1994 Table 2 Phase I RFI)
- Lost River Basin Boundary
- SWMU Boundary

Notes:
Regular text indicates analyte concentration exceeding NMED residential SSL
Bolded text indicates analyte concentration exceeding NMED residential and industrial SSL
Bolded and italicized text indicates analyte concentration exceeding NMED residential, industrial, and construction SSL
< = Analyte not detected above reporting limit.
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram

N

0 100 200 400
SCALE IN FEET
Coordinate System: NAD 1983 StatePlane NM Central Feet

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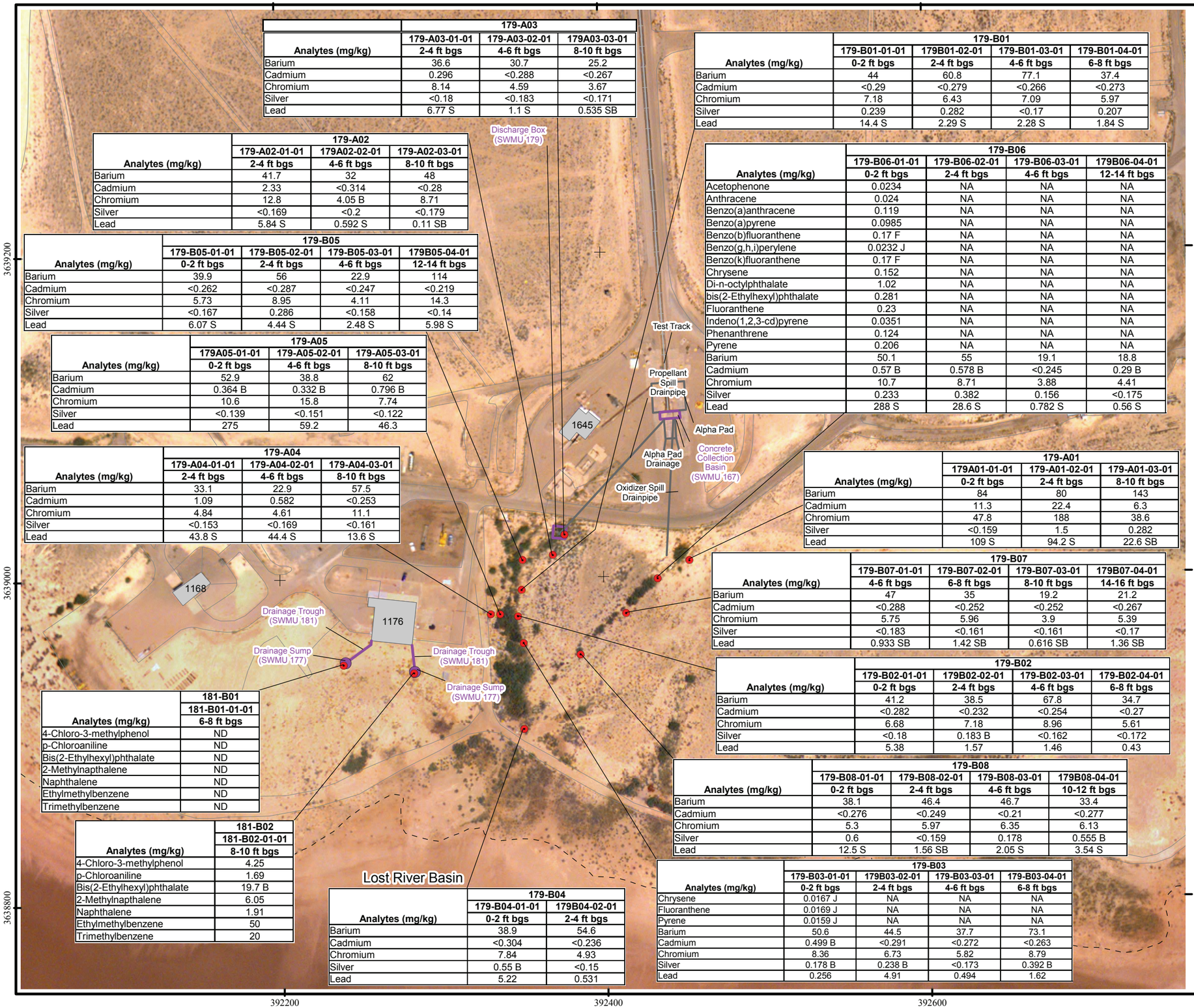
Revised: 05/21/07 PS
Map Source: Holloman AFB



Analytes (mg/kg)	179-A03		
	179-A03-01-01	179-A03-02-01	179A03-03-01
	2-4 ft bgs	4-6 ft bgs	8-10 ft bgs
Barium	36.6	30.7	25.2
Cadmium	0.296	<0.288	<0.267
Chromium	8.14	4.59	3.67
Silver	<0.18	<0.183	<0.171
Lead	6.77 S	1.1 S	0.535 SB

Analytes (mg/kg)	179-A02		
	179-A02-01-01	179A02-02-01	179-A02-03-01
	2-4 ft bgs	4-6 ft bgs	8-10 ft bgs
Barium	41.7	32	48
Cadmium	2.33	<0.314	<0.28
Chromium	12.8	4.05 B	8.71
Silver	<0.169	<0.2	<0.179
Lead	5.84 S	0.592 S	0.11 SB

Analytes (mg/kg)	179-B05			
	179-B05-01-01	179-B05-02-01	179-B05-03-01	179B05-04-01
	0-2 ft bgs	2-4 ft bgs	4-6 ft bgs	12-14 ft bgs
Barium	39.9	56	22.9	114
Cadmium	<0.262	<0.287	<0.247	<0.219
Chromium	5.73	8.95	4.11	14.3
Silver	<0.167	0.286	<0.158	<0.14
Lead	6.07 S	4.44 S	2.48 S	5.98 S

Analytes (mg/kg)	179-A05		
	179A05-01-01	179-A05-02-01	179-A05-03-01
	0-2 ft bgs	4-6 ft bgs	8-10 ft bgs
Barium	52.9	38.8	62
Cadmium	0.364 B	0.332 B	0.796 B
Chromium	10.6	15.8	7.74
Silver	<0.139	<0.151	<0.122
Lead	275	59.2	46.3

Analytes (mg/kg)	179-A04		
	179-A04-01-01	179-A04-02-01	179-A04-03-01
	2-4 ft bgs	4-6 ft bgs	8-10 ft bgs
Barium	33.1	22.9	57.5
Cadmium	1.09	0.582	<0.253
Chromium	4.84	4.61	11.1
Silver	<0.153	<0.169	<0.161
Lead	43.8 S	44.4 S	13.6 S

Analytes (mg/kg)	181-B01	
	181-B01-01-01	
	6-8 ft bgs	
4-Chloro-3-methylphenol	ND	
p-Chloroaniline	ND	
Bis(2-Ethylhexyl)phthalate	ND	
2-Methylnapthalene	ND	
Naphthalene	ND	
Ethylmethylbenzene	ND	
Trimethylbenzene	ND	

Analytes (mg/kg)	181-B02	
	181-B02-01-01	
	8-10 ft bgs	
4-Chloro-3-methylphenol	4.25	
p-Chloroaniline	1.69	
Bis(2-Ethylhexyl)phthalate	19.7 B	
2-Methylnapthalene	6.05	
Naphthalene	1.91	
Ethylmethylbenzene	50	
Trimethylbenzene	20	

Analytes (mg/kg)	179-B04	
	179-B04-01-01	179B04-02-01
	0-2 ft bgs	2-4 ft bgs
Barium	38.9	54.6
Cadmium	<0.304	<0.236
Chromium	7.84	4.93
Silver	0.55 B	<0.15
Lead	5.22	0.531

Analytes (mg/kg)	179-B01			
	179-B01-01-01	179B01-02-01	179-B01-03-01	179-B01-04-01
	0-2 ft bgs	2-4 ft bgs	4-6 ft bgs	6-8 ft bgs
Barium	44	60.8	77.1	37.4
Cadmium	<0.29	<0.279	<0.266	<0.273
Chromium	7.18	6.43	7.09	5.97
Silver	0.239	0.282	<0.17	0.207
Lead	14.4 S	2.29 S	2.28 S	1.84 S

Analytes (mg/kg)	179-B06			
	179-B06-01-01	179-B06-02-01	179-B06-03-01	179B06-04-01
	0-2 ft bgs	2-4 ft bgs	4-6 ft bgs	12-14 ft bgs
Acetophenone	0.0234	NA	NA	NA
Anthracene	0.024	NA	NA	NA
Benzo(a)anthracene	0.119	NA	NA	NA
Benzo(a)pyrene	0.0985	NA	NA	NA
Benzo(b)fluoranthene	0.17 F	NA	NA	NA
Benzo(g,h,i)perylene	0.0232 J	NA	NA	NA
Benzo(k)fluoranthene	0.17 F	NA	NA	NA
Chrysene	0.152	NA	NA	NA
Di-n-octylphthalate	1.02	NA	NA	NA
bis(2-Ethylhexyl)phthalate	0.281	NA	NA	NA
Fluoranthene	0.23	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.0351	NA	NA	NA
Phenanthrene	0.124	NA	NA	NA
Pyrene	0.206	NA	NA	NA
Barium	50.1	55	19.1	18.8
Cadmium	0.57 B	0.578 B	<0.245	0.29 B
Chromium	10.7	8.71	3.88	4.41
Silver	0.233	0.382	0.156	<0.175
Lead	288 S	28.6 S	0.782 S	0.56 S

Analytes (mg/kg)	179-A01		
	179A01-01-01	179-A01-02-01	179-A01-03-01
	0-2 ft bgs	2-4 ft bgs	8-10 ft bgs
Barium	84	80	143
Cadmium	11.3	22.4	6.3
Chromium	47.8	188	38.6
Silver	<0.159	1.5	0.282
Lead	109 S	94.2 S	22.6 SB

Analytes (mg/kg)	179-B07			
	179-B07-01-01	179-B07-02-01	179-B07-03-01	179B07-04-01
	4-6 ft bgs	6-8 ft bgs	8-10 ft bgs	14-16 ft bgs
Barium	47	35	19.2	21.2
Cadmium	<0.288	<0.252	<0.252	<0.267
Chromium	5.75	5.96	3.9	5.39
Silver	<0.183	<0.161	<0.161	<0.17
Lead	0.933 SB	1.42 SB	0.616 SB	1.36 SB

Analytes (mg/kg)	179-B02			
	179-B02-01-01	179B02-02-01	179-B02-03-01	179-B02-04-01
	0-2 ft bgs	2-4 ft bgs	4-6 ft bgs	6-8 ft bgs
Barium	41.2	38.5	67.8	34.7
Cadmium	<0.282	<0.232	<0.254	<0.27
Chromium	6.68	7.18	8.96	5.61
Silver	<0.18	0.183 B	<0.162	<0.172
Lead	5.38	1.57	1.46	0.43

Analytes (mg/kg)	179-B08			
	179-B08-01-01	179-B08-02-01	179-B08-03-01	179B08-04-01
	0-2 ft bgs	2-4 ft bgs	4-6 ft bgs	10-12 ft bgs
Barium	38.1	46.4	46.7	33.4
Cadmium	<0.276	<0.249	<0.21	<0.277
Chromium	5.3	5.97	6.35	6.13
Silver	0.6	<0.159	0.178	0.555 B
Lead	12.5 S	1.56 SB	2.05 S	3.54 S

Analytes (mg/kg)	179-B03			
	179-B03-01-01	179B03-02-01	179-B03-03-01	179-B03-04-01
	0-2 ft bgs	2-4 ft bgs	4-6 ft bgs	6-8 ft bgs
Chrysene	0.0167 J	NA	NA	NA
Fluoranthene	0.0169 J	NA	NA	NA
Pyrene	0.0159 J	NA	NA	NA
Barium	50.6	44.5	37.7	73.1
Cadmium	0.499 B	<0.291	<0.272	<0.263
Chromium	8.36	6.73	5.82	8.79
Silver	0.178 B	0.238 B	<0.173	0.392 B
Lead	0.256	4.91	0.494	1.62

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 4.6 Phase II Soil Sampling Locations and Results 1993 SS-39

Legend

- Soil Boring (1994 Table 2 Phase I RFI)
- Lost River Basin Boundary
- SWMU Boundary

Notes:
Regular text indicates analyte concentration exceeding NMED residential SSL
Bolded text indicates analyte concentration exceeding NMED residential and industrial SSL
Bolded and italicized text indicates analyte concentration exceeding NMED residential, industrial, and construction SSL
< = Analyte not detected above reporting limit.
mg/kg = milligrams per kilogram

N

0 100 200 400

SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

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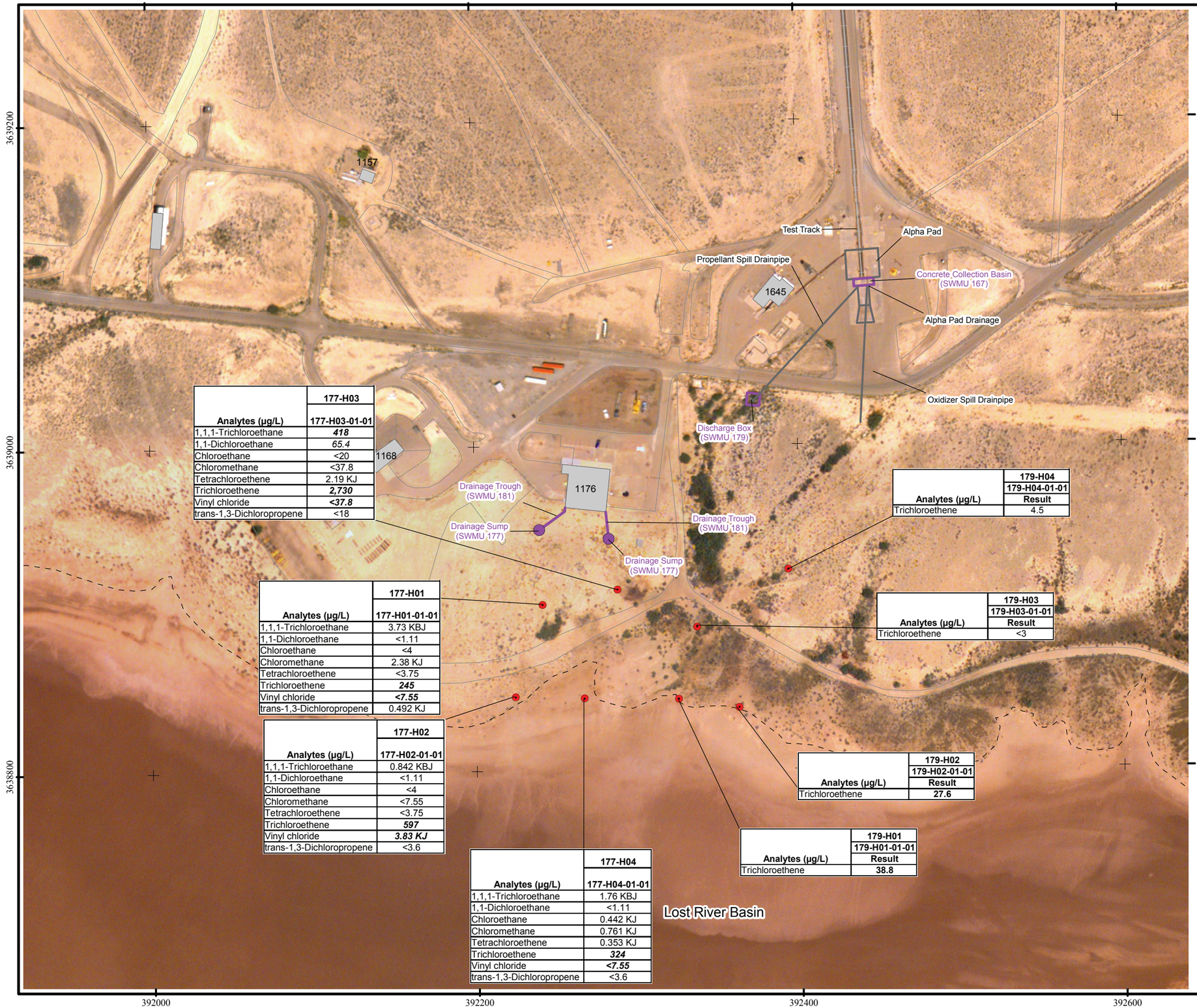
Revised: 05/25/07 PS
Map Source: Holloman AFB



Analytes (µg/L)	177-H03 177-H03-01-01
1,1,1-Trichloroethane	***418***
1,1-Dichloroethane	*65.4*
Chloroethane	<20
Chloromethane	<37.8
Tetrachloroethene	2.19 KJ
Trichloroethene	***2,730***
Vinyl chloride	***<37.8***
trans-1,3-Dichloropropene	<18

Analytes (µg/L)	179-H04 179-H04-01-01 Result
Trichloroethene	4.5

Analytes (µg/L)	177-H01 177-H01-01-01
1,1,1-Trichloroethane	3.73 KBJ
1,1-Dichloroethane	<1.11
Chloroethane	<4
Chloromethane	2.38 KJ
Tetrachloroethene	<3.75
Trichloroethene	***245***
Vinyl chloride	***<7.55***
trans-1,3-Dichloropropene	0.492 KJ

Analytes (µg/L)	179-H03 179-H03-01-01 Result
Trichloroethene	<3

Analytes (µg/L)	177-H02 177-H02-01-01
1,1,1-Trichloroethane	0.842 KBJ
1,1-Dichloroethane	<1.11
Chloroethane	<4
Chloromethane	<7.55
Tetrachloroethene	<3.75
Trichloroethene	***597***
Vinyl chloride	***3.83 KJ***
trans-1,3-Dichloropropene	<3.6

Analytes (µg/L)	179-H02 179-H02-01-01 Result
Trichloroethene	**27.6**

Analytes (µg/L)	179-H01 179-H01-01-01 Result
Trichloroethene	**38.8**

Analytes (µg/L)	177-H04 177-H04-01-01
1,1,1-Trichloroethane	1.76 KBJ
1,1-Dichloroethane	<1.11
Chloroethane	0.442 KJ
Chloromethane	0.761 KJ
Tetrachloroethene	0.353 KJ
Trichloroethene	***324***
Vinyl chloride	***<7.55***
trans-1,3-Dichloropropene	<3.6

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 4.7 Phase II Groundwater Sampling Results 1993 SS-39

Legend

- Soil Boring (1994 Table 2 Phase I RFI)
- Lost River Basin Boundary
- SWMU Boundary

Notes:
Italicized value indicates analyte concentration exceeds NMGWQ standard.
Bolded and italicized value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard.
µg/L = microgram per liter

N

0 100 200 400
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

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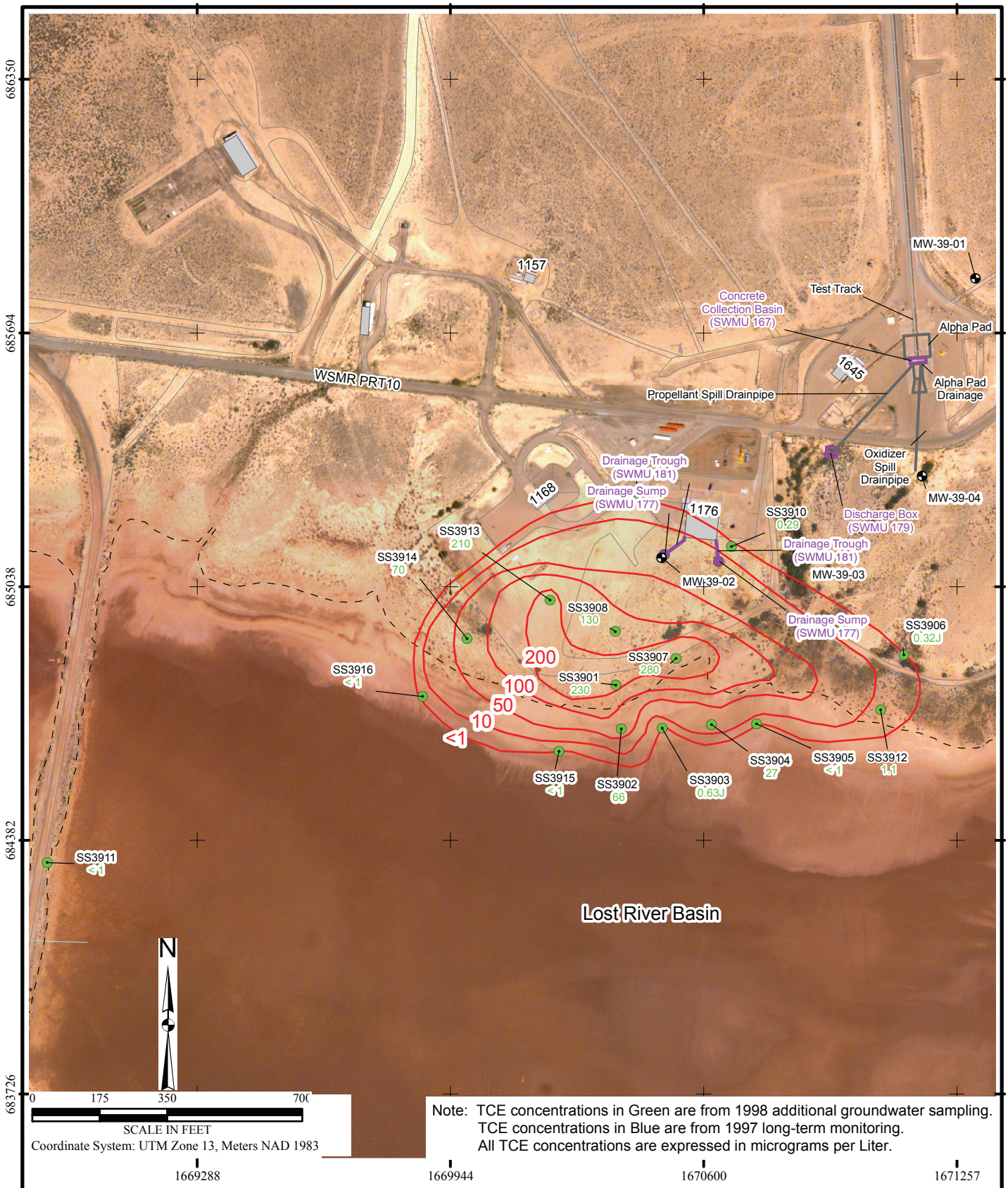
Revised: 05/25/07 PS
Map Source: Holloman AFB



Note: TCE concentrations in Green are from 1998 additional groundwater sampling.
TCE concentrations in Blue are from 1997 long-term monitoring.
All TCE concentrations are expressed in micrograms per Liter.

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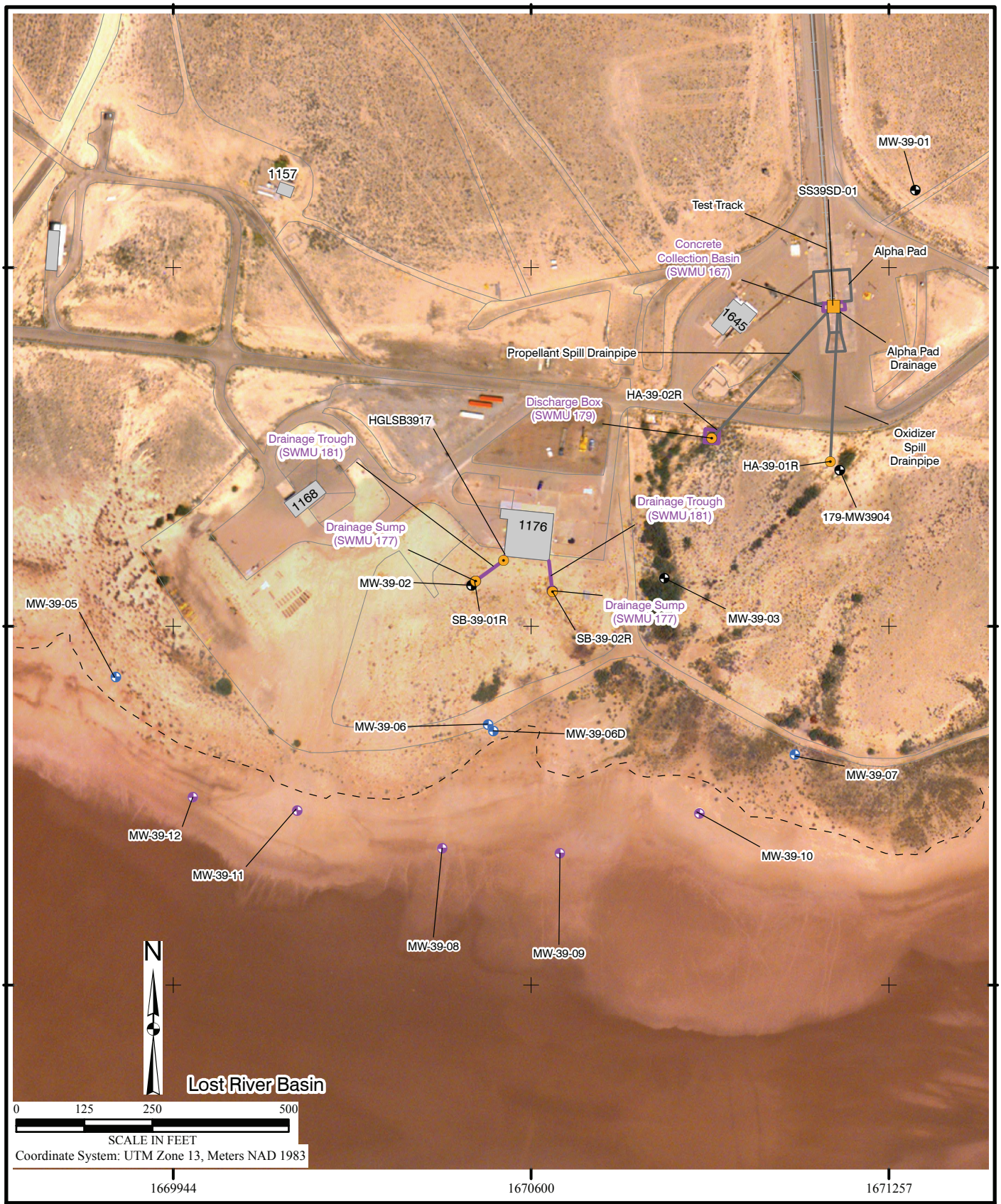
Project: AFC002-037-04-11-02
Revised: 05/16/07 PS
Map Source: Holloman AFB

Legend

- Monitoring Well (1997 Data)
- DPT Location (1998 Data)
- Trichloroethene Contour (µg/L)
- Lost River Basin Boundary
- SWMU Boundary

Figure 4.8
TCE Detected in Groundwater Isopleth Map, 1997/1998 Site SS-39



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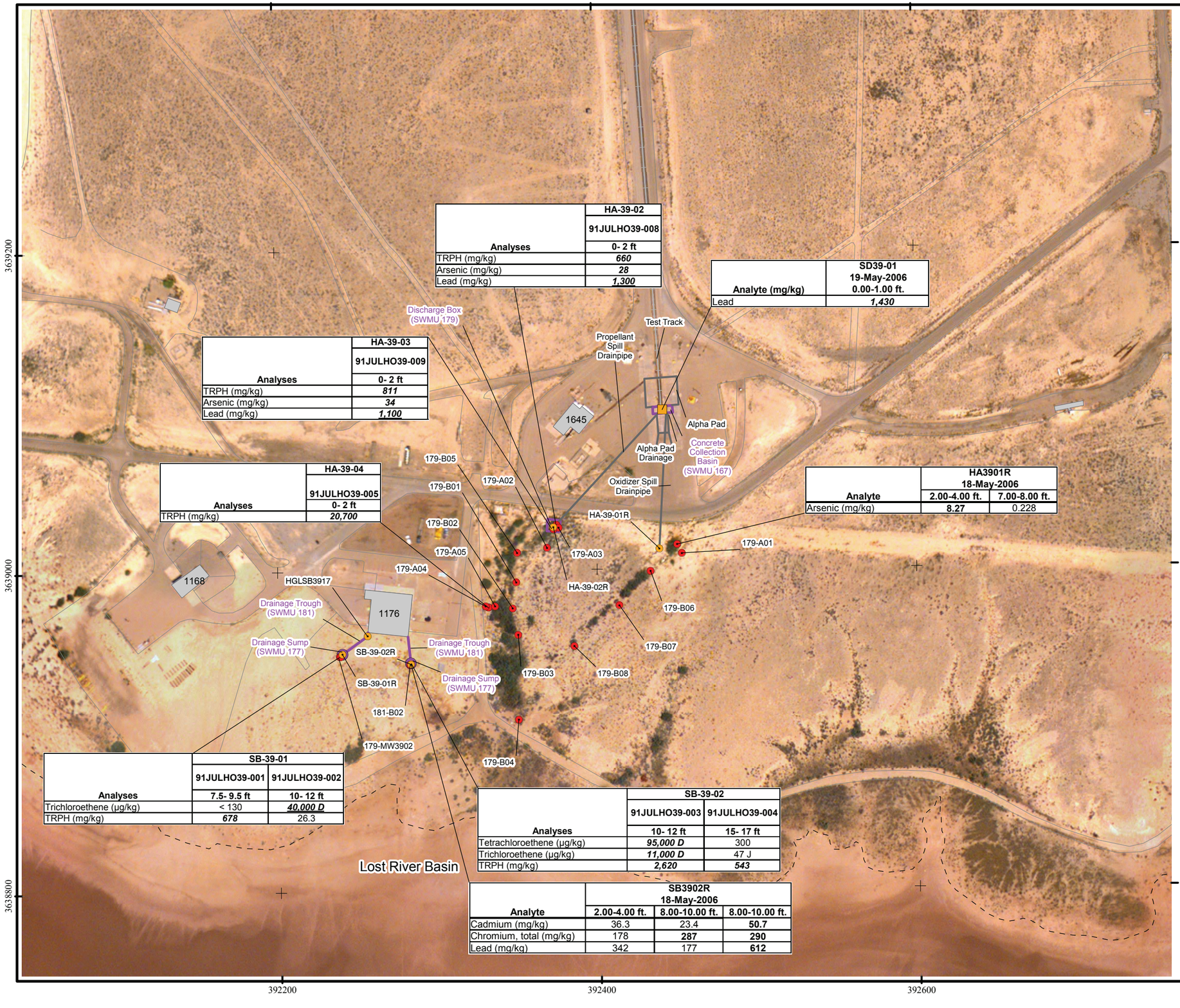
Revised: 05/18/07 PS
Map Source: Holloman AFB

Legend

- Monitoring Well (Existing)
- Pre-Pack Monitoring Well (Supp RFI)
- Permanent Monitoring Well (Supp RFI)
- Soil Boring
- Lost River Basin Boundary
- SWMU Boundary
- Sediment Sample

Figure 4.9
SS-39 Supplemental RFI Sample Locations

Figure 4.10
SS-39
Soil and Sediment
Analyte Exceedances



Analyses	HA-39-02 91JULHO39-008 0- 2 ft
TRPH (mg/kg)	***660***
Arsenic (mg/kg)	***28***
Lead (mg/kg)	***1,300***

Analyte (mg/kg)	SD39-01 19-May-2006 0.00-1.00 ft.
Lead	***1,430***

Analyses	HA-39-03 91JULHO39-009 0- 2 ft
TRPH (mg/kg)	***811***
Arsenic (mg/kg)	***34***
Lead (mg/kg)	***1,100***

Analyses	HA-39-04 91JULHO39-005 0- 2 ft
TRPH (mg/kg)	***20,700***

Analyte	HA3901R 18-May-2006 2.00-4.00 ft.	 7.00-8.00 ft.
Arsenic (mg/kg)	**8.27**	0.228

Analyses	SB-39-01 91JULHO39-001 7.5- 9.5 ft	 91JULHO39-002 10- 12 ft
Trichloroethene (µg/kg)	< 130	***40,000 D***
TRPH (mg/kg)	***678***	26.3

Analyses	SB-39-02 91JULHO39-003 10- 12 ft	 91JULHO39-004 15- 17 ft
Tetrachloroethene (µg/kg)	***95,000 D***	300
Trichloroethene (µg/kg)	***11,000 D***	47 J
TRPH (mg/kg)	***2,620***	***543***

Analyte	SB3902R 18-May-2006 2.00-4.00 ft.	 8.00-10.00 ft.	 8.00-10.00 ft.
Cadmium (mg/kg)	36.3	23.4	**50.7**
Chromium, total (mg/kg)	178	**287**	**290**
Lead (mg/kg)	342	177	**612**

Legend

- Soil Boring (1994 Table 2 Phase I RFI)
- Supplemental RFI Soil Boring
- Sediment Sample
- Lost River Basin Boundary
- SWMU Boundary

Notes:
Bolded text indicates analyte concentration exceeding NMED residential SSLs
Bolded and italicized values indicates analyte concentration exceeding NMED residential and industrial SSLs
Bolded, italicized, and underlined values indicates analyte concentration exceeding NMED residential, industrial, and construction worker SSLs
< = Analyte not detected above reporting limit.
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
TRPH = total recoverable petroleum hydrocarbons

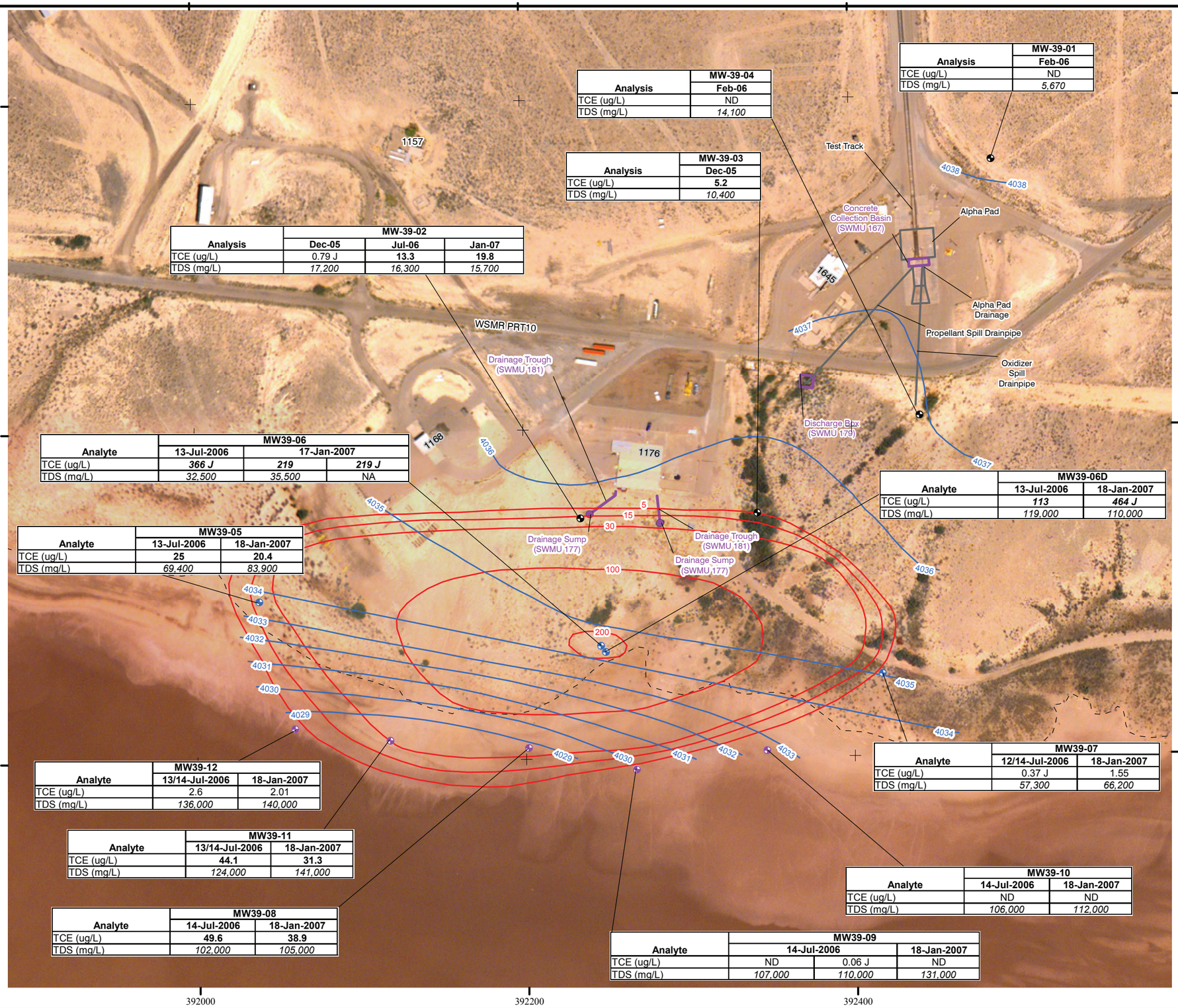
N

0 100 200 400
SCALE IN FEET
Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/
DP-30_SD-33_SS-39_SD-27_Supp_RFI
SS-39_Soil_Sed_Exceed.mxd
Project: AFC002-037-04-11-02
Revised: 05/29/07 PS
Map Source: Holloman AFB

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 4.11
SS-39
TCE Concentration in Groundwater 2007



Analysis	MW-39-01
	Feb-06
TCE (ug/L)	ND
TDS (mg/L)	*5,670*

Analysis	MW-39-04
	Feb-06
TCE (ug/L)	ND
TDS (mg/L)	*14,100*

Analysis	MW-39-03
	Dec-05
TCE (ug/L)	**5.2**
TDS (mg/L)	*10,400*

Analysis	MW-39-02		
	Dec-05	Jul-06	Jan-07
TCE (ug/L)	0.79 J	**13.3**	**19.8**
TDS (mg/L)	*17,200*	*16,300*	*15,700*

Analyte	MW39-06		
	13-Jul-2006	17-Jan-2007	
TCE (ug/L)	***366 J***	***219***	***219 J***
TDS (mg/L)	*32,500*	*35,500*	NA

Analyte	MW39-06D	
	13-Jul-2006	18-Jan-2007
TCE (ug/L)	***113***	***464 J***
TDS (mg/L)	*119,000*	*110,000*

Analyte	MW39-05	
	13-Jul-2006	18-Jan-2007
TCE (ug/L)	**25**	**20.4**
TDS (mg/L)	*69,400*	*83,900*

Analyte	MW39-07	
	12/14-Jul-2006	18-Jan-2007
TCE (ug/L)	0.37 J	1.55
TDS (mg/L)	*57,300*	*66,200*

Analyte	MW39-12	
	13/14-Jul-2006	18-Jan-2007
TCE (ug/L)	2.6	2.01
TDS (mg/L)	*136,000*	*140,000*

Analyte	MW39-11	
	13/14-Jul-2006	18-Jan-2007
TCE (ug/L)	**44.1**	**31.3**
TDS (mg/L)	*124,000*	*141,000*

Analyte	MW39-10	
	14-Jul-2006	18-Jan-2007
TCE (ug/L)	ND	ND
TDS (mg/L)	*106,000*	*112,000*

Analyte	MW39-08	
	14-Jul-2006	18-Jan-2007
TCE (ug/L)	**49.6**	**38.9**
TDS (mg/L)	*102,000*	*105,000*

Analyte	MW39-09		
	14-Jul-2006		18-Jan-2007
TCE (ug/L)	ND	0.06 J	ND
TDS (mg/L)	*107,000*	*110,000*	*131,000*

Legend

- Monitoring Well (1997 Data)
- Pre-Pack Monitoring Well (Supp RFI)
- Permanent Monitoring Well (Supp RFI)
- Lost River Basin Boundary
- SWMU Boundary
- TCE Isopleth
- 4028 — Groundwater Elevation Contour (January 2007)
- 4032.86 — Groundwater Elevation

Notes:
Bolded value indicates analyte concentration exceeds U.S. EPA MCL.
Italicized value indicates analyte concentration exceeds NMGWQ standard.
Bolded and italicized value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard.
NA = not analyzed
ND = not detected
R = data rejected
µg/L = micrograms per liter

N

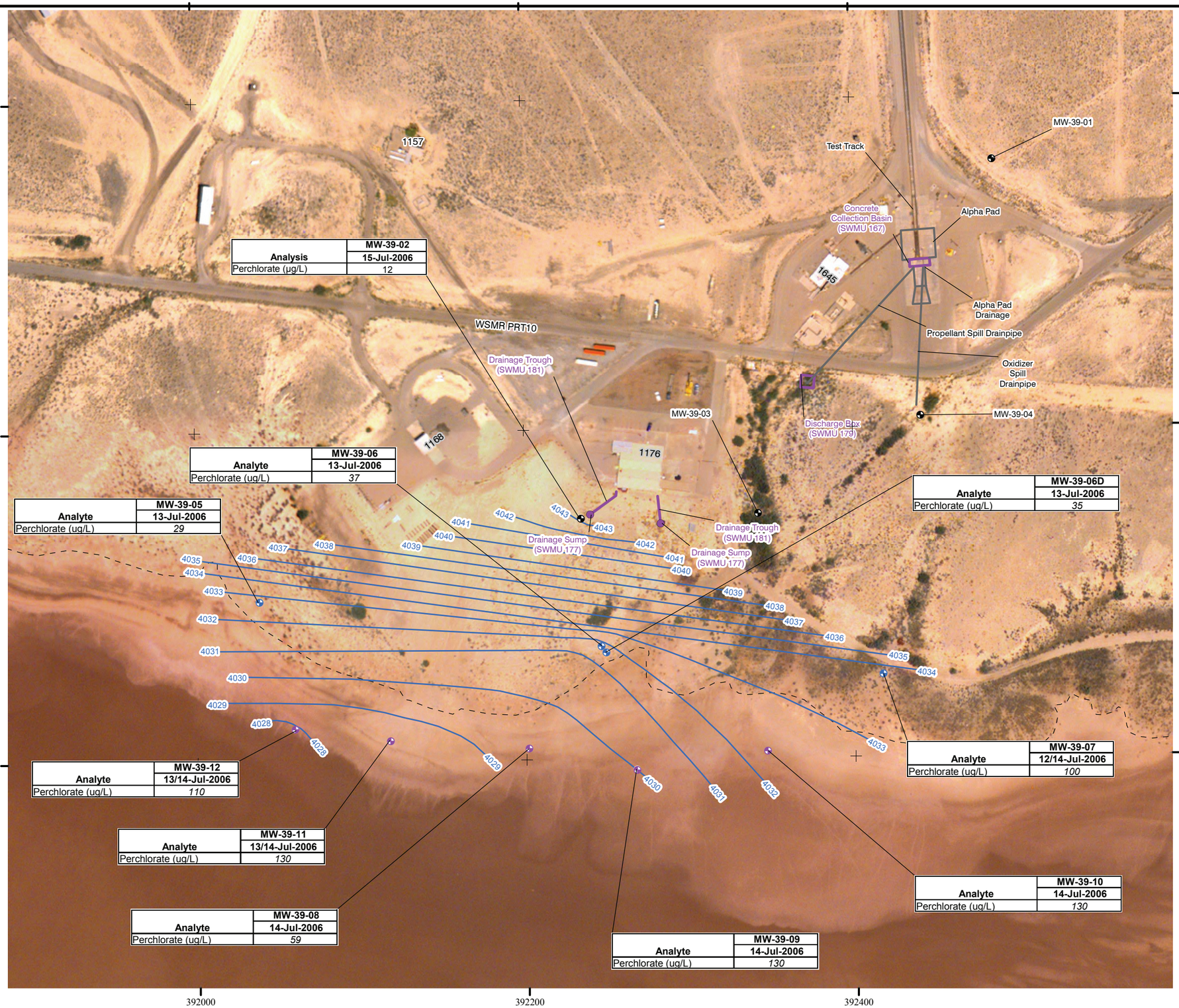
0 100 200 400
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/DP-30_SD-33_SS-39_SD-27_Supp_RFI SS-39_GW_Jan_2007_Tags.mxd
Project: AFC002-037-04-11-02
Revised: 02/13/06 TB
Map Source: Holloman AFB

HGL—Supplemental RCRA Facility Investigation, DP-30/SD-33, SS-39, and SD-27 Holloman AFB, Alamogordo, NM

Figure 4.12
SS-39
Perchlorate Concentrations in Groundwater
July 2006



Legend

- Monitoring Well (1997 Data)
- Pre-Pack Monitoring Well (Supp RFI)
- Permanent Monitoring Well (Supp RFI)
- Lost River Basin Boundary
- SWMU Boundary
- 4038 Groundwater Elevation Contour (July 2006)
- 4032.86 Groundwater Elevation

Notes:
Italicized value indicates analyte concentration exceeds NMGWQ standard.
µg/L = micrograms per liter

N

0 100 200 400
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/ DP-30_SD-33_SS-39_SD-27_Supp_RFI SS-39_GW_Pech_Tags.mxd
Project: AFC002-037-04-11-02
Revised: 05/29/07 PS
Map Source: Holloman AFB

TABLES

Table 4.1
1991 Remedial Investigation Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background[1]	NMED Soil Screening Levels[2]			SB-39-01		SB-39-02		HA-39-01	HA-39-02
		Residential	Industrial	Construction Worker	91JULHO39-001 7.5- 9.5 ft	91JULHO39-002 10- 12 ft	91JULHO39-003 10- 12 ft	91JULHO39-004 15- 17 ft	91JULHO39-007 0- 2 ft	91JULHO39-008 0-2 ft
SW820 - Volatile Organics (µg/kg)										
1,1,1- Trichloroethane	NA	563,000	563,000	563,000	< 130	430,000 D	87,000 D	900	< 140	< 110
1,1,2- Trichloroethane	NA	11,900	30,200	194,000	< 130	95 J	< 140	< 140	< 140	< 110
1,1 - Dichloroethane	NA	1,400,000	1,420,000	1,420,000	< 130	260	170	69 J	< 140	< 110
1,1 - Dichloroethene	NA	206,000	777,000	678,000	< 130	< 130	< 140	44 J	< 140	18 J
1,2 - Dichloroethane	NA	6,040	15,200	64,200	< 130	140	< 140	< 140	< 140	< 110
Chloromethane	NA	21,800	53,400	284,000	44 J	< 270	< 280	< 270	< 280	< 230
Ethyl benzene	NA	128,000	128,000	128,000	2.9 J	4.3 J	81 J	< 140	< 140	< 110
Methylene chloride	NA	182,000	490,000	2,630,000	510 B	630 B	1,400 B	530 B	720	350
Tetrachloroethene	NA	12,500	31,600	134,000	< 130	430	***95,000 D***	300	< 140	< 110
Toluene	NA	252,000	252,000	252,000	12 JB	3,400 B	82 JB	12 JB	91.1 J	8.0 J
Trichloroethene	NA	638	1,560	33,600	< 130	***40,000 D***	***11,000 D***	47 J	< 140	< 110
Xylenes	NA	82,000	82,000	82,000	8.1 J	23 J	290	< 140	< 140	< 110
EPA 418.1 - TRPH (mg/kg)	NA	200[3]	200[3]	--	***678***	26.3	***2,620***	***543***	50.2	***660***
SW6010 - Metals (mg/kg)										
Beryllium	1.3	156	2,250	56.2	< 0.36	< 0.49	< 0.45	0.58	< 0.46	0.57
Cadmium	1.0	39	564	154	0.98	< 1.2	30	4.3	< 1.2	7.3
Chromium	24.6	210[4]	450[4]	500[4]	5.6	3.2	78	25	8.6	26
Copper	21.2	3,130	45,400	12,400	6	< 4.9	82	5.1	14	91
Nickel	18.1	1,560	22,700	6,190	< 3.6	< 4.9	14	8.6	6.5	23
Silver	0.73	391	5,680	1,550	< 1.8	< 2.4	< 2.3	< 2.4	< 2.3	< 1.8
Zinc	48.7	23,500	100,000	92,900	52	8.4	380	60	30	250
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	2.6	0.66	2	2	1.6	***28***
SW7421 - Lead (mg/kg)	12.3	400	800	800	16	1	77	9.2	180	***1,300***
SW7471 - Mercury (mg/kg)	--	6.11[5]	68.4[5]	23.8[5]	< 0.056	< 0.064	< 0.068	< 0.060	< 0.064	0.063

NOTE: Table presents only constituents detected in soil at this site.
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Unknown oil TPH SSL obtained from Table 2a (NMED, 2006a)
(4) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(5) Methyl mercury screening criteria used as a surrogate for mercury

Laboratory Qualifier
D = secondary dilution required for this analyte.
B = analyte detected in laboratory blank analysis, no blank subtraction performed
Validation Qualifier
J = detected below the detection limit.

ND = not detected, reported at detection limit.
NMED = New Mexico Environment Department
-- = not detected; not applicable
NA = not analyzed
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
TRPH = total recoverable petroleum hydrocarbons

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italiciced* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Table 4.1 (continued)
1991 Remedial Investigation Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background[1]	NMED Soil Screening Levels[2]			HA-39-03	HA-39-04	HA-39-05
		Residential	Industrial	Construction Worker	91JULHO39-009 0-2 ft	91JULHO39-005 0- 2 ft	91JULHO39-006 0-2 ft
SW820 - Volatile Organics (µg/kg)							
1,1,1- Trichloroethane	NA	563,000	563,000	563,000	< 150	< 120	< 130
1,1,2- Trichloroethane	NA	11,900	30,200	194,000	< 150	< 120	< 130
1,1 - Dichloroethane	NA	1,400,000	1,420,000	1,420,000	< 150	< 120	< 130
1,1 - Dichloroethene	NA	206,000	777,000	678,000	< 150	< 120	22 J
1,2 - Dichloroethane	NA	6,040	15,200	64,200	< 150	< 120	< 130
Chloromethane	NA	21,800	53,400	284,000	< 300	< 240	< 260
Ethyl benzene	NA	128,000	128,000	128,000	< 150	< 120	5.9 J
Methylene chloride	NA	182,000	490,000	2,630,000	36 J	54 J	260
Tetrachloroethene	NA	12,500	31,600	134,000	< 150	< 120	28 J
Toluene	NA	252,000	252,000	252,000	9.1 J	8.9 J	9.3 J
Trichloroethene	NA	638	1,560	33,600	< 150	< 120	< 130
Xylenes	NA	82,000	82,000	82,000	< 150	38 J	13 J
EPA 418.1 - TRPH (mg/kg)	NA	200[3]	200[3]	--	***811***	***20,700***	95.6
SW6010 - Metals (mg/kg)							
Beryllium	1.3	156	2,250	56.2	0.58	< 0.48	< 0.47
Cadmium	1.0	39	564	154	7.8	38	4
Chromium	24.6	210[4]	450[4]	500[4]	47	190	130
Copper	21.2	3,130	45,400	12,400	140	110	19
Nickel	18.1	1,560	22,700	6,190	21	31	58
Silver	0.73	391	5,680	1,550	12	< 2.4	< 2.4
Zinc	48.7	23,500	100,000	92,900	180	540	130
SW7060 - Arsenic (mg/kg)	6.9	3.9	17.7	85.2	***34***	3.7	0.99
SW7421 - Lead (mg/kg)	12.3	400	800	800	***1,100***	210	10
SW7471 - Mercury (mg/kg)	--	6.11[5]	68.4[5]	23.8[5]	< 0.069	0.074	< 0.060

NOTE: Table presents only constituents detected in soil at this site.
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Unknown oil TPH SSL obtained from Table 2a (NMED, 2006a)
(4) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(5) Methyl mercury screening criteria used as a surrogate for mercury

ND = not detected, reported at detection limit.
NMED = New Mexico Environment Department
-- = not detected; not applicable
NA = not analyzed
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
TRPH = total recoverable petroleum hydrocarbons

Laboratory Qualifier
D = secondary dilution required for this analyte.
B = analyte detected in laboratory blank analysis, no blank subtraction performed

Validation Qualifier
J = detected below the detection limit.

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italiciced* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Table 4.2
1991 Remedial Investigation Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background[1]	U.S. EPA MCL[2]	NMGWQ Standards [2][3]	MW-39-01[4] 39-01-01	MW-39-02 39-02-01	MW-39-03 39-03-01	MW-39-04 39-04-01
SW8240 - Volatile Organics (µg/L)							
1,1,1- Trichloroethane	NA	200	60	< 5.0	***240 D***	< 5.0	1.8 J
1,1 - Dichloroethane	NA	--	25	< 5.0	0.59 J	< 5.0	< 5.0
1,1 - Dichloroethene	NA	7	5	< 5.0	***9.6***	< 5.0	< 5.0
Acetone	NA	--	--	24 J	< 100	3.5 J	< 100
Carbon tetrachloride	NA	5	10	< 5.0	**5.8**	< 5.0	< 5.0
Chloroform	NA	--	100	0.35 J	2.1 J	0.81 J	< 5.0
Chloromethane	NA	--	--	< 10	0.72 J	< 10	< 10
Methylene chloride	NA	--	100	14 B	10 B	15 B	15 B
Tetrachloroethene	NA	5	20	0.19 J	1.1 J	0.37 J	< 5.0
Trichloroethene	NA	5	100	0.25 J	**59**	2.7 J	< 5.0
EPA 160.1 - Total Dissolved Solids (mg/L)	43,600	--	1,000	*11,000*	*13,000*	*14,000*	*2,600*
EPA 300.0 - Chloride (mg/L)	19,600	--	250	*2,200*	*4,200*	*4,500*	39
EPA 300.0 - Sulfate (mg/L)	7,470	--	600	*4,300*	*4,400*	*3,500*	< 0.050
EPA 340.2 - Fluoride (mg/L)	4.7	4	1.6	*1.8*	1.5	*1.9*	0.77
EPA 353.1 - Nitrate-Nitrite (mg/L)	98	10	10[5]	***48***	***87***	***49***	0.52
EPA 365.2 - Total Phosphorus (mg/L)	0.75	--	--	0.22	0.18	0.21	0.093
SW6010 - Metals (µg/L)							
Berylium	3.8	4	--	< 0.2	2.9	2.5	< 2.0
Cadmium	8.3	5	10	< 0.5	**5.9**	< 5.0	< 5.0
Chromium	234	100	50	< 10	20	21	< 10
Copper	38.6	1,300	1,000	< 20	< 20	120	< 20
Nickel	43.6	--	200	< 20	30	38	< 20
Zinc	253.4	--	10,000	< 20	71	58	24
SW7421 - Lead (µg/L)	19.9	15 [5]	50	**< 30**	7.8	11	**19**
SW7740 - Selenium (µg/L)	79.3	50	50	< 5	15	13	< 5.0

NOTE: Tables presents only constituents detected in groundwater at this site.
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) U.S. EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103
(4) Upgradient well
(5) NMGWQ human health standard for Nitrate was used; a value for Nitrite was not listed

< = Analyte not detected at the reported detection limit.
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
-- = No value or standard was found
mg/L = milligrams per liter
µg/L = micrograms per liter

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.3
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-A01 179A01-01-01	179-A01 179-A01-02-01	179-A01 179-A01-03-01	179-A02 179-A02-01-01	179-A02 179A02-02-01	179-A02 179-A02-03-01
		Residential	Industrial	Construction	0-2 ft bgs	2-4 ft bgs	8-10 ft bgs	2-4 ft bgs	4-6 ft bgs	8-10 ft bgs
SW6010-Metals (mg/kg)										
Barium	84.4	15,600	100,000	60,200	84	80	143	41.7	32	48
Cadmium	1.0	39	564	154	11.3	22.4	6.3	2.33	<0.314	<0.28
Chromium	24.6	210 [3]	450 [3]	500 [3]	47.8	188	38.6	12.8	4.05 B	8.71
Silver	0.73	391	5,680	1,550	<0.159	1.5	0.282	<0.169	<0.2	<0.179
SW7421-Lead (mg/kg)										
Lead	12.3	400	800	800	109 S	94.2 S	22.6 SB	5.84 S	0.592 S	0.11 SB

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.3 (continued)
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-A03	179-A03	179-A03	179-A04	179-A04	179-A04
					179-A03-01-01	179-A03-02-01	179A03-03-01	179-A04-01-01	179-A04-02-01	179-A04-03-01
		Residential	Industrial	Construction	2-4 ft bgs	4-6 ft bgs	8-10 ft bgs	2-4 ft bgs	4-6 ft bgs	8-10 ft bgs
SW6010-Metals (mg/kg)										
Barium	84.4	15,600	100,000	60,200	36.6	30.7	25.2	33.1	22.9	57.5
Cadmium	1.0	39	564	154	0.296	<0.288	<0.267	1.09	0.582	<0.253
Chromium	24.6	210 [3]	450 [3]	500 [3]	8.14	4.59	3.67	4.84	4.61	11.1
Silver	0.73	391	5,680	1,550	<0.18	<0.183	<0.171	<0.153	<0.169	<0.161
SW7421-Lead (mg/kg)										
Lead	12.3	400	800	800	6.77 S	1.1 S	0.535 SB	43.8 S	44.4 S	13.6 S

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.3 (continued)
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-A05 179A05-01-01 0-2 ft bgs	179-A05 179-A05-02-01 4-6 ft bgs	179-A05 179-A05-03-01 8-10 ft bgs	179-B01 179-B01-01-01 0-2 ft bgs	179-B01 179B01-02-01 2-4 ft bgs	179-B01 179-B01-03-01 4-6 ft bgs	179-B01 179-B01-04-01 6-8 ft bgs
		Residential	Industrial	Construction							
SW8270-Semi-volatile Organic Compounds (mg/kg)											
Acetophenone	NA	1,480	1,480	1,480	NA	NA	NA	ND	NA	NA	NA
Anthracene	NA	22,000	100,000	86,000	NA	NA	NA	ND	NA	NA	NA
Benzo(a)anthracene	NA	6.21	23.4	212	NA	NA	NA	ND	NA	NA	NA
Benzo(a)pyrene	NA	0.621	2.34	21.2	NA	NA	NA	ND	NA	NA	NA
Benzo(b)fluoranthene	NA	6.21	23.4	212	NA	NA	NA	ND	NA	NA	NA
Benzo(g,h,i)perylene	NA	--	--	--	NA	NA	NA	ND	NA	NA	NA
Benzo(k)fluoranthene	NA	62.1	234	2,120	NA	NA	NA	ND	NA	NA	NA
Chrysene	NA	615	2,310	21,200	NA	NA	NA	ND	NA	NA	NA
Di-n-octylphthalate	NA	--	--	--	NA	NA	NA	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	347	1,370	4,660	NA	NA	NA	ND	NA	NA	NA
Fluoranthene	NA	2,290	24,400	8,730	NA	NA	NA	ND	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	6.21	23.4	212	NA	NA	NA	ND	NA	NA	NA
Phenanthrene	NA	1,830	20,500	6,990	NA	NA	NA	ND	NA	NA	NA
Pyrene	NA	2,290	30,900	9,010	NA	NA	NA	ND	NA	NA	NA
SW6010-Metals (mg/kg)											
Barium	84.4	15,600	100,000	60,200	52.9	38.8	62	44	60.8	77.1	37.4
Cadmium	1.0	39	564	154	0.364 B	0.332 B	0.796 B	<0.29	<0.279	<0.266	<0.273
Chromium	24.6	210 [3]	450 [3]	500 [3]	10.6	15.8	7.74	7.18	6.43	7.09	5.97
Silver	0.73	391	5,680	1,550	<0.139	<0.151	<0.122	0.239	0.282	<0.17	0.207
SW7421-Lead (mg/kg)											
Lead	12.3	400	800	800	275	59.2	46.3	14.4 S	2.29 S	2.28 S	1.84 S

(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Chromium VI screening values used as a surrogate for total chromium

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
J = Positive detection with reported concentration between the method detection limit and the reporting limit
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.3 (continued)
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-B02 179-B02-01-01 0-2 ft bgs	179-B02 179B02-02-01 2-4 ft bgs	179-B02 179-B02-03-01 4-6 ft bgs	179-B02 179-B02-04-01 6-8 ft bgs	179-B03 179-B03-01-01 0-2 ft bgs	179-B03 179B03-02-01 2-4 ft bgs	179-B03 179-B03-03-01 4-6 ft bgs	179-B03 179-B03-04-01 6-8 ft bgs
		Residential	Industrial	Construction								
SW8270-Semi-volatile Organic Compounds (mg/kg)												
Acetophenone	NA	1,480	1,480	1,480	ND	NA	NA	NA	ND	NA	NA	NA
Anthracene	NA	22,000	100,000	86,000	ND	NA	NA	NA	ND	NA	NA	NA
Benzo(a)anthracene	NA	6.21	23.4	212	ND	NA	NA	NA	ND	NA	NA	NA
Benzo(a)pyrene	NA	0.621	2.34	21.2	ND	NA	NA	NA	ND	NA	NA	NA
Benzo(b)fluoranthene	NA	6.21	23.4	212	ND	NA	NA	NA	ND	NA	NA	NA
Benzo(g,h,i)perylene	NA	--	--	--	ND	NA	NA	NA	ND	NA	NA	NA
Benzo(k)fluoranthene	NA	62.1	234	2,120	ND	NA	NA	NA	ND	NA	NA	NA
Chrysene	NA	615	2,310	21,200	ND	NA	NA	NA	0.0167 J	NA	NA	NA
Di-n-octylphthalate	NA	--	--	--	ND	NA	NA	NA	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	347	1,370	4,660	ND	NA	NA	NA	ND	NA	NA	NA
Fluoranthene	NA	2,290	24,400	8,730	ND	NA	NA	NA	0.0169 J	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	6.21	23.4	212	ND	NA	NA	NA	ND	NA	NA	NA
Phenanthrene	NA	1,830	20,500	6,990	ND	NA	NA	NA	ND	NA	NA	NA
Pyrene	NA	2,290	30,900	9,010	ND	NA	NA	NA	0.0159 J	NA	NA	NA
SW6010-Metals (mg/kg)												
Barium	84.4	15,600	100,000	60,200	41.2	38.5	67.8	34.7	50.6	44.5	37.7	73.1
Cadmium	1.0	39	564	154	<0.282	<0.232	<0.254	<0.27	0.499 B	<0.291	<0.272	<0.263
Chromium	24.6	210 [3]	450 [3]	500 [3]	6.68	7.18	8.96	5.61	8.36	6.73	5.82	8.79
Silver	0.73	391	5,680	1,550	<0.18	0.183 B	<0.162	<0.172	0.178 B	0.238 B	<0.173	0.392 B
SW7421-Lead (mg/kg)												
Lead	12.3	400	800	800	5.38	1.57	1.46	0.43	0.256	4.91	0.494	1.62

(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Chromium VI screening values used as a surrogate for total chromium

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
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NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
J = Positive detection with reported concentration between the method detection limit and the reporting limit
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.3 (continued)
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-B04 179-B04-01-01 0-2 ft bgs	179-B04 179B04-02-01 2-4 ft bgs	179-B05 179-B05-01-01 0-2 ft bgs	179-B05 179-B05-02-01 2-4 ft bgs	179-B05 179-B05-03-01 4-6 ft bgs	179-B05 179B05-04-01 12-14 ft bgs
		Residential	Industrial	Construction						
SW8270-Semi-volatile Organic Compounds (mg/kg)										
Acetophenone	NA	1,480	1,480	1,480	ND	NA	ND	NA	NA	NA
Anthracene	NA	22,000	100,000	86,000	ND	NA	ND	NA	NA	NA
Benzo(a)anthracene	NA	6.21	23.4	212	ND	NA	ND	NA	NA	NA
Benzo(a)pyrene	NA	0.621	2.34	21.2	ND	NA	ND	NA	NA	NA
Benzo(b)fluoranthene	NA	6.21	23.4	212	ND	NA	ND	NA	NA	NA
Benzo(g,h,i)perylene	NA	--	--	--	ND	NA	ND	NA	NA	NA
Benzo(k)fluoranthene	NA	62.1	234	2,120	ND	NA	ND	NA	NA	NA
Chrysene	NA	615	2,310	21,200	ND	NA	ND	NA	NA	NA
Di-n-octylphthalate	NA	--	--	--	ND	NA	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	347	1,370	4,660	ND	NA	ND	NA	NA	NA
Fluoranthene	NA	2,290	24,400	8,730	ND	NA	ND	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	6.21	23.4	212	ND	NA	ND	NA	NA	NA
Phenanthrene	NA	1,830	20,500	6,990	ND	NA	ND	NA	NA	NA
Pyrene	NA	2,290	30,900	9,010	ND	NA	ND	NA	NA	NA
SW6010-Metals (mg/kg)										
Barium	84.4	15,600	100,000	60,200	38.9	54.6	39.9	56	22.9	114
Cadmium	1.0	39	564	154	<0.304	<0.236	<0.262	<0.287	<0.247	<0.219
Chromium	24.6	210 [3]	450 [3]	500 [3]	7.84	4.93	5.73	8.95	4.11	14.3
Silver	0.73	391	5,680	1,550	0.55 B	<0.15	<0.167	0.286	<0.158	<0.14
SW7421-Lead (mg/kg)										
Lead	12.3	400	800	800	5.22	0.531	6.07 S	4.44 S	2.48 S	5.98 S

(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Chromium VI screening values used as a surrogate for total chromium

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
J = Positive detection with reported concentration between the method detection limit and the reporting limit
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.3 (continued)
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-B06 179-B06-01-01 0-2 ft bgs	179-B06 179-B06-02-01 2-4 ft bgs	179-B06 179-B06-03-01 4-6 ft bgs	179-B06 179B06-04-01 12-14 ft bgs	179-B07 179-B07-01-01 4-6 ft bgs	179-B07 179-B07-02-01 6-8 ft bgs	179-B07 179-B07-03-01 8-10 ft bgs	179-B07 179B07-04-01 14-16 ft bgs
		Residential	Industrial	Construction								
SW8270-Semi-volatile Organic Compounds (mg/kg)												
Acetophenone	NA	1,480	1,480	1,480	0.0234	NA	NA	NA	ND	NA	NA	NA
Anthracene	NA	22,000	100,000	86,000	0.024	NA	NA	NA	ND	NA	NA	NA
Benzo(a)anthracene	NA	6.21	23.4	212	0.119	NA	NA	NA	ND	NA	NA	NA
Benzo(a)pyrene	NA	0.621	2.34	21.2	0.0985	NA	NA	NA	ND	NA	NA	NA
Benzo(b)fluoranthene	NA	6.21	23.4	212	0.17 F	NA	NA	NA	ND	NA	NA	NA
Benzo(g,h,i)perylene	NA	--	--	--	0.0232 J	NA	NA	NA	ND	NA	NA	NA
Benzo(k)fluoranthene	NA	62.1	234	2,120	0.17 F	NA	NA	NA	ND	NA	NA	NA
Chrysene	NA	615	2,310	21,200	0.152	NA	NA	NA	ND	NA	NA	NA
Di-n-octylphthalate	NA	--	--	--	1.02	NA	NA	NA	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	347	1,370	4,660	0.281	NA	NA	NA	ND	NA	NA	NA
Fluoranthene	NA	2,290	24,400	8,730	0.23	NA	NA	NA	ND	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	6.21	23.4	212	0.0351	NA	NA	NA	ND	NA	NA	NA
Phenanthrene	NA	1,830	20,500	6,990	0.124	NA	NA	NA	ND	NA	NA	NA
Pyrene	NA	2,290	30,900	9,010	0.206	NA	NA	NA	ND	NA	NA	NA
SW6010-Metals (mg/kg)												
Barium	84.4	15,600	100,000	60,200	50.1	55	19.1	18.8	47	35	19.2	21.2
Cadmium	1.0	39	564	154	0.57 B	0.578 B	<0.245	0.29 B	<0.288	<0.252	<0.252	<0.267
Chromium	24.6	210 [3]	450 [3]	500 [3]	10.7	8.71	3.88	4.41	5.75	5.96	3.9	5.39
Silver	0.73	391	5,680	1,550	0.233	0.382	0.156	<0.175	<0.183	<0.161	<0.161	<0.17
SW7421-Lead (mg/kg)												
Lead	12.3	400	800	800	288 S	28.6 S	0.782 S	0.56 S	0.933 SB	1.42 SB	0.616 SB	1.36 SB

(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Chromium VI screening values used as a surrogate for total chromium

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
J = Positive detection with reported concentration between the method detection limit and the reporting limit
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.3 (continued)
Phase II RFI Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background [1]	NMED Soil Screening Levels [2]			179-B08 179-B08-01-01 0-2 ft bgs	179-B08 179-B08-02-01 2-4 ft bgs	179-B08 179-B08-03-01 4-6 ft bgs	179-B08 179B08-04-01 10-12 ft bgs
		Residential	Industrial	Construction				
SW8270-Semi-volatile Organic Compounds (mg/kg)								
Acetophenone	NA	1,480	1,480	1,480	ND	NA	NA	NA
Anthracene	NA	22,000	100,000	86,000	ND	NA	NA	NA
Benzo(a)anthracene	NA	6.21	23.4	212	ND	NA	NA	NA
Benzo(a)pyrene	NA	0.621	2.34	21.2	ND	NA	NA	NA
Benzo(b)fluoranthene	NA	6.21	23.4	212	ND	NA	NA	NA
Benzo(g,h,i)perylene	NA	--	--	--	ND	NA	NA	NA
Benzo(k)fluoranthene	NA	62.1	234	2,120	ND	NA	NA	NA
Chrysene	NA	615	2,310	21,200	ND	NA	NA	NA
Di-n-octylphthalate	NA	--	--	--	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	347	1,370	4,660	ND	NA	NA	NA
Fluoranthene	NA	2,290	24,400	8,730	ND	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	6.21	23.4	212	ND	NA	NA	NA
Phenanthrene	NA	1,830	20,500	6,990	ND	NA	NA	NA
Pyrene	NA	2,290	30,900	9,010	ND	NA	NA	NA
SW6010-Metals (mg/kg)								
Barium	84.4	15,600	100,000	60,200	38.1	46.4	46.7	33.4
Cadmium	1.0	39	564	154	<0.276	<0.249	<0.21	<0.277
Chromium	24.6	210 [3]	450 [3]	500 [3]	5.3	5.97	6.35	6.13
Silver	0.73	391	5,680	1,550	0.6	<0.159	0.178	0.555 B
SW7421-Lead (mg/kg)								
Lead	12.3	400	800	800	12.5 S	1.56 SB	2.05 S	3.54 S

(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Chromium VI screening values used as a surrogate for total chromium

RFI = RCRA Facility Investigation
RCRA = Resource Conservation and Recovery Act
SWMUs = Soild Waste Management Units
AFB = Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not applicable
< = Analyte not detected at reported detection limit
NA = not analyzed
J = Positive detection with reported concentration between the method detection limit and the reporting limit
S =Lab-specific qualifer (no information provided)
B = Analyte detected in associated blank analyses

Table 4.4
1994 RCRA Facility Investigation Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytes	Background[1]	NMED Soil Screening Levels [2]			181-B01	181-B02
					181-B01-01-01	181-B02-01-01
		Residential	Industrial	Construction Worker	6-8 ft bgs	8-10 ft bgs
SW8270-Semi-volatile Organic Compounds (mg/kg)						
4-Chloro-3-methylphenol	NA	--	--	--	--	4.25
p-Chloroaniline	NA	240 [3]	8,200 [3]	2,700 [3]	--	1.69
Bis(2-Ethylhexyl)phthalate	NA	347	1,370	4,660	--	19.7 B
2-Methylnapthalene	NA	--	--	--	--	6.05
Naphthalene	NA	79.5	300	262	--	1.91
SW8270-Semi-volatile Organic Compounds TICs (mg/kg)						
Ethylmethylbenzene	NA	--	--	--	--	50
Trimethylbenzene	NA	24.8 [4]	69.2 [4]	69.2 [4]	--	20

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) 1, 3, 5 - Trimethylbenzene screening criteria used as a surrogate for trimethylbenzene

RCRA = Resource Conservation and Recovery Act
SMWUs= Solid Waste Management Units
RFI = RCRA Facility Investigation
AFB= Air Force Base
NMED = New Mexico Environment Department
ft = feet
bgs = below ground surface
mg/kg = milligrams per kilogram
-- = not detected; not applicable
NA = not analyzed
B = analyte detected in associated blank analyses
TICs = tentatively identified compounds

Table 4.5
Phase II RCRA Facility Investigation Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analytical Results for Groundwater Samples from Phase II RI for SS39 AT SWMU 177

Analytes	Background (1)	U.S. EPA MCL (2)	NMGWQ Standard (2)(3)	177-H01	177-H02	177-H03	177-H04
				177-H01-01-01	177-H02-01-01	177-H03-01-01	177-H04-01-01
SW8010-Halogenated Volatile Organics (µg/L)							
1,1,1-Trichloroethane	NA	200	60	3.73 KBJ	0.842 KBJ	***418***	1.76 KBJ
1,1-Dichloroethane	NA	--	25	<1.11	<1.11	*65.4*	<1.11
Chloroethane	NA	--	--	<4	<4	<20	0.442 KJ
Chloromethane	NA	--	--	2.38 KJ	<7.55	<37.8	0.761 KJ
Tetrachloroethene	NA	5	20	<3.75	<3.75	2.19 KJ	0.353 KJ
Trichloroethene	NA	5	100	***245***	***597***	***2,730***	***324***
Vinyl chloride	NA	2	1	***<7.55***	***3.83 KJ***	***<37.8***	***<7.55***
trans-1,3-Dichloropropene	NA	--	--	0.492 KJ	<3.6	<18	<3.6

Analytical Results for Groundwater Samples from Phase II RI for SS39 AT SWMU 179

Analytes	Background (1)	U.S. EPA MCL (2)	NMGWQ Standard (2)(3)	179-H01	179-H02	179-H03	179-H04
				179-H01-01-01	179-H02-01-01	179-H03-01-01	179-H04-01-01
				Result	Result	Result	Result
SW8010-Halogenated Volatile Organics (µg/L)							
Trichloroethene	NA	5	100	***38.8***	***27.6***	<3	4.5

(1) Radian, 1992 and 1993. Background provided for reference only.
(2) U.S. EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(2) NMAC 20.6.2.3103

RCRA = Resource Conservation and Recovery Act
SWMUs = Solid Waste Management Units
RFI = RCRA Facility Investigation
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
µg/L = micrograms per liter
NA = not analyzed
-- = not applicable
K = Peak did not meet method identification criteria. Analyte not detected on other GC column
B = Analyte detected in associated blank analyses
J = Analyte detected at concentration below the detection limit
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
< = Analyte not detected at the reported detection limit

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.6
1998 Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analysis	Background (1)	U.S. EPA MCL (2)	NMGWQ Standards (2)(3)	SS39-01 (upgradient) 5'	SS39-02 1'	SS39-03 2'	SS39-04 3'	SS39-05 4'	SS39-06 4'	SS39-07 4'	SS39-08 8'
VOCs-EPA SW-846 Method 8260A (µg/L)											
Acetone	NA	--	--	<50	<20	<10	<10	<10	<10	<71	<36
Benzene	NA	5	10	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	***<7.1***	<3.6
Carbon disulfide	NA	--	--	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<7.1	<3.6
Carbon tetrachloride	NA	5	10	1.4 J	<2.0	<1.0	<1.0	<1.0	<1.0	***<7.1***	2.1 J
Chloroform	NA	--	100	1.3J	<2.0	<1.0	<1.0	<1.0	0.17 J	1.9 J	1.4 J
Chloromethane	NA	--	--	<10	<4.0	<2.0	0.11 J	<2.0	<2.0	<14	<7.1
1,1-Dichloroethene	NA	7	5	1.5J	<2.0	<1.0	<1.0	<1.0	<1.0	2.1 J	1.3 J
Ethylbenzene	NA	700	750	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<7.1	<3.6
Methylene chloride	NA	--	100	0.98 JB	0.27 JB	<1.0	<1.0	0.10 JB	<1.0	1.1 JB	0.53 J,B
Tetrachloroethene	NA	5	20	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<7.1	<3.6
Toluene	NA	1,000	750	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<7.1	<3.6
1,1,1-Trichloroethane	NA	200	60	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<7.1	<3.6
Trichloroethene	NA	5	100	***230***	***66***	0.63 J	***27***	<1.0	0.32 J	***280***	***130***
2-butanone (MEK)	NA	--	--	<25	<10	<5.0	<5.0	<5.0	<5.0	<36	<18

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103

< = Indicates compound not detected at or above the RL
B = Method blank contamination, the associated method blank contains the target analyte at a reportable level
J = Estimated result, result is less than RL
RL = Reporting Limit
µg/L = micrograms per liter
VOCs = Volatile organic compounds
-- = not detected, not applicable
NA = not analyzed
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
MCL = maximum contaminant level

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.6 (continued)
1998 Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analysis	Background (1)	U.S. EPA MCL (2)	NMGWQ Standards (2)(3)	SS39-09 18'	SS39-10 17'	SS39-11 8'	SS39-12 3'	SS39-13 11'	SS39-14 5'	SS39-15	SS39-16
VOCs-EPA SW-846 Method 8260A (µg/L)											
Acetone	NA	--	--	5.9 J	5.1 J	<10	<10	<50	<17	<10	<10
Benzene	NA	5	10	1	0.42 J	<1.0	<1.0	<5.0	<1.7	<1.0	<1.0
Carbon disulfide	NA	--	--	0.22 J	<1.0	0.37 J	<1.0	<5.0	<1.7	<1.0	<1.0
Carbon tetrachloride	NA	5	10	<1.0	<1.0	<1.0	<1.0	0.86 J	<1.7	<1.0	<1.0
Chloroform	NA	--	100	<1.0	0.29 J	<1.0	<1.0	1.3 J	0.22 J	<1.0	<1.0
Chloromethane	NA	--	--	<2.0	<2.0	<2.0	<2.0	<1.0	<3.3	<2.0	<2.0
1,1-Dichloroethene	NA	7	5	<1.0	<1.0	<1.0	<1.0	1.2 J	<1.7	<1.0	<1.0
Ethylbenzene	NA	700	750	0.15 J	0.12 J	<1.0	<1.0	<5.0	<1.7	<1.0	<1.0
Methylene chloride	NA	--	100	0.19 JB	<1.0	<1.0	<1.0	<5.0	<1.7	<1.0	<1.0
Tetrachloroethene	NA	5	20	<1.0	0.14 J	<1.0	<1.0	<5.0	<1.7	<1.0	<1.0
Toluene	NA	1,000	750	0.79 J	0.50 J	<1.0	<1.0	<5.0	<1.7	<1.0	<1.0
1,1,1-Trichloroethane	NA	200	60	<1.0	0.18 J	<1.0	<1.0	<5.0	<1.7	<1.0	<1.0
Trichloroethene	NA	5	100	0.18 J	0.29 J	<1.0	1.1	***210***	***70***	<1.0	<1.0
2-butanone (MEK)	NA	--	--	3.8 J	<5.0	1.2 J	<5.0	<25	<8.3	<5.0	<5.0

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103

< = Indicates compound not detected at or above the RL
B = Method blank contamination, the associated method blank contains the target analyte at a reportable level
J = Estimated result, result is less than RL
RL = Reporting Limit
µg/L = micrograms per liter
VOCs = Volatile organic compounds
-- = not detected, not applicable
NA = not analyzed
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
MCL = maximum contaminant level

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.7
Groundwater Compliance Long Term Monitoring Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analysis	Background (1)	U.S. EPA MCL (2)	NMGWQ Standard	MW-39-01 (upgradient)					MW-39-02					MW-39-03					MW-39-04				
				Sep-97	Sep-99	Sep-01	Apr-03	Feb-06	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Sep-97	Sep-99	Sep-01	Apr-03	Dec-05	Sep-97	Sep-99	Sep-01	Apr-03	Feb-06
VOCs (µg/L)																							
Acetone	NA	--	--	--	< 5	< 5	< 10	--	--	< 5	< 5	< 10	--	--	< 5	< 5	< 10	--	--	< 5	57	< 10	--
Carbon disulfide	NA	--	--	--	< 3	< 5	< 1	--	--	< 3	< 5	< 1	--	14	< 3	< 5	< 1	--	--	< 3	< 5	< 1	--
Carbon tetrachloride	NA	5	10	--	< 3	< 5	< 1	--	***8.3 J***	4	3.1 J	2.2	--	--	< 3	< 5	< 1	5	--	< 3	< 5	< 1	--
Chloroform	NA	--	100	1.1 J	< 3	< 5	< 1	--	3.8	2 J	1.9 J	0.8 (J)	1.6	--	1 J	1.1 J	1.1	1.9	--	< 3	< 5	< 1	--
1,1-Dichloroethene	NA	7	5	--	< 3	< 5	< 1	--	--	1 J	< 5	< 1	--	--	< 3	< 5	< 1	--	--	< 3	< 5	< 1	--
Methyl ethyl ketone	NA	--	--	--	< 5	< 5	NA	--	--	< 5	< 5	NA	--	--	< 5	< 5	NA	--	--	< 5	17	NA	--
Trichloroethene	NA	5	100	--	< 3	< 5	< 1	--	***38***	***45***	***39***	3.4	0.79 J	--	1 J	< 5	0.71 (J)	**5.2**	--	ND	< 5	< 1	--
TDS	NA	--	1,000	NA	NA	NA	NA	**5,670**	NA	NA	NA	NA	**17,200**	NA	NA	NA	NA	**10,400**	NA	NA	NA	NA	**14,100**

NOTES:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) U.S. EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103

NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
U.S. EPA = U.S. Environmental Protection Agency
MCL = maximum contaminant level
CRDL = Contract-required Detection Limit
IDL = Instrument Detection Limit
ND = not detected below method dection limit
NA = not analyzed
VOCs = volatile organic compounds
µg/L = micrograms per liter
mg/L = milligrams per liter
-- = no detected; not applicable
< = Analyte not detected at the reported detection limit

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Laboratory Qualifiers-- assigned as a result of laboratory data assessment procedures
J - estimated value; less than CRDL but greater than or equal to IDL

EPA Qualifiers--assigned as a result of independent data validation
None

2003 Validation Qualifiers
J- Estimated value detected less than the CRDL but greater than the reporting limit.
U - Compound was analyzed for but not detected. Analyte result was below the CRDL.
UJ - Estimated as a non-detect at the detection limit.

Table 4.8
Analytical Summary Scheme
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI and January 2007 Groundwater Compliance Long Term Monitoring
Holloman AFB, New Mexico

Sample ID	Sample Location	Sample Depth (ft bgs)	Collection Date	VOCs	RCRA Metals	RCRA Metals (Diss)	UDMH	Aniline	Perchlorate	TDS
SOIL										
HA-39-01R-0204	HA3901R	2 - 4	18-May-06		X		X	X		
HA-39-01R-0708	HA3901R	7 - 8	18-May-06		X		X	X		
HA-39-02R-0204	HA3902R	2 - 4	18-May-06		X		X	X		
HA-39-02R-0809	HA3902R	8 - 9	18-May-06		X		X	X		
SB-39-01R-0204	SB3901R	8 - 9	18-May-06		X		X	X		
SB-39-01R-0810	SB3901R	2 - 4	18-May-06		X		X	X		
SB-39-02R-0204	SB3902R	8 - 10	18-May-06		X		X	X		
SB-39-02R-0910	SB3902R	9 - 10	18-May-06		X		X	X		
HGLSBSDUP06	SB3902R	9 - 10	18-May-06		X			X		
HGLSB39-17-0204	SB39-17	2 - 4	18-May-06		X		X	X		
HGLSB39-17-0910	SB39-17	9 - 10	18-May-06		X		X	X		
SEDIMENT										
HGLSD39-01-0001	SD39-01	0 - 1	19-May-06		X		X	X		
GROUNDWATER										
HGLMW39-02B	MW39-02	NA	15-Jul-06	X	X	X	X	X	X	X
HGLMW39-05	MW39-05	NA	13-Jul-06	X	X	X	X	X	X	X
HGLMW39-06	MW39-06	NA	13-Jul-06	X	X	X		X	X	X
HGLMW39-06-UDMH		NA	14-Jul-06				X			
HGLMW39-06D	MW39-06D	NA	13-Jul-06	X	X	X	X	X	X	X
HGLMW39-07	MW39-07	NA	12-Jul-06	X			X	X	X	X
HGLMW39-07METALS		NA	14-Jul-06		X	X				
HGLMW39-08	MW39-08	NA	14-Jul-06	X	X	X	X	X	X	X
HGLMW39-09	MW39-09	NA	14-Jul-06	X	X	X	X	X	X	X
HGLGWDUP10	MW39-09	NA	14-Jul-06	X	X	X	X	X	X	X
HGLMW39-10	MW39-10	NA	14-Jul-06	X	X	X	X	X	X	X
HGLMW39-11	MW39-11	NA	13-Jul-06	X				X	X	X
HGLMW39-11UDMH		NA	14-Jul-06				X			
HGLMW39-11METALS		NA	14-Jul-06		X	X				
HGLMW39-12	MW39-12	NA	12-Jul-06	X			X	X	X	X
HGLMW39-12METALS		NA	14-Jul-06		X	X				
GROUNDWATER COMPLIANCE LTM										
HGLMW39-02	MW39-02	NA	17-Jan-07	X	X	X			X	X
HGLMW39-05	MW39-05	NA	18-Jan-07	X	X	X			X	X
HGLMW39-06	MW39-06	NA	17-Jan-07	X	X	X			X	X
HGLMW39-06D	MW39-06D	NA	18-Jan-07	X	X	X			X	X
HGLMW39-07	MW39-07	NA	18-Jan-07	X	X	X			X	X
HGLMW39-08	MW39-08	NA	18-Jan-07	X	X	X			X	X
HGLMW39-09	MW39-09	NA	18-Jan-07	X	X	X			X	X
HGLMW39-10	MW39-10	NA	18-Jan-07	X	X	X			X	X
HGLMW39-11	MW39-11	NA	18-Jan-07	X	X	X			X	X
HGLMW39-12	MW39-12	NA	18-Jan-07	X	X	X			X	X

VOCs = volatile organic compounds
TPH = total petroleum hydrocarbons
RCRA = Resource Conservation and Recovery Act
UDMH = unsymmetrical dimethylhydrazine
TDS = total dissolved solids
ft = feet
bgs = below ground surface

Table 4.9
Sediment Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analyte [1]	Background [2]	NMED Soil Screening Level [3]			SD39-01 19-May-2006 0.00-1.00 ft.	
		Residential	Industrial	Construction Worker	Val	Q
Semi-Volatile Organic Compounds (µg/kg)						
Acetophenone	NA	1,480,000	1,480,000	1,480,000	2,680	
Diethyl phthalate	NA	48,900,000	100,000,000	100,000,000	932	J
Dimethyl phthalate	NA	100,000,000	100,000,000	100,000,000	1,120	J
Metals (mg/kg)						
Barium	84.4	15,600	100,000	60,200	168	
Cadmium	1.0	39	564	154	7.31	
Chromium, total	24.6	210 [4]	450 [4]	500 [4]	43.2	
Lead	12.3	400	800	800	***1,430***	
Mercury	--	6.11 [5]	68.4 [5]	23.8 [5]	0.0516	
Silver	0.73	391	5,680	1,550	0.136	J

Notes:
(1) Sample analyzed for SVOCs (UDMH), aniline, and RCRA metals. UDMH and aniline not detected.
(2) Radian, 1992 and 1993. Background provided for reference only.
(3) Obtained from Table A-1 (NMED, 2006c)
(4) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(5) Methyl mercury screening criteria used as a surrogate for mercury

NMED = New Mexico Environment Department
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
-- = not detected
NA = not analyzed
ft = feet
UDMH = unsymmetrical dimethylhydrazine
Val = validated result
Q = data qualifier
J = estimated positive detection

Bolded and *italicized* value indicates analyte concentration exceeds NMED residential and industrial SSL

Table 4.10
Soil Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

Analyte [1]	Background [2]	NMED Soil Screening Levels [3]			SB3901R 18-May-2006				SB3902R 18-May-2006						SB39-17 18-May-2006			
					2.00-4.00 ft.		8.00-10.00 ft.		2.00-4.00 ft.		8.00-10.00 ft.		8.00-10.00 ft.		2.00-4.00 ft.		9.00-10.00 ft.	
		Residential	Industrial	Construction Worker	Val	Q	Val	Q	Val	Q	Val	Q	Val [4]	Q [4]	Val	Q	Val	Q
Metals (mg/kg)																		
Arsenic	6.90	3.90	17.70	85.2	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U	0.228	U
Barium	84.4	15,600	100,000	60,200	25.6		19.9		124		70.7		78.8		19.6		11.5	
Cadmium	1.0	39.0	564	154	2.25		0.0795	U	36.3		23.4		**50.7**		0.0795	U	0.0795	U
Chromium, total	24.6	210 [5]	450 [5]	500 [5]	16.9		3.01		178		**287**		**290**		0.528	J	0.615	J
Lead	12.3	400	800	800	18.8		0.65	U	342		177		**612**		0.65	U	0.65	U
Mercury	--	6.11 [6]	68.4 [6]	23.8 [6]	0.0879		0.0088	U	0.435		0.0802		0.0625		0.0088	U	0.0088	U
Silver	0.73	391	5,680	1,550	0.787		0.834		6.34		0.0444	U	0.0444	U	0.991		0.536	

Analyte [1]	Background [2]	NMED Soil Screening Levels [3]			HA3901R 18-May-2006				HA3902R 18-May-2006			
					2.00-4.00 ft.		7.00-8.00 ft.		2.00-4.00 ft.		8.00-9.00 ft.	
		Residential	Industrial	Construction Worker	Val	Q	Val	Q	Val	Q	Val	Q
Metals (mg/kg)												
Arsenic	6.90	3.90	17.70	85.2	**8.27**		0.228	U	0.228	U	0.228	U
Barium	84.4	15,600	100,000	60,200	36.8		21.6		64.4		33.1	
Cadmium	1.0	39.0	564	154	0.294		0.0795	U	0.0795	U	0.0795	U
Chromium, total	24.6	210 [5]	450 [5]	500 [5]	10.4		3.82		6.48		4.38	
Lead	12.3	400	800	800	102		53		20.7		5.05	
Mercury	--	6.11 [6]	68.4 [6]	23.8 [6]	0.0095	J	0.0088	U	0.0094	J	0.0088	U
Silver	0.73	391	5,680	1,550	0.994		1.09		0.0444	U	0.473	

Notes:
(1) Samples analyzed for UDMH, aniline, and RCRA metals. UDMH and aniline not detected.
(2) Radian, 1992 and 1993. Background provided for reference only.
(3) Obtained from Table A-1 (NMED, 2006c)
(4) Duplicate
(5) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(6) Methyl mercury screening criteria used as a surrogate for mercury

NMED = New Mexico Environment Department
mg/kg = milligrams per kilogram
ft = feet
Val = validated result
Q = data qualifier
U = non-detect result, value presented indicates reporting limit
J = estimated positive detection
UDMH = unsymmetrical dimethylhydrazine
-- = not detected

Bolded value indicates analyte concentration exceeds NMED residential SSL

Table 4.11
Groundwater Well Construction Summary Data
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

		Survey Information					Boring Information		Well Construction Information							
Well ID	Installation Date	Northing	Easting	Top of Casing	Top of Monument (TOM)	Ground	Borehole diameter (in)	Bottom of Boring	Bottom of Well	PVC diameter (in)	Length of Riser Pipe (ft)	Screen slot size (in)	Length of Screen (ft)	Top	Bottom	Date of Development
MW39-01	9/25/1991	685830.382	1671298.192	4061.89	4061.89	4059.92	7.5	28	27.5	2	20.25	0.01	9.5	17.75	27.25	NP
MW39-02	9/25/1991	685113.105	1670479.976	4053.06	4052.85	4051.42	7.5	25.5	24.5	2	17.45	0.01	9.5	14.75	24.25	NP
MW39-03	9/25/1991	685124.020	1670833.302	4042.71	4042.36	4040.20	7.5	14	14	2	6.75	0.01	9.5	4.25	13.75	NP
MW39-04	9/25/1991	685319.268	1671156.831	4055.48	4055.14	4053.56	7.5	24	23.1	2	15.55	0.01	9.5	13.35	22.85	NP
MW39-05	6/14/2006	684944.840	1669838.805	4038.53	4038.46	4035.84	6.25	15.33	15.33	2	Not specifie	0.01	10	5.0	15	6/17/2006
MW39-06	6/13/2006	684858.132	1670521.449	4040.88	4040.78	4037.41	6.25	16.80	16.3	2	3.33	0.01	10	6.0	16	6/15/2006
MW39-06D	6/13/2006	684846.261	1670531.067	4040.23	4040.14	4037.07	6.25	26.80	26.8	2	3.13	0.01	10	16.5	26.5	6/17/2006
MW39-07	6/14/2006	684804.006	1671083.811	4040.13	4040.20	4037.05	6.25	14.78	14.78	2	3.07	0.01	10	4.7	14.4	6/16/2006
MW39-08	Event(4)	684654.799	1670377.331	NA	NA	4034.05	3	10	10	2	5	0.01	5	5.0	10	Event
MW39-09	Event(4)	684612.479	1670592.700	NA	NA	4034.09	3	10	10	2	5	0.01	5	5.09	10.09	Event
MW39-10	Event(4)	684650.942	1670853.498	NA	NA	4034.20	3	10	10	2	5	0.01	5	0.2	5.02	Event
MW39-11	Event(4)	684669.596	1670101.079	NA	NA	4034.11	3	10	10	2	5	0.01	5	0.5	10.5	Event
MW39-12	Event(4)	684691.675	1669910.951	NA	NA	4033.75	3	10	10	2	5	0.01	5	0.8	10.8	Event

Notes:
(1) NAD 83 State Plane New Mexico C Grid
(2) NAVD 88
(3) Includes stickup
(4) Installed every sampling event

NAD 83 = North American Datum 1983
NAVD 88 = North American Vertical Datum 1988
PVC = polyvinyl chloride
Sch = Schedule
ft = feet
in = inches
bgs = below ground surface
msl = mean sea level
ID = identification
NP = not provided

Table 4.12
Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI and January 2007 Groundwater Compliance Long Term Monitoring
Holloman AFB, New Mexico

Analyte	Background [1]	U.S. EPA MCL [2]	NMGWQ Standard [2][3]	MW39-02				MW39-05				MW39-06					
				15-Jul-2006		17-Jan-2007		13-Jul-2006		18-Jan-2007		13-Jul-2006		17-Jan-2007			
				Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val [4]	Q [4]
Volatile Organic Compounds (ug/L)																	
1-Bromo-4-Fluorobenzene (4-Bromofluorobenzene)	NA	--	--	NA		48		NA		44.8		NA		47.2		47.3	
1,1-Dichloroethane	NA	--	25	0.0299	U	1	U	0.0299	U	1	U	0.03	J	1	U	1	U
1,1-Dichloroethene	NA	7	5	0.0736	U	0.54	J	0.0736	U	1	U	2.02		1.83		1.88	
Acetone	NA	--	--	0.854	U	10	UJ	0.854	U	10	UJ	0.854	U	10	UJ	10	UJ
Benzene	NA	5	10	0.0495	U	1	U	0.07	J	1	U	0.09	J	1	U	1	U
Bromodichloromethane	NA	--	--	0.0651	U	1	U	0.0651	U	1	U	0.14	J	1	U	1	U
Bromoform	NA	--	--	0.0859	U	1	U	0.0859	U	1	U	0.0859	U	1	U	1	U
Carbon tetrachloride	NA	5	10	3.13		3.08		0.121	U	1	U	1.51		1.93		1.88	
Chlorobenzene	NA	100	--	0.0217	U	1	U	0.03	J	1	U	0.0217	U	1	U	1	U
Chloroform	NA	--	100	1.38		1.44		0.0475	U	1	U	2.85		2.52		2.52	J
Chloromethane	NA	--	--	0.23	U	1	U	0.23	U	1	U	0.37	J	1	U	1	U
cis-1,2-Dichloroethene	NA	70	--	0.101	U	1	U	0.101	U	1	U	0.12	J	1	U	1	U
Dibromofluoromethane	NA	--	--	NA		52.4		NA		53.5		NA		51.9		51.6	
m,p-Xylene (sum of isomers)	NA	10,000 [5]	620 [5]	0.04	J	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	NA	--	100	0.689	U	5	U	0.689	U	5	U	0.689	U	5	U	5	U
Toluene-D8	NA	1,000	750	NA		47.2		NA		46.5		NA		46.9		46.8	
Trichloroethene (TCE)	NA	5	100	**13.3**		**19.8**		**25**		**20.4**		***366***	***J***	***219***		***219***	***J***
Metals (ug/L)																	
Arsenic	72.3	10	100	NA		5	U	NA		5	U	NA		5	U	5	U
Barium	929	2,000	1,000	NA		14		NA		19		NA		37		26	J
Chromium, total	234	100	50	NA		14		NA		5	U	NA		5	U	5	U
Lead	19.9	15	50	NA		5	U	NA		5	U	NA		5	U	5	U
Filtered Metals (ug/L)																	
Arsenic (Filtered)	35.4	10	100	R [7]		5	U	R [7]		5	U	R [7]		5	U	5	U
Barium (Filtered)	85.2	2,000	1,000	R [7]		14	J	R [7]		15	J	R [7]		12	J	12	J
Cadmium (Filtered)	7.4	5	10	R [7]		1	UJ	R [7]		1	UJ	R [7]		1	UJ	1	UJ
Chromium, total (Filtered)	7.2	100	50	R [7]		7	J	R [7]		5	UJ	R [7]		5	UJ	5	UJ
Selenium (Filtered)	85.3	50	50	R [7]		10	UJ	R [7]		10	UJ	R [7]		10	UJ	10	UJ
Silver (Filtered)	6.7	--	50	R [7]		2	UJ	R [7]		2	UJ	R [7]		2	UJ	2	UJ
Perchlorate (ug/L)																	
Perchlorate	NA	--	<24.5 [6]	12		*75*	U	*29*		*600*	U	*37*		*300*	U	*300*	U
Other Compounds (mg/L)																	
TDS	NA	--	1,000	*16,300*		*15,700*		*69,400*		*83,900*		*32,500*		*35,500*		NA	

Notes
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103
(4) Duplicate
(5) Total xylenes EPA MCL and NMGWQ Standard used as surrogate for m,p-Xylene
(6) Human Health Medium Specific Screening Levels 2007 (EPA Reg VI, 2007)
(7) Dissolved metals data rejected (see Section 4.7.4)

µg/L = micrograms per liter
mg/L = milligrams per liter
TDS = total dissolved solids
Val = analytical result
Q = data qualifier
J = positive detection, value between RL and the MDL
U = non-detect result
NA = not analyzed
-- = not applicable; not detected
MDL = method detection limit
RL = reporting limit
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.12 (continued)
Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI and January 2007 Groundwater Compliance Long Term Monitoring
Holloman AFB, New Mexico

Analyte	Background [1]	U.S. EPA MCL [2]	NMGWQ Standard [2][3]	MW39-06D				MW39-07				MW39-08			
				13-Jul-2006		18-Jan-2007		12/14-Jul-2006		18-Jan-2007		14-Jul-2006		18-Jan-2007	
				Val	Q	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q
Volatile Organic Compounds (ug/L)															
1-Bromo-4-Fluorobenzene (4-Bromofluorobenzene)	NA	--	--	NA		43.4		NA		45.5		NA		43.8	
1,1-Dichloroethane	NA	--	25	0.0299	U	1	U	0.0299	U	1	U	0.0299	U	1	U
1,1-Dichloroethene	NA	7	5	0.24	J	1.42		0.0736	U	1	U	0.0736	U	1	U
Acetone	NA	--	--	1.88	J	10	UJ	0.854	U	10	UJ	0.854	U	10	UJ
Benzene	NA	5	10	0.09	J	1	U	0.0495	U	1	U	1	U	1	U
Bromodichloromethane	NA	--	--	0.0651	U	1	U	0.0651	U	1	U	0.0651	U	1	U
Bromoform	NA	--	--	0.0859	U	1	U	0.0859	U	1	U	0.0859	U	1	U
Carbon tetrachloride	NA	5	10	0.121	U	1	U	0.121	U	1	U	0.121	U	1	U
Chlorobenzene	NA	100	--	0.04	J	1	U	1	U	1	U	1	U	1	U
Chloroform	NA	--	100	0.27	J	0.65	J	0.11	J	1	U	0.23	J	1	U
Chloromethane	NA	--	--	0.23	U	0.51	J	0.23	U	1	U	0.23	U	1	U
cis-1,2-Dichloroethene	NA	70	--	0.101	U	1	U	0.101	U	1	U	0.101	U	1	U
Dibromofluoromethane	NA	--	--	NA		51.7		NA		51.7		NA		52.8	
m,p-Xylene (sum of isomers)	NA	10,000 [5]	620 [5]	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	NA	--	100	0.689	U	5	U	0.689	U	5	U	0.689	U	5	U
Toluene-D8	NA	1,000	750	NA		45.4		NA		45.9		NA		45.6	
Trichloroethene (TCE)	NA	5	100	***113***		***464***	***J***	0.37	J	1.55		**49.6**		**38.9**	
Metals (ug/L)															
Arsenic	72.3	10	100	NA		**17**		5	U	5	U	NA		5	U
Barium	929	2,000	1,000	NA		17	J	19		44		NA		60	
Chromium, total	234	100	50	NA		5	U	1.4	U	5	U	NA		5	U
Lead	19.9	15	50	NA		5	U	1.6	UJ	5	U	NA		5	U
Filtered Metals (ug/L)															
Arsenic (Filtered)	35.4	10	100	R [7]		5	U	R [7]		5	U	R [7]		5	U
Barium (Filtered)	85.2	2,000	1,000	R [7]		17	J	R [7]		9	J	R [7]		11	J
Cadmium (Filtered)	7.4	5	10	R [7]		1	UJ	R [7]		1	UJ	R [7]		1	UJ
Chromium, total (Filtered)	7.2	100	50	R [7]		5	UJ	R [7]		5	UJ	R [7]		5	UJ
Selenium (Filtered)	85.3	50	50	R [7]		10	UJ	R [7]		10	UJ	R [7]		10	UJ
Silver (Filtered)	6.7	--	50	R [7]		2	UJ	R [7]		2	UJ	R [7]		2	UJ
Perchlorate (ug/L)															
Perchlorate	NA	--	<24.5 [6]	*35*		*600*	*U*	*100*		*300*	*U*	*59*		*600*	*U*
Other Compounds (mg/L)															
TDS	NA	--	1,000	*119,000*		*110,000*		*57,300*		*66,200*		*102,000*		*105,000*	

Notes
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103
(4) Duplicate
(5) Total xylenes EPA MCL and NMGWQ Standard used as surrogate for m,p-Xylene
(6) Human Health Medium Specific Screening Levels 2007 (EPA Reg VI, 2007)
(7) Dissolved metals data rejected (see Section 4.7.4)

µg/L = micrograms per liter
mg/L = milligrams per liter
TDS = total dissolved solids
Val = analytical result
Q = data qualifier
J = positive detection, value between RL and the MDL
U = non-detect result
NA = not analyzed
-- = not applicable; not detected
MDL = method detection limit
RL = reporting limit
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.12 (continued)
Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI and January 2007 Groundwater Compliance Long Term Monitoring
Holloman AFB, New Mexico

Analyte	Background [1]	U.S. EPA MCL [2]	NMGWQ Standard [2][3]	MW39-09						MW39-10				MW39-11			
				14-Jul-2006				18-Jan-2007		14-Jul-2006		18-Jan-2007		13/14-Jul-2006		18-Jan-2007	
				Val	Q	Val [4]	Q [4]	Val	Q	Val	Q	Val	Q	Val	Q	Val	Q
Volatile Organic Compounds (ug/L)																	
1-Bromo-4-Fluorobenzene (4-Bromofluorobenzene)	NA	--	--	NA		NA		42.8	J	NA		43.4		NA		42.9	
1,1-Dichloroethane	NA	--	25	0.0299	U	0.0299	U	1	UJ	0.0299	U	1	U	0.0299	U	1	U
1,1-Dichloroethene	NA	7	5	0.0736	U	0.0736	U	1	UJ	0.0736	U	1	U	0.0736	U	1	U
Acetone	NA	--	--	10	U	10	U	10	UJ	10	U	10	UJ	3.12	J	10	UJ
Benzene	NA	5	10	1	U	1	U	1	UJ	0.0495	U	1	U	0.06	J	1	U
Bromodichloromethane	NA	--	--	0.0651	U	0.0651	U	1	UJ	0.0651	U	1	U	0.0651	U	1	U
Bromoform	NA	--	--	0.16	J	0.0859	U	1	UJ	0.0859	U	1	U	0.0859	U	1	U
Carbon tetrachloride	NA	5	10	0.121	U	0.121	U	1	UJ	0.121	U	1	U	0.121	U	1	U
Chlorobenzene	NA	100	--	1	U	1	U	1	UJ	1	U	1	U	0.03	J	1	U
Chloroform	NA	--	100	0.0475	U	0.0475	U	1	UJ	0.0475	U	1	U	0.0475	U	1	U
Chloromethane	NA	--	--	0.37	J	0.37	J	0.59	J	0.34	J	1	U	0.36	J	0.43	J
cis-1,2-Dichloroethene	NA	70	--	0.101	U	0.101	U	1	UJ	0.101	U	1	U	0.25	J	1	U
Dibromofluoromethane	NA	--	--	NA		NA		52.1	J	NA		52.4		NA		52.2	
m,p-Xylene (sum of isomers)	NA	10,000 [5]	620 [5]	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Methylene chloride	NA	--	100	0.689	U	0.689	U	0.58	J	0.689	U	5	U	0.689	U	5	U
Toluene-D8	NA	1,000	750	NA		NA		44.7	J	NA		45.4		NA		45.3	
Trichloroethene (TCE)	NA	5	100	0.0495	U	0.06	J	1	UJ	0.0495	U	1	U	**44.1**		**31.3**	
Metals (ug/L)																	
Arsenic	72.3	10	100	NA		NA		5	U	NA		5	U	NA		5	U
Barium	929	2,000	1,000	NA		NA		277		NA		11		NA		11	
Chromium, total	234	100	50	NA		NA		5	U	NA		5	U	NA		5	U
Lead	19.9	15	50	NA		NA		**38**		NA		5	U	NA		5	U
Filtered Metals (ug/L)																	
Arsenic (Filtered)	35.4	10	100	R [7]		R [7]		5	U	R [7]		5	U	R [7]		5	U
Barium (Filtered)	85.2	2,000	1,000	R [7]		R [7]		6	J	R [7]		9	J	R [7]		9	J
Cadmium (Filtered)	7.4	5	10	R [7]		R [7]		1	UJ	R [7]		1	UJ	R [7]		1	UJ
Chromium, total (Filtered)	7.2	100	50	R [7]		R [7]		5	UJ	R [7]		5	UJ	R [7]		5	UJ
Selenium (Filtered)	85.3	50	50	R [7]		R [7]		10	UJ	R [7]		10	UJ	R [7]		10	UJ
Silver (Filtered)	6.7	--	50	R [7]		R [7]		2	UJ	R [7]		2	UJ	R [7]		2	UJ
Perchlorate (ug/L)																	
Perchlorate	NA	--	<24.5 [6]	*110*		*130*		*600*	*U*	*130*		*600*	*U*	*130*		*750*	*U*
Other Compounds (mg/L)																	
TDS	NA	--	1,000	*107,000*		*110,000*		*131,000*		*106,000*		*112,000*		*124,000*		*141,000*	

Notes
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103
(4) Duplicate
(5) Total xylenes EPA MCL and NMGWQ Standard used as surrogate for m,p-Xylene
(6) Human Health Medium Specific Screening Levels 2007 (EPA Reg VI, 2007)
(7) Dissolved metals data rejected (see Section 4.7.4)

µg/L = micrograms per liter
mg/L = milligrams per liter
TDS = total dissolved solids
Val = analytical result
Q = data qualifier
J = positive detection, value between RL and the MDL
U = non-detect result
NA = not analyzed
-- = not applicable; not detected
MDL = method detection limit
RL = reporting limit
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.12 (continued)
Groundwater Analytical Results
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI and January 2007 Groundwater Compliance Long Term Monitoring
Holloman AFB, New Mexico

Analyte	Background [1]	U.S. EPA MCL [2]	NMGWQ Standard [2][3]	MW39-12 13/14-Jul-2006 Val	Q	MW39-12 18-Jan-2007 Val	Q
Volatile Organic Compounds (ug/L)							
1-Bromo-4-Fluorobenzene (4-Bromofluorobenzene)	NA	--	--	NA		42.3	
1,1-Dichloroethane	NA	--	25	0.0299	U	1	U
1,1-Dichloroethene	NA	7	5	0.0736	U	1	U
Acetone	NA	--	--	0.854	U	10	UJ
Benzene	NA	5	10	0.0495	U	1	U
Bromodichloromethane	NA	--	--	0.0651	U	1	U
Bromoform	NA	--	--	0.0859	U	1	U
Carbon tetrachloride	NA	5	10	0.121	U	1	U
Chlorobenzene	NA	100	--	0.0217	U	1	U
Chloroform	NA	--	100	0.0475	U	1	U
Chloromethane	NA	--	--	0.28	J	0.42	J
cis-1,2-Dichloroethene	NA	70	--	0.101	U	1	U
Dibromofluoromethane	NA	--	--	NA		53.8	
m,p-Xylene (sum of isomers)	NA	10,000 [5]	620 [5]	1	U	1	U
Methylene chloride	NA	--	100	0.689	U	5	U
Toluene-D8	NA	1,000	750	NA		45.4	
Trichloroethene (TCE)	NA	5	100	2.6		2.01	
Metals (ug/L)							
Arsenic	72.3	10	100	NA		5	U
Barium	929	2,000	1,000	NA		143	
Chromium, total	234	100	50	NA		5	U
Lead	19.9	15	50	NA		5	U
Filtered Metals (ug/L)							
Arsenic (Filtered)	35.4	10	100	R [7]		5	U
Barium (Filtered)	85.2	2,000	1,000	R [7]		9	J
Cadmium (Filtered)	7.4	5	10	R [7]		1	UJ
Chromium, total (Filtered)	7.2	100	50	R [7]		5	UJ
Selenium (Filtered)	85.3	50	50	R [7]		10	UJ
Silver (Filtered)	6.7	--	50	R [7]		2	UJ
Perchlorate (ug/L)							
Perchlorate	NA	--	<24.5 [6]	*110*		*750*	*U*
Other Compounds (mg/L)							
TDS	NA	--	1,000	*136,000*		*140,000*	

Notes
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) US EPA MCLs and NMGWQ standards are provided for refernce only since TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103
(4) Duplicate
(5) Total xylenes EPA MCL and NMGWQ Standard used as surrogate for m,p-Xylene
(6) Human Health Medium Specific Screening Levels 2007 (EPA Reg VI, 2007)
(7) Dissolved metals data rejected (see Section 4.7.4)

µg/L = micrograms per liter
mg/L = milligrams per liter
TDS = total dissolved solids
Val = analytical result
Q = data qualifier
J = positive detection, value between RL and the MDL
U = non-detect result
NA = not analyzed
-- = not applicable; not detected
MDL = method detection limit
RL = reporting limit
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 4.13
Supplemental RFI and January 2007 Compliance LTM Sample Delivery Groups
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI and January 2007 Groundwater Compliance Long Term Monitoring
Holloman AFB, New Mexico

Sample Identification:		SAMPLE DELIVERY GROUP												
		6E+06	6E+06	6E+06	6E+06	6E+06	6E+06	D6E240388	D6G140204	D6G14155	D6G15115	D6G18345	D6G18347	D6G22231
Soil	HGLHA3901R-0204	X						X						
	HGLHA3901R-0708	X						X						
	HGLHA3902R-0204	X						X						
	HGLHA3902R-0809	X						X						
	HGLSB3901R-0204	X						X						
	HGLSB3901R-0810	X						X						
	HGLSB3902R-0204	X						X						
	HGLSB3902R-0910	X						X						
	HGLSB39-17-0204	X						X						
	HGLSB39-17-0910	X						X						
	HGLSBSDUP06	X						X						
Sediment	HGLSD39-01-0001		X					X						
Groundwater	HGLMW39-02								X					
	HGLMW39-02B						X				X			X
	HGLMW39-05				X					X			X	
	HGLMW39-06				X					X			X	
	HGLMW39-06D				X					X			X	
	HGLMW39-06UDMH										X			
	HGLMW39-07			X		X			X			X		
	HGLMW39-08					X					X		X	
	HGLMW39-09					X					X		X	
	HGLGWDUP10					X					X		X	
	HGLMW39-10					X					X		X	
	HGLMW39-11				X	X				X			X	
	HGLMW39-11UDMH										X			
	HGLMW39-12				X	X			X				X	

Table 4.14
SS-39 Summary of Analyte Exceedances by Media
SS-39 (SWMUs 165, 177, 179, and 181) – Missile Fuel Spill Area
Supplemental RFI
Holloman AFB, New Mexico

MEDIA	Soil and Terrestrial Sediment			Groundwater	
	Residential SSL	Industrial SSL	Construction Worker SSL	U.S. EPA MCLs(1)	NMGWQ(1)
Sediment	Lead	Lead	Lead	--	--
Soil	Tetrachloroethene, Trichloroethene, D-TPH, Arsenic, Cadmium, Chomium (total), Lead	Tetrachloroethene, Trichloroethene, D-TPH, Arsenic, Lead	Trichloroethene, Lead	--	--
Groundwater	--	--	--	1,1,1-Trichloroethane, 1,1-Dichloroethene, Carbon tetrachloride, Trichloroethene, Vinyl chloride, Cadmium, Lead, Nitrate/Nitrite	1,1,1-Trichloroethane, 1,1-Dichloroethene, Trichloroethene, Vinyl chloride, Perchlorate, Nitrate/Nitrite, TDS, Chloride, Sulfate, Fluoride,

Notes:
(1) U.S. EPA MCLs and NMGWQ standards are provided for refernce only in cases where TDS exceeds 10,000 mg/L

SSL = soil screening level
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
PCB = polychlorinated biphenyl
TCE = trichloroethene
TDS = total dissolved solids
D-TPH = diesel-range total petroleum hydrocarbons
-- = not applicable

5.0 SD-27 (SWMU 141) – PAD 9 WASHRACK AREA

5.1 LOCATION

SD-27, the Pad 9 Washrack Area (SWMU 141), is located east of Taxiway F near former Building 882. The site is located within the airfield, significantly limiting unauthorized access. The location of SD-27 with respect to the surrounding facility is shown on Figure 2.1. An aerial photograph of SD-27 is provided as Figure 5.1.

5.2 SITE DESCRIPTION

SD-27 is an inactive washrack that consists of a circular concrete pad with sump and drainage gallery. The drainage gallery/sump discharged accumulated wash water to a former drainage pit, located approximately 215 feet south of the concrete pad via an underground discharge pipe. The washrack concrete pad is approximately 150 feet in diameter and appears to be in relatively good condition, with only a few fractures and cracks evident. No petroleum or unusual stains were observed on the pad during supplemental RFI field activities. The concrete pad is connected to Taxiway F by a partially degraded asphalt service road. The sump, a 4 foot wide, 7 foot long, and 1 to 1.5 foot deep pit, was constructed of concrete and covered with a thick steel grate. Prior to supplemental RFI field activities, the sump and associated drainage gallery, a .5-foot wide, 0.5-foot deep concrete-lined trough running the radius of the concrete wash rack, was nearly filled with accumulated sediment, grasses, and a cactus. Upon removal of the accumulated sediment, the base of the sump was determined to be in good condition. No soil staining, unusual solids or liquids, or unknown odors were noted in the sediment contained within the former sump and concrete trench.

In the center of the sump floor, a broken floor drain was present. The floor drain is believed to connect the sump to the former drainage pit via an underground discharge pipe. The drain inlet was broken and filled-in with sediment. The outlet of the discharge pipe, located in the former drainage pit, was not observed during the supplemental RFI site inspection. The former drainage pit was described in previous reports as being approximately 50 feet in diameter, 12 feet deep and unlined. At the time of the supplemental RFI site inspection, the drainage pit had been backfilled to within 2 to 3 feet of grade. The backfilled pit supported a thick concentration of shrubs which were trimmed down prior to field sampling activities. No unusual stains or odors were noted on the surface soils within or around the former drainage pit. A partially standing fence surrounds the drainage pit. No surface expression of the only building formerly present onsite, Building T884, was observed during the supplemental RFI field event.

The area immediately surrounding SD-27 is unpaved, undeveloped and currently used as a safety buffer for Base runway operations. An active taxiway, Taxiway F, is located approximately 200 feet west of the SWMU.

Due to security issues associated with USAF operations, no photographs of SD-27 were permitted.

5.3 WASTE HISTORY

The Pad 9 washrack was used to wash down drones and manned aircraft that had flown through clouds of nuclear blast materials in the late 1940s and early 1950s. Wash water would collect in the sump and discharge via the discharge pipe to the discharge pit (Radian, 1993). No information on the exact year when washrack activities ceased at SD-27 was obtained. However, according to former military personnel, no aircraft maintenance activities have occurred at SD-27 since the cessation of washing down potentially radioactive contaminated drones and manned aircraft (Radian, 1993).

5.4 ENVIRONMENTAL SETTING

5.4.1 Topography

SD-27, Pad 9, is located in a generally flat portion of the Base, although an overall southwestwardly dip is present. The drainage pit represents the lowest topographic feature on or near SD-27. The base of the pit is extremely hummocky reflecting former backfilling activities.

5.4.2 Surface Water

No surface water bodies or surface water drainage features are present within, crossing, or lie adjacent to SD-27. No surface water was observed within the washrack sump, the drainage ditch, or within the former discharge pit. Precipitation falling onto the unpaved soil surrounding the site will most likely either evaporate or infiltrate into the subsurface soil. No visual evidence of overland flow was observed immediately surrounding the site. Precipitation falling on the paved portion of SD-27 will evaporate, infiltrate into the subsurface along the few observed cracks and fractures, or, if a sufficient amount of precipitation fell on the concrete-paved area, discharge as overland flow to the sump, drainage gallery, or surrounding unpaved areas.

5.4.3 Soils

The soils beneath SD-27 are classified by the USDA Soil Conservation Service as belonging to the well-drained, sandy loam and gypsum of the Holloman-Gypsum Land-Yesum complex (USDA, 1981). The soils of this association are formed from alluvial and eolian gypsiferous sediments. The Holloman unit makes up about 35% of the complex and is described as being a light brown to pink, very fine, sandy loam with high gypsum content. The soil is moderately permeable, calcareous, and mildly to moderately alkaline. The Gypsum land unit makes up about 30% of the complex and is described as being a soft to hard white gypsum, typically overlain by less than one inch of very fine, sandy loam. The Yesum unit, which makes up 20% of the complex, is light brown to pinkish-white, very fine sandy loam that is also high in gypsum. The Yesum unit is moderately permeable, calcareous, and mildly alkaline (USDA, 1981).

5.4.4 Geology

Site-specific geologic information was obtained from soil borings completed during this investigation as well as from a PA/ SI. Lithologic logs of soil borings completed for this supplemental RFI are included in Appendix B. Boring logs generated from borings completed for the previous investigations can be obtained from the previous investigation reports.

Based on a review of the boring logs, the soil beneath SD-27 is very heterogeneous. No single lithologic unit was observed to be continuous across the site. During a previous investigation, a 1- to 2-foot thick clay lens was encountered within the first 5 feet of soil beneath the eastern portion of SD-27. This continuous unit was not observed in any of the supplemental RFI borings.

Supplement RFI borings completed through or in the immediate vicinity of the concrete pad encountered soil composed primarily of silty, very fine- to medium-grained sand. In addition, these borings encountered refusal between 8.5 and 13 feet bgs. No subsurface obstructions were observed to result in borehole refusal. South of the concrete pad, subsurface soils encountered consisted primarily of sands, silts, sandy clay and clay south. Borings completed south of the pad were advance to a maximum depth of 20 feet bgs without encountering refusal.

5.4.5 Hydrogeology

Multiple water bearing zones were encountered in the subsurface soils beneath SD-27 ranging from 5 feet bgs to 20 feet bgs. The majority of these zones were insufficient in yielding water for sampling. Groundwater of sufficient volume for sampling was not encountered beneath the concrete pad prior to borehole refusal (possibly resulting from the highly compacted soils encountered in the northern and central portions of the site) at a depth of 8.5 to 13 feet bgs. Within the former drainage pit, groundwater yields sufficient for sampling were encountered between 10 and 12 feet bgs. During previous investigations, groundwater was encountered between 5 and 8 feet bgs. The presence of groundwater at shallower depths within and in the vicinity of the former drainage pit and not beneath the concrete pad is most likely attributable to the decrease in elevation between the concrete pad and the former drainage pit, the increased porosity of the backfill material in the former drainage pit, and an overall decrease in the vertical infiltration rate of precipitation beneath the concrete pad.

5.5 PREVIOUS INVESTIGATIONS

Previous investigations conducted at SD-27 include a radiation soil screening investigation, a PA/SI, and a Phase II RI. A general discussion of the previous investigations, results obtained, and associated conclusions are presented below. Analytical results associated with the PA/SI and RI are summarized in Tables 5.1 and 5.2.

5.5.1 Radiation Site Screening

In May 1976, a radiation site screening investigation was conducted on the SD-27 drainage pit. No information regarding this investigation was obtained from the Base administrative record; rather, the results of the investigation were summarized in the 1993 PA/SI report. As presented in the PA/SI report, the radiation investigation determined that no radiation above background was present in the discharge pit soils (Radian, 1994). Based on the sampling results, the drainage pit was backfilled to grade (Radian, 1994). No additional information on the total number or locations of samples collected, radiological analyses performed, or the actual radiological analytical results was presented in the PA/SI report.

5.5.2 Preliminary Assessment/Site Investigation

The PA/SI was conducted at SD-27 in 1993 and consisted of completing four soil borings (designated as BH-27-01 through BH-27-04). The borings were completed immediately south of the concrete pad, within the former drainage pit, and within the footprint of a former transformer. In addition, one background soil boring, BH-27-05, was completed and sampled approximately 500 feet north of SD-27. The locations of the PA/SI soil borings are depicted on Figure 5.2.

One soil sample per boring was collected for laboratory analyses, which included gross alpha and gross beta (4 samples), PCBs (1 sample), Extractable Fuel Hydrocarbons (1 sample) and Purgable Fuel Hydrocarbons (1 sample). The PA/SI analytical sampling scheme was devised to address known or potential contaminants of concern associated with various areas of interest (i.e., drainage pit, sump, former transformer location, etc.) present onsite. The PA/SI analytical sampling results are summarized on Table 5.1.

Within the drainage pit (i.e., borings BH-27-02 and BH-27-03), stained soils and fuel odors were encountered from 8 to 16 feet bgs, at and below the top of the underlying watertable. No free phase hydrocarbons were noted in the collected soils. A soil sample collected from the stained area contained TPH at 430 micrograms per kilogram (μg/kg), ethylbenzene at 680 μg/kg, toluene at 51 μg/kg, and xylenes at 2,700 μg/kg. For the purpose of this supplemental RFI, the PA/SI soil analytical results were evaluated against current NMED SSLs, which are included on Table 5.1. None of the reported analyte concentrations exceeded applicable NMED SSLs. Fingerprint analysis of the hydrocarbons identified the TPH as kerosene. The total concentration of both extractable and purgable compounds was 3.8 mg/kg, which is several orders of magnitude below current residential (760 mg/kg) and industrial (1,810 mg/kg) New Mexico TPH guidelines for kerosene (NMED, 2006a). Gross alpha and beta results were within three times the site-specific background concentration. No groundwater samples were collected as part of the PA/SI report.

5.5.3 Phase II Remedial Investigation

After reviewing the PA/SI data, NMED required a Phase II RI to ascertain whether the underlying groundwater had been impacted from former site activities. The Phase II RI was conducted in 1994 and consisted of advancing one soil boring (94-27-01R) through the

discharge pit to a maximum depth of 16 feet bgs. Three soil samples were collected from the boring for laboratory analysis, one from 10 to 12 feet bgs, one from 12 to 14 feet bgs, and one from 14 to 16 feet bgs. All three soil samples were collected below the top of the underlying water bearing unit. The three samples were analyzed for VOCs, SVOCs, and total recoverable petroleum hydrocarbons (TRPH).

Five VOCs, seven SVOCs, and TRPH were detected in the Phase II RI soil samples. With the exception of only a few analytes, analyte maximum concentrations were detected primarily in the 10 to 12 foot soil interval while the lowest concentrations were detected in the 12 to 14 foot bgs soil interval. Phase II RI soil analytical data are summarized in Table 5.2. Although human health SSLs have been included in Table 5.2, the Phase II RI soil analytical data should not be compared to health-based SSLs since all three soil samples were collected below the watertable. No groundwater samples were collected as part of the Phase II RI.

5.5.4 Site Close Out Petition

Based on the results of the PA/SI and RI, Holloman AFB submitted a No Further Action and Site Close Out Petition letter for SD-27 (SWMU 141) in December 2001. In a March 5, 2002 letter, NMED responded to the NFA petition by requesting additional soil and groundwater characterization data. The following data gaps were identified by NMED (Bhate, 2003):

- The condition of the washrack drainage gallery;
- The lack of soil and groundwater quality data beneath the washrack drainage gallery to determine the presence or absence of hazardous materials; and
- The lack of soil and groundwater quality data beneath drain pit to determine if any hazardous constituents are present in the subsurface directly below the pit.

5.6 SUPPLEMENTAL RFI ACTIVITIES

Supplemental RFI activities were conducted at SD-27 in May and June 2006 and in general accordance with the NMED-approved Bhate work plan (Bhate, 2003). A sample analytical summary table is included as Table 5.3.

5.6.1 Drainage Gallery Assessment

Evaluation of the former drainage gallery required sampling the sediment within the former sump, removal of the sediment and visual inspection of the former sump, and the collection of subsurface soils beneath the sump. All drainage gallery assessment activities were conducted in May 2006.

5.6.1.1 Sediment Sampling

The sediment within the sump was removed using a shovel. During removal, the sediment was field screened with a PID and a Victoreen radiological meter Geiger counter. No unusual odors were detected with the PID, and no radiation readings over background were detected. Victoreen readings have been recorded on the SD-27 supplemental RFI boring logs included in

Appendix B. In addition, no staining or liquids were observed on the sediment in the former sump. A composite sediment sample, designated HGLSD27-01-0002, was collected from the sump and submitted for VOC, SVOC, G-TPH, D-TPH, RCRA metals, and radionuclides. Sample compositing was conducted by collecting equal amounts of sediment from random locations and depths within the sump. After sample collection, the excavated sediment was stockpiled within plastic and stored onsite until analytical results were obtained to determine the ultimate disposition of the sediment.

One VOC, 15 SVOCs, 6 RCRA metals, GRO, and DRO were all detected in the sediment sample. Sediment sample results are summarized on Table 5.4. Of the analytes detected, only benzo(a)pyrene, dibenzo(a,h)anthracene, chromium, and lead were detected at concentrations exceeding NMED SSLs. Benzo(a)pyrene and lead were detected at concentrations exceeding NMED residential and industrial SSLs. Dibenzo(a,h)anthracene and chromium were detected at concentrations exceeding residential SSLs. In addition, radionuclides lead-210, radium-226, and radium-228 were detected above U.S. EPA radiological SSLs for direct ingestion of site soils.

After removal of the accumulated sediment, the washrack sump was determined to be approximately 7 feet long, 4 feet wide and ranged in depth from 1.0 to 1.5 feet below the grade of the pad. The metal grate covering the sump was in good condition. The sump was observed to be constructed of concrete sidewalls and a concrete floor with the floor sloping inward from the sidewalls to the center of the sump. The concrete appeared to be in good condition with no cracks or fractures observed. In addition, no concrete staining was observed. A floor drain covered with a broken cover was present in the center of the sump and filled with sediment.

The concrete-lined trench extended from the south end of the concrete slab, sloping towards the southern edge of the sump to promote drainage to the sump. The trench was approximately 0.5-feet wide and 0.5-feet deep. A small amount of sediment has accumulated on the floor of the trench. No staining of the trench sidewalls, floor, or sediment was observed and no unusual odors noted. Radiation field screening did not detect radiation above background in the trench.

In accordance with the SD-27 workplan, the sediment within the former sump was removed and stockpiled within plastic pending analytical results (HGL, 2006b). Based on the obtained analytical data, the sediment was transported off base on September 12, 2006 and disposed as non-hazardous material. A copy of the manifest is presented as Appendix F.

5.6.1.2 Subsurface Sampling

After removal of the sediment from the former sump, a DPT drill rig was used to advance a soil boring, designated SB-27-01, through the base of the former sump to the underlying watertable. Boring SB-27-01 was completed through the concrete base of the sump just east of center. The boring was to be advanced to 14 feet bgs; however, the borehole refusal was encountered at 8.5 feet bgs. No subsurface obstructions accounting for borehole refusal were observed; rather, refusal appears to have resulted from the subsurface lithology, possibly

resulting from the compaction of well sorted sands encountered beneath the north and central portions of the site.

During borehole advancement, soil samples were continuously collected for lithologic characterization, field screening with a PID, and possibly for laboratory analysis. After sampling was completed, the boring was abandoned in accordance with Holloman SOPs. Based on field screening results, one soil sample, obtained from 6 to 8 feet bgs, was collected from the boring and submitted for VOC, SVOC, RCRA metals, GRO, DRO, and radionuclides.

The soil analytical results are summarized on Table 5.5. Six VOAs, G-TPH, D-TPH, barium, chromium, and six radionuclides were all detected in the soil sample collected from boring SB27-01. With the exception of lead-210, none of the detected analytes exceeded NMED SSLs. Lead-210 was detected above the U.S. EPA radionuclides SSL for direct ingestion of soil at a concentration of 1.19 picocuries per gram (pCi/g), slightly less than detected in sediment sample SD27-01, collected 4 feet above the soil sample. The data indicate that soils beneath the drainage gallery have not been impacted.

5.6.2 DPT Soil and Groundwater Assessment—Concrete Pad and Drainage Pit

5.6.2.1 Subsurface Soil Sampling

Eight soil borings, designated as SB-27-01 through SB-27-08, were advanced within the washrack concrete pad, within the former drainage pit, and in the vicinity of the former discharge pipe. Initially, only three soil borings were proposed for assessing the soil and groundwater quality in the vicinity of the former drainage pit and discharge pipe. Soil and groundwater samples were anticipated from these three borings as well as boring SB-27-01 completed as part of the drainage gallery assessment (Section 5.6.1). However, borehole refusals were encountered in two of the borings (SB-27-01 at 8.5 feet bgs and SB-27-04 at 10.5 feet bgs) prior to reaching the underlying watertable. Consequently, additional borings SB-27-05 through SB-27-08 were completed at the site. Borehole refusal was experienced in both SB-27-05 (13 feet bgs) and SB-27-06 (11.5 ft bgs) prior to reaching the underlying watertable. SB-27-07 was completed to 22.5 feet bgs near the former drainline by abandoning soil sampling activities and hydraulically hammering a sampler to the underlying watertable. The remaining boring, SB-27-08, was completed in an inferred hydraulically upgradient location in an effort to assess background metals and radionuclides concentrations in groundwater. The locations of the supplemental RFI soil borings are depicted on Figure 5.2.

Continuous soil sampling was conducted for borings SB-27-01 through SB-27-05. Soil sampling was not performed during the advancement of borings SB-27-06 through SB-27-08 since the goal of these boreholes was to obtain groundwater samples. The lithologic logging data, field screening results, and visual observations were recorded during borehole advancement. Copies of the boring logs are included in Appendix B.

Elevated PID readings and stained soils were observed below 6 feet bgs in borings SB27-02 and SB27-03. Consequently, two soil samples from borings SB27-02 and SB27-03 were

analyzed for VOCs, SVOCs, RCRA metals, and radionuclides. The shallower soil sample was collected from a soil interval above the watertable which reflected the greatest potential for contamination based on field screening results and visual observations. The deeper soil samples were collected at or below the watertable interface in accordance with the Bhate workplan. These samples were collected to evaluate soil quality beneath the watertable, a soil zone previously sampled and determined to contain elevated concentrations of TRPH. With respect to borings SB-27-01, SB-27-04, and SB-27-05, refusal was encountered prior to reaching the underlying watertable. Because field screening and visual observations did not indicate a preferential contaminated soil interval in the shallow subsurface, the soil interval immediately above where refusal was encountered was collected and analyzed for VOCs, SVOCs, RCRA metals, and radionuclides.

Soil analytical results are summarized on Table 5.5. Fourteen VOCs, 3 SVOCs, G-TPH, D-TPH, 4 metals (barium, chromium, lead, and silver), 9 radionuclides, and gross beta/protons were detected in the site soils. D-TPH was detected in two samples but exceeded the NMED residential and industrial TPH SSLs in only one sample, collected from 11 to 12 feet bgs in boring SB27-02, located within the former disposal pit. The 11 to 13 foot bgs soil interval was below the watertable but represents the floor of the former disposal pit based on previous reports. Three radionuclides, lead-210, radium-226, and radium-228, exceeded U.S. EPA radionuclides SSLs for the direct ingestion of soil. The exceedances occurred solely in boring SB27-02. Radium-226 was detected above screening value 6 to 8 feet bgs, the top of the watertable; while lead-210 and radium-228 were detected in the 11 to 13 foot bgs soil sample, the former floor of the disposal pit. The locations of the soil exceedances, the analytes exceeding screening criteria, and the analyte concentrations are presented on Figure 5.3. In summary, soils containing constituents above criteria are located solely within the former disposal pit.

5.6.2.2 Groundwater Sampling

After soil sampling activities were completed, soil borings SB27-02, SB27-03, SB27-07, and SB27-08 were converted into temporary groundwater sampling points using temporary wells. The temporary wells were constructed of one-inch diameter, 10-foot long, 0.010-slotted PVC well screens flush-jointed with a PVC riser pipe. The well screens were positioned straddling the top of the watertable to determine if free phase hydrocarbons are present on the underlying watertable. Once installed, the temporary wells were left undisturbed for up to several days to allow the underlying watertable to re-equilibrate after the well installation process.

A groundwater sample was retrieved from the temporary wells using disposable Teflon-lined polyethylene tubing fitted to a peristaltic pump. The tubing was inserted into the temporary well so that the tubing inlet sat approximately ½ between the bottom of the well and the top of the watertable. The temporary wells were then purged and sampled using low flow purging and sampling techniques, in accordance with Holloman SOP 8 (Groundwater Sampling for Chemical analysis). One tubing volume of purge water was pumped from the well prior to sampling. After purging the required tubing volume from the temporary wells, the appropriate sample bottles were filled using direct filling techniques. Groundwater samples were analyzed for VOCs, SVOCs, RCRA metals (total and dissolved), and radionuclides (total and

dissolved). Dissolved RCRA metals and radionuclides were filtered in the field using a 0.4 micron in-line filter during the sample collection process. Groundwater sample collection and management was conducted in accordance with SOP 1 (Documentation, Sample Handling, Chain-of-Custody, and Shipping) and SOP 8 (Groundwater Sampling for Chemical Analysis). SD-27 groundwater sample data sheets are included in Appendix D.

Sixteen VOCs, 8 SVOCs, G-TPH, D-TPH, metals, and radionuclides were detected in the groundwater underlying SD-27 at concentrations exceeding the site-specific background groundwater sample collected from boring SB27-08. A summary of the groundwater analytical results is included as Table 5.6. Of the analytes detected, several VOCs (primarily petroleum-related), D-TPH, lead, dissolved selenium, radium-228 (total and dissolved) were detected at concentrations exceeding screening criteria. Analyte concentrations exceeding screening criteria are depicted on Figure 5.4. All of the non-radionuclide groundwater exceedances were detected in groundwater samples collected from the former disposal pit (i.e., boring SB27-02) or presumably hydraulically downgradient of the former disposal pit (i.e., boring SB27-03) with one exception. Lead was detected slightly above the U.S. EPA action level (15 μg/L) in the groundwater sample collected for boring SB27-07, located presumably hydraulically downgradient of the former concrete washrack. Lead was not detected in the field-filtered sample; consequently, the reported lead concentration is most likely attributable to a turbid sample. No other metals were detected in the total or dissolved groundwater samples.

Total and dissolved concentrations of radium-228 were detected above the U.S. EPA MCL in groundwater samples collected from borings SB27-03 (total and dissolved radium-228) and SB27-07 (total radium-228). A groundwater sample and duplicate sample were collected from boring SB27-03. Radium-228 was not detected in the groundwater sample, but was detected in the duplicate sample at concentrations exceeding screening criteria. A dissolved radionuclide sample was not collected from boring SB27-07 due to poor well yields.

5.6.3 Investigation Derived Waste Management

Investigation derived waste (IDW) consisting of drainage gallery sump sediments, soil cuttings, decontamination water, and purge groundwater were handled in accordance with Holloman AFB SOP 9 (Field Management of Investigation-Derived Waste). Based on sediment analytical results and elevated PID readings, the sediment from the drainage gallery sump and the soil cuttings from borings SB27-02 and SB27-03 were removed from Holloman AFB on September 12, 2006 and disposed as non-hazardous waste. A non-hazardous waste manifest of the SD-27 IDW is included as Appendix F.

5.7 ASSESSMENT OF DATA RESULTS

A general description of the SD-27 data assessment results is provided below. Detailed information regarding the data and assessment findings and responses are included in the data validation packages included in Appendix E.

Nine soil samples including two duplicate samples, one sediment sample, and six groundwater samples including one duplicate sample were submitted for laboratory analysis. The analytical data for the groundwater samples are presented in SDG 6051928, 6052304, 6061925, ARS-06-01000-GAGB, ARS-06-01001-GAGB, and ARS-06-01184. The analytical data for the soil and sediment samples are presented in SDG 6051928, 6052223, ARS-06-01000-GAGB, and ARS-06-01001-GAGB. Table 5.7 identifies the location of sample results by SDG.

5.7.1 Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limit met method or contractual requirements. All data reviewed were acceptable. The following minor issues were identified and resolved, including:

- The "J" flagging of one fluoranthene and one chromium soil result (in SDG 6052223) for being reported below the reporting limit but greater than the MDL.
- The "J" flagging of the several VOC soil results in (SDG 6051928) for being reported at concentration higher than the highest calibration standard. The laboratory reported these values instead of re-analyzing the sample at dilution. The "J" flag indicates an estimated value.
- The "J" flagging of several VOC and lead soil results in SDG 6051928 for being reported below the reporting limit but greater than the MDL.
- The "J" flagging of several VOC and SVOC sediment results in SDG 6051928 for being reported below the reporting limit but greater than the MDL.
- The "J" flagging of several VOC, SVOC, D-TPH, and chromium groundwater results in SDG 6051928 for being reported below the reporting limit but greater than the MDL.
- The "J" flagging of several VOCs and selenium groundwater results in SDG 6061925 for being reported below the reporting limit but greater than the MDL.

5.7.2 Precision and Accuracy

QC data, including MS / MSD, surrogates, and LCS recoveries were used to assess the precision and accuracy for the soil and groundwater samples. The following minor issues were identified and resolved, including:

- The "UJ" flagging of a cadmium and lead groundwater result (in SDG 6061925) for having recoveries out of criteria in the MS/MSD pair for water samples.

- The "UJ" flagging of one gross-alpha groundwater result (in SDG ARS-06-01001) for having a recovery out of criteria in the MS/MSD pair.

- The "J" flagging of one gross-alpha groundwater result (in SDG ARS-06-01184) for having a recovery out of criteria in the MS/MSD pair.

All soil and groundwater samples were properly preserved and analyzed within the required holding time. All initial and continuing calibration QC criteria were reviewed and were acceptable. The frequency of analysis and %R of the second source calibration verifications were reviewed and determined to be acceptable. Surrogate spikes were added to all samples, QC checks, and blanks as required by the reference method. All data reviewed were acceptable.

5.7.3 Comparability

Comparability represents the confidence with which one data set can be compared to another. In accordance with the approved QAPP (HGL, 2005b), data are comparable when collection techniques, measurement methods, and reporting procedures are equivalent for the samples within a sample set. Implementation of appropriate procedures for sampling and shipping, as specified in the QAPP (HGL, 2005b), were performed. Within the data sets, it was concluded that results were comparable to each other.

5.7.4 Representativeness

Representativeness was assessed by use of field duplicate and blank samples. Method and field blank samples were analyzed to determine potential contamination from laboratory or shipping procedures. Overall, representativeness was considered satisfactory, except as noted below.

- For VOC analyses in SDG 6052223, nine target analytes were detected in the method blank associated with the water samples in QC Batch No. 26849, and three target analytes were detected in the method blank for soil samples in QC Batch No. 26929. Six other target analytes were detected in the trip blank TB-051706 and four target analytes were detected in trip blank TB051806. For the affected results of sample HGLSB27-05-0708, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- For VOC analyses in SDG 6051928, several target analytes were detected in the six method blanks and the trip blank associated with all samples. For the affected soil and sediment results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

- G-TPH were detected in three method blanks associated with all samples (in SDG 6051928) in QC Batches No. 26698, 26781, and 26822. For the affected results of sample HGLSD27-01-0002, the reporting limit was raised to the observed value.

- For VOC analyses in SDG 6061925, nineteen target analytes were detected in the method blank associated with the water samples in QC Batch No. 27581, two of which were common laboratory contaminants. Ten target analytes were detected in the Trip Blank from June 16, 2006, and seven were detected in the Trip Blank from June 17, 2006. For the affected results, either the sample result was raised to the reporting limit, or the reporting limit was raised to the observed value.

5.7.5 Completeness

Completeness is defined as the percentage of the total number of analytical results requested that are judged to be valid, including estimated (J-flagged) values, in accordance with the QAPP (HGL, 2005b). Completeness of the laboratory analysis for the SD-27 samples was determined to be 100 percent, within acceptable data quality objective limits.

5.7.6 Usability

Based on the data review and validation, the analytical data were determined to be useable for their intended purpose.

5.8 NATURE AND EXTENT OF CONTAMINATION

A summary of analytes detected at concentrations exceeding screening criteria segregated by media is included as Table 5.8.

5.8.1 Contaminant Distribution

5.8.1.1 Sediment Contamination

Sediment within the drainage gallery has been removed and disposed offsite. The analytical data for the sediment showed that, of the analytes detected, only two polynuclear aromatic hydrocarbons and two metals (chromium and lead) exceeding residential and/or industrial SSLs. In addition, three radionuclides (lead-210, radium-226, and radium-228) were present at concentrations exceeding NMED SSLs for direct ingestion of soil.

Several VOCs, D-TPH, metals, and radionuclides have been detected in the soils within the former drainage pit and in the groundwater within the drainage pit and downgradient of the washrack and drainage pit. Based on the presence of these analytes in the sediment within the sump, the former washrack is most likely the source of soil and groundwater contamination at SD-27.

5.8.1.2 Soil Contamination

Soil contamination (i.e., analyte concentrations above SSLs) has been detected solely within the former drainage pit at depths associated with the soil/groundwater interface (i.e., 6 to 10 feet bgs), the former bottom of the drainage pit (i.e., 11 to 13 feet bgs), and in the soil immediately below the former bottom of the drainage pit (i.e., 14 to 16 feet bgs). Contaminants detected in the soils at concentrations above criteria include benzene, total xylenes, D-TPH, lead-210, radium-226, and radium-228. Although these concentrations have been detected above criteria at or below the watertable, all but lead-210 and radium-226 have been detected in the groundwater downgradient of the former pit at concentrations exceeding criteria.

5.8.1.3 Groundwater Contamination

Halogenated VOCs (1,2-dichloroethane and TCE), fuel-related VOCs (BTEX compounds), D-TPH, lead, selenium (dissolved) and radium-228 (total and filtered) were detected above screening criteria. Groundwater contamination appears to be centered on the former discharge pit; however, some contaminant migration to the southeast has occurred. The presence of TCE, albeit below screening criteria, lead, and radium-228 in the groundwater sample from boring SB27-07, indicates the integrity of the discharge pipe may be compromised.

5.8.2 Fate and Transport

5.8.2.1 Sediment

Based on documented historic site activities and collected analytical data, contaminated sediment and wash water was discharged to the washrack sump which discharged the collected water and sediment to the former discharge pit via an underground drain pipe. Based on this process, all potential contaminant migration routes would have been to the subsurface via the discharge pit. No staining of the washrack concrete surface or the soil surrounding the washrack was observed during the supplemental RFI.

The sediment within the former washrack sump has been removed and disposed offsite.

5.8.2.2 Soil

Based on the data collected, soil contamination is located solely within the former discharge pit between 6 and 17 feet bgs. Based on the collected data, approximately 800 yd^3 of saturated impacted soils are present within the discharge pit. Although the detected soil contamination is below the top of the watertable within the drainage pit, several of the contaminants have been detected above criteria in the groundwater. Based on the presence of these contaminants in groundwater, the impacted soils appear to be a source for the groundwater contaminant plume.

5.8.2.3 Groundwater

The direction of groundwater flow has yet to be determined; however, based local topography and groundwater contaminant distribution, a southerly to southwesterly groundwater flow direction is indicated. TDS concentrations were not established since no permanent monitoring wells were installed. Groundwater usage in the vicinity of SD-27 is currently unknown; however, groundwater is not used as a potable water source on base.

5.8.2.4 Radionuclides

Several radionuclides, lead-210, radium-226, and radium-228 have been detected in the former sump sediment, the soils of the discharge pit, and the groundwater within and downgradient of the sump and discharge pit at concentrations exceeding residential NMED SSLs for the direct ingestion of soils and U.S. EPA MCLs. All of the associated concentrations in soil were below industrial SSLs and well below 15 pCi/g. In addition, gross alpha and gross beta concentrations were below the ORNL radionuclides screening level of 30 pCi/g and 15 pCi/L (gross alpha), indicating these concentrations are not of concern.

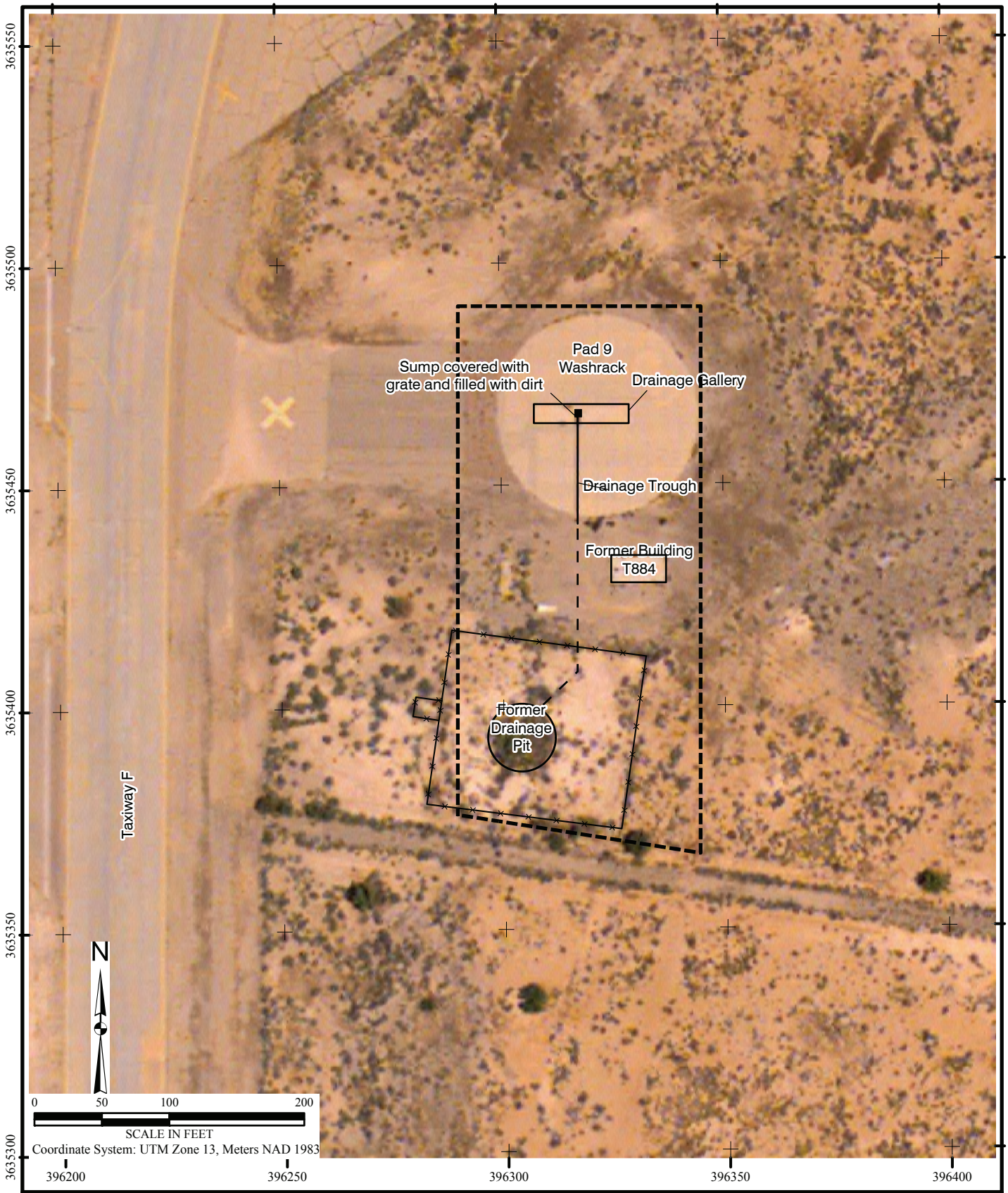
5.9 CONCLUSIONS

Former aircraft washing activities at SD-27 resulted in the discharge of sediment and wash water containing VOCs, SVOC, G-TPH, D-TPH, metals, and radionuclides to the washrack sump, drain pipe, and former drainage pit to the extent where the underlying media has been impacted above screening criteria. Sediments within the former sump were removed and disposed offsite, eliminating any potential future impacts from this material. Soil contamination was detected solely at or below the underlying watertable and appears to reflect contamination from discharge at the former disposal pit. Groundwater contamination implies the integrity of the former sump's drain pipe or sump has been compromised as well as indicates that site contaminants have migrated downgradient. Neither the extent of the soil or groundwater contamination around SD-27 has been determined.

5.10 RECOMMENDATIONS

Based on the supplemental RFI data, further investigation of SD-27 is recommended to determine appropriate remedial actions, if necessary. Field activities recommended include the sampling and potential removal of sediment within the washrack concrete trough which terminates at the concrete washrack, a subsurface soil investigation to delineate the extent of impacted soils in the vicinity of the discharge pit targeting VOCs, TPH-G, TPH-D, metals, and radionuclides, the installation of five permanent groundwater monitoring wells (i.e., one upgradient well, one downgradient of washrack, and three downgradient monitoring wells), and at least one round of groundwater sampling to assess VOCs, SVOCs, D-TPH, metals (total and dissolved), gross alpha and beta radionuclides (total and dissolved), and TDS concentrations in the underlying groundwater.

FIGURES



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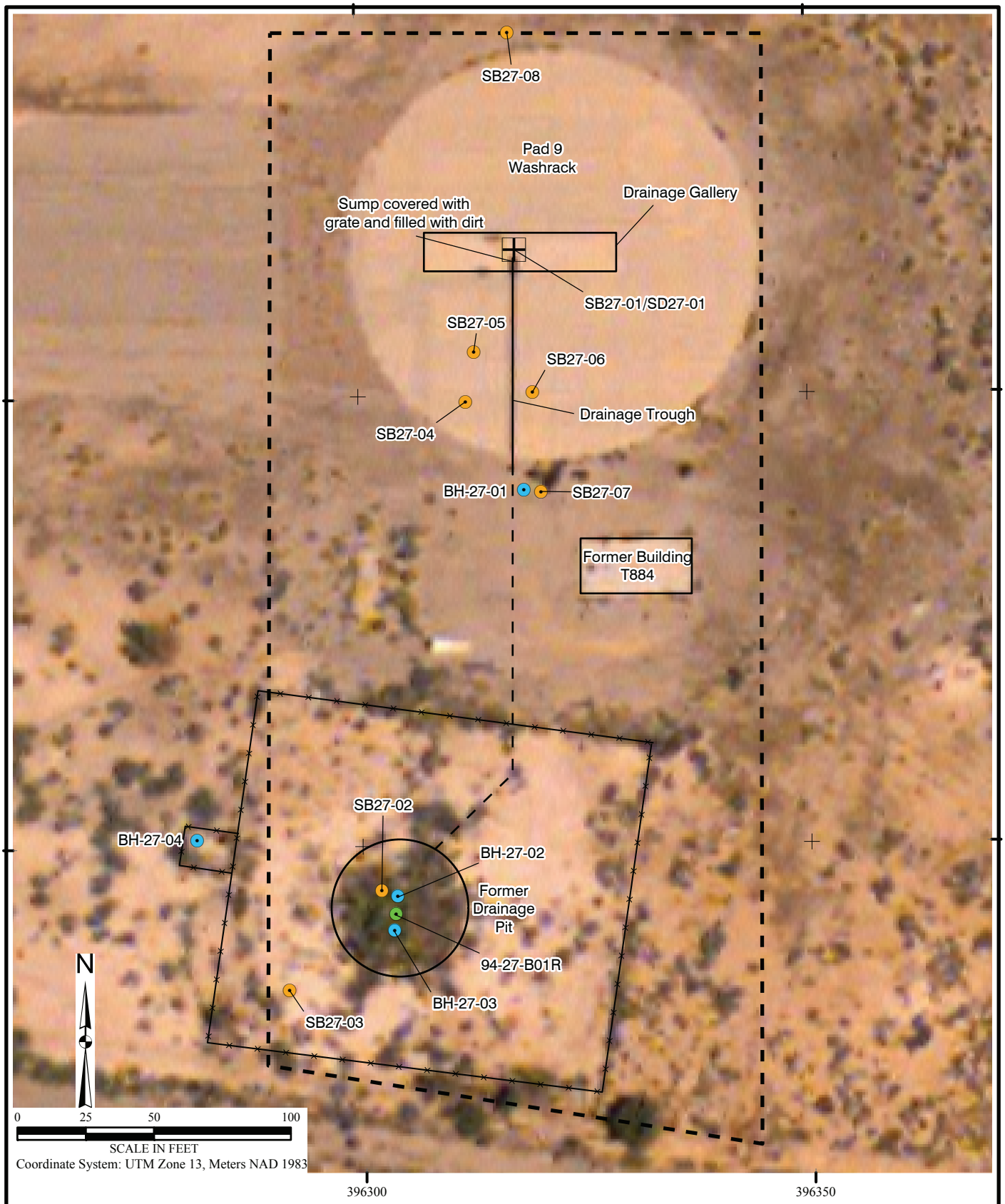
Project: AFC002-037-04-10-05
Revised: 05/18/07 PS
Map Source: Holloman AFB

Legend

- SD-27 Boundary
- Inferred Location of Discharge Pipe
- Fence

Figure 5.1
SD-27
Layout Map



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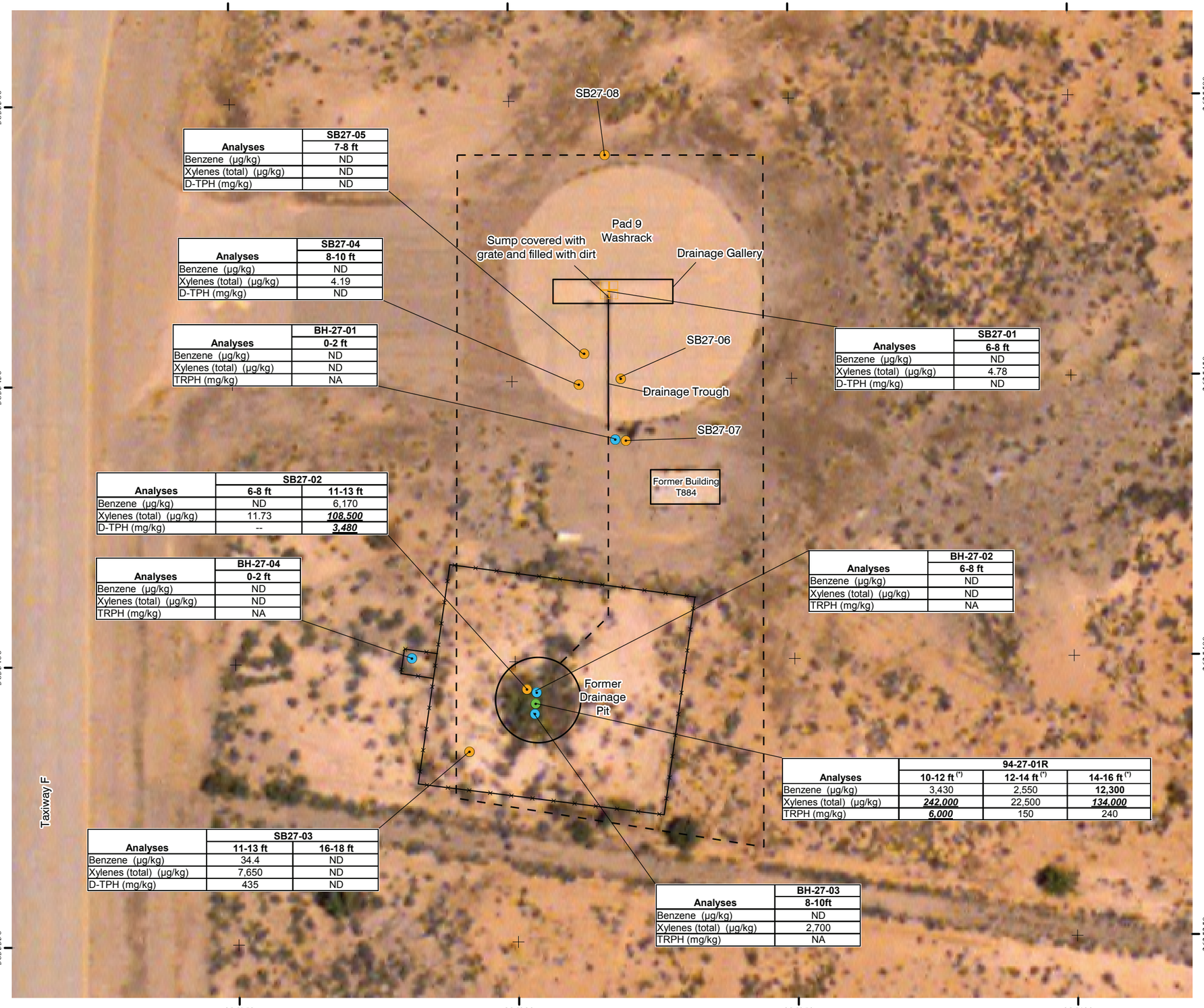
Project: AFC002-037-04-11-05
Revised: 05/18/07 PS
Map Source: Holloman AFB

Legend

- SD-27 Boundary
- Inferred Location of Discharge Pipe
- Fence
- Phase I RI (PA/SI) Soil Boring
- Phase II Soil Boring
- Supplemental RFI Soil Boring
- Supplemental RFI Sediment and Soil Boring Location

Figure 5.2
Previous and Supplemental RFI Soil and Groundwater Sample Locations

Figure 5.3
SD-27
Soil Analyte Exceedances



Analyses	SB27-05
	7-8 ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	ND
D-TPH (mg/kg)	ND

Analyses	SB27-04
	8-10 ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	4.19
D-TPH (mg/kg)	ND

Analyses	BH-27-01
	0-2 ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	ND
TRPH (mg/kg)	NA

Analyses	SB27-01
	6-8 ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	4.78
D-TPH (mg/kg)	ND

Analyses	SB27-02	
	6-8 ft	11-13 ft
Benzene (µg/kg)	ND	6,170
Xylenes (total) (µg/kg)	11.73	***108,500***
D-TPH (mg/kg)	--	***3,480***

Analyses	BH-27-04
	0-2 ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	ND
TRPH (mg/kg)	NA

Analyses	BH-27-02
	6-8 ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	ND
TRPH (mg/kg)	NA

Analyses	94-27-01R		
	10-12 ft (*)	12-14 ft (*)	14-16 ft (*)
Benzene (µg/kg)	3,430	2,550	**12,300**
Xylenes (total) (µg/kg)	***242,000***	22,500	***134,000***
TRPH (mg/kg)	***6,000***	150	240

Analyses	SB27-03	
	11-13 ft	16-18 ft
Benzene (µg/kg)	34.4	ND
Xylenes (total) (µg/kg)	7,650	ND
D-TPH (mg/kg)	435	ND

Analyses	BH-27-03
	8-10ft
Benzene (µg/kg)	ND
Xylenes (total) (µg/kg)	2,700
TRPH (mg/kg)	NA

Legend

- SD-27 Boundary
- Inferred Location of Discharge Pipe
- Fence
- Phase I RI (PA/SI) Soil Boring
- Phase II RI Soil Boring
- Supplemental RFI Soil Boring
- Supplemental RFI Soil Boring and Sediment Location

Notes:
Unmodified values indicates analyte concentration do not exceed criteria
Bolded values indicates analyte concentration exceeding NMED residential and industrial SSL
Bolded and italicized values indicates analyte concentration exceeding NMED residential and industrial SSL
Bolded, italicized, and underlined values indicate analyte concentration exceeding NMED residential, industrial, and construction worker SSIs
NA = Not analyzed
ND = Not detected
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
pCi/g = picocuies per gram
* = below water table

N

0 30 60 120
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

File X:/AFC002/Holloman_AFB/TO37/Maps/DP-30_SD-33_SS-39_SD-27_Supp_RFI SD-27_Soil_Tags.mxd
Project: AFC002-037-04-11-02
Revised: 05/29/07 PS
Map Source: Holloman AFB

Figure 5.4
SD-27
Groundwater Analyte Exceedances

Analyte	SB27-08 Jun-06
1,2-Dichloroethane (µg/L)	ND
Benzene (µg/L)	ND
Ethylbenzene (µg/L)	ND
Toluene (µg/L)	ND
Trichloroethene (µg/L)	0.17
Xylenes (Total) (µg/L)	ND
Lead (Total) (µg/L)	ND
Selenium (Filtered) (µg/L)	10

Analyte	SB27-07 Jun-06
1,2-Dichloroethane (µg/L)	ND
Benzene (µg/L)	ND
Ethylbenzene (µg/L)	ND
Toluene (µg/L)	ND
Trichloroethene (µg/L)	0.22
Xylenes (Total) (µg/L)	ND
Lead (Total) (µg/L)	**17**
Selenium (Filtered) (µg/L)	7

Analyte	SB27-02 May-06
1,2-Dichloroethane (µg/L)	ND
Benzene (µg/L)	***7,750***
Ethylbenzene (µg/L)	***1,030***
Toluene (µg/L)	***5,690***
Trichloroethene (µg/L)	**6.89**
Xylenes (Total) (µg/L)	*2,185*
Lead (Total) (µg/L)	ND
Selenium (Filtered) (µg/L)	***289***

Analyte	SB27-03 May-06
1,2-Dichloroethane (µg/L)	***52.4***
Benzene (µg/L)	***2,800***
Ethylbenzene (µg/L)	***3,080***
Toluene (µg/L)	***2,430***
Trichloroethene (µg/L)	ND
Xylenes (Total) (µg/L)	*3,320*
Lead (Total) (µg/L)	ND
Selenium (Filtered) (µg/L)	***97***

Pad 9 Washrack
Sump covered with grate and filled with dirt
Drainage Gallery
SB-27-01
SB27-01
SB27-05
SB27-06
SB27-04
Drainage Trough
BH-27-01
Former Building T884
BH-27-04
BH-27-02
Former Drainage Pit
94-27-B01R
BH-27-03
Taxiway F

3635500
3635450
3635400
3635350
396250
396300
396350
396400

Legend

- SD-27 Boundary
- Inferred Location of Discharge Pipe
- Fence
- Phase I RI (PA/SI) Soil Boring
- Phase II RI Soil Boring
- Supplemental RFI Soil Boring
- Supplemental RFI Soil Boring Sediment and Location

Notes:
Unmodified value indicates no exceedances of screening criteria
Bolded value indicate analyte concentration exceeding U.S. EPA MCL
Italicized value indicates exceedances of NMGWQ standard
Bold and italicized value indicates exceedance of U.S. EPA MCL and NMGWQ standard
NA = not analyzed
ND = not detected
R = data rejected
µg/L = microgram per liter

N

0 30 60 120
SCALE IN FEET

Coordinate System: NAD 1983 StatePlane NM Central Feet

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Project: AFC002-037-04-11-02
Revised: 05/25/07 PS
Map Source: Holloman AFB

TABLES

Table 5.1
Preliminary Assessment/Visual Inspection Soil Analytical Results
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background [1]	NMED Soil Screening Level [2]			BH-27-05	BH-27-01	BH-27-02	BH-27-03	BH-27-04
		Residential	Industrial	Construction Worker	Background 4-6	0-2	6-8	8-10	0-2
Extractable Fuel Hydrocarbons (µg/kg)									
Kerosene	NA	760,000 [2]	1,810,000 [3]	--	--	--	--	430	--
Purgeable Fuel Hydrocarbons (µg/kg)									
Ethylbenzene	NA	128,000	128,000	128,000	--	--	--	680	--
Toluene	NA	252,000	252,000	252,000	--	--	--	51	--
Xylenes (total)	NA	82,000	82,000	82,000	--	--	--	2,700	--
Radioactivity (pCi/g)									
Gross alpha	NA	--	--	--	7.35	8.95	19.29	13.5	--
Gross beta	NA	--	--	--	7.68	16.69	15.31	12.15	--
PCBs (µg/kg)									
PCB-1254	NA	1,110	8,260	4,280	--	--	--	--	200

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Table 2a (NMED, 2006a)

-- = not detected; not applicable
µg/kg = milligrams per kilogram
pCi/g = picocuries per gram
NA = not analyzed
NMED = New Mexico Environment Department
PCB = polychlorinated biphenyl

Table 5.2
Phase II Remedial Investigation Soil Analytical Results
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Analyses	Background [1]	NMED Soil Screening Level [2]			94-27-01R								
					10-12			12-14			14-16		
		Residential	Industrial	Construction Worker	Result	DL	Qual	Result	DL	Qual	Result	DL	Qual
Volatile Organic Compounds (µg/kg)													
Acetone	NA	28,100,000	100,000,000	98,500,000	<	2,360	U	4,830	2,360		21,700	2,360	
Benzene	NA	10,300	25,800	174,000	3,430	406		2,550	406		**12,300**	406	
Toluene	NA	252,000	252,000	252,000	111,000	663		20,300	663		58,500	663	
Ethylbenzene	NA	128,000	128,000	128,000	102,000	436		29,600	436		51,600	436	
Xylene (total)	NA	82,000	82,000	82,000	***242,000***	416		22,500	416		***134,000***	416	
Semivolatile Organic Compounds (µg/kg)													
Naphthalene	NA	79,500	300,000	262,000	8,800	5,100		550	5,100	J	2,100	5,100	J
2-Methylnaphthalene	NA	NP	NP	NP	7,900	170		790	170		3,200	170	
Dibenzofuran	NA	142,000	1,620,000	552,000	340	170		40	170	J	80	170	J
Di-n-butylphthalate	NA	6,110,000	68,400,000	23,300,000	30	170	J	60	170	J	<	170	U
Butyl benzyl phthalate	NA	240,000 [3]	240000 [3]	240000 [3]	40	170	BJ	<	170	U	<	170	U
Bis(2-ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000	160	170	BJ	210	170	BJ	110	170	BJ
Di-n-octyl phthalate	NA	--	--	--	<	170	U	210	170		<	170	U
Total Recoverable Petroleum Hydrocarbons - (mg/kg)													
TRPH	NA	760[4]	1,180[4]	--	***6,000***	25		150	25		240	25	

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(4) Kerosene and jet fuel NMED TPH SSL (NMED, 2006a)

< = Not detected above the detection limit
B = positive detection considered to be attributable to laboratory blank contamination
J = positive detection result considered an estimate
U = non-detect value equal to reporting limit
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
DL = detection limit
Qual = qualifier
TRPH = total recoverable petroleum hydrocarbons
NA = not analyzed
-- = not applicable
NMED = New Mexici Environment Department

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL
Bolded, *italiciced* , and underlined value indicates analyte concentration exceeds NMED residential, industrial, and construction worker SSL

Table 5.3
Analytical Summary Scheme
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Sample ID	Sample Location	Sample Depth (ft bgs)	VOCs	SVOCs	TPH	RCRA Metals	RCRA Metals (Diss)	Radionuclides	Radionuclides (Diss)	Justification
SOILS										
HGLSB27-01-0608	SB27-01	6 - 8	X	X	X	X		X		Evaluation of subsurface soils beneath concrete washrack/drainage sump
HGLSB27-02-0608	SB27-02	6 - 8	X	X	X	X		X		Evaluation of subsurface soils within the former disposal pit
HGLSB27-02-1113	SB27-02	11 - 13	X	X	X	X		X		Evaluation of subsurface soils within the former disposal pit
SBDUP03		11 - 13						X		QA/QC sample
HGLSB27-03-1113	SB27-03	11 - 13	X	X	X	X		X		Evaluation of subsurface soils in vicinity of former disposal pit
HGLSB27-03-1618	SB27-03	16 - 18	X	X	X	X		X		Evaluation of subsurface soils in vicinity of former disposal pit
SBDUP02		17 - 18	X	X	X	X				Evaluation of subsurface soils in vicinity of former disposal pit
HGLSB27-04-0810	SB27-04	8 - 10	X	X	X	X		X		Evaluation of subsurface soils beneath washrack in vicinity of former discharge pipe
HGLSB27-05-0708	SB27-05	7 - 8	X	X	X	X				Evaluation of subsurface soils beneath washrack in vicinity of former discharge pipe
SEDIMENT										
HGLSD27-01-0002	SD27-01	0 - 2	X	X	X	X		X		Drainage gallery assessment
GROUNDWATER										
HGLGW27-02-051606	GW27-02		X	X	X	X	X	X	X	Assessing groundwater quality within former disposal pit
HGLGW27-03-051606	GW27-03		X	X	X	X	X	X	X	Assessing groundwater quality downgradient of site
GWDUP01								X	X	QA/QC sample
HGLGW27-07	GW27-07		X	X	X	X	X			Assess groundwater quality downgradient of washrack
GWDUP-01			X	X	X	X	X			QA/QC sample
HGLGW27-008	GW27-08		X	X	X	X	X	X	X	Presumed upgradient groundwater sample

Notes:
VOCs = volatile organic compounds
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
RCRA = Resource Conservation and Recovery Act
Diss = dissolved
ft = feet
bgs = below ground surface
QA = quality assurance
QC = quality control

Table 5.4
Sediment Analytical Results
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Analyte	Background [1]	NMED Soil Screening Level [2]			SD27-01 16-May-2006 0.00-2.00 ft.	
		Residential	Industrial	Construction Worker	Val	Q
Volatile Organic Compounds (µg/kg)						
1,2,4-Trimethylbenzene	NA	58,000	213,000	190,000	3.68	J
Benzene	NA	10,300	25,800	174,000	5.42	J
Chloroform	NA	4,000	9,590	216,000	0.58	J
m,p-Xylene (sum of isomers)	NA	82,000 [3]	82,000 [3]	82,000 [3]	4.78	J
n-Butylbenzene	NA	62,100	62,100	62,100	2.1	J
Naphthalene	NA	79,500	300,000	262,000	57	J
o-Xylene	NA	99,500	99,500	99,500	2.28	J
p-Cymene (p-Isopropyltoluene)	NA	NA	NA	NA	1.66	J
Semi-Volatile Organic Compounds (µg/kg)						
4-Nitrophenol	NA	490,000 [4]	16,000,000 [4]	5,500,000 [4]	53	J
Acenaphthene	NA	3,730,000	33,500,000	14,100,000	124	J
Acenaphthylene	NA	--	--	--	291	
Anthracene	NA	22,000,000	100,000,000	86,000,000	2,960	
Benzo(a)anthracene	NA	6,210	23,400	212,000	2,680	
Benzo(a)pyrene	NA	621	2,340	21,200	***3,200***	
Benzo(b)fluoranthene	NA	6,210	23,400	212,000	4,100	
Benzo(g,h,i)perylene	NA	--	--	--	2,710	
Benzo(k)fluoranthene	NA	62,100	234,000	2,120,000	2,320	
bis(2-Ethylhexyl)phthalate	NA	347,000	1,370,000	4,660,000	5,490	
Chrysene	NA	615,000	2,310,000	21,200,000	3,800	
Dibenz(a,h)anthracene	NA	621	2,340	21,200	**1,250**	
Dibenzofuran	NA	142,000	1,620,000	552,000	352	
Fluoranthene	NA	2,290,000	24,400,000	8,730,000	6,670	
Indeno(1,2,3-c,d)pyrene	NA	6,210	23,400	212,000	2,020	
Phenanthrene	NA	1,830,000	20,500,000	6,990,000	470	
Pyrene	NA	2,290,000	30,900,000	9,010,000	5,880	
Other Compounds (mg/kg)						
D-TPH	NA	520 [5]	1,120 [5]	-- [5]	107	
Metals (mg/kg)						
Arsenic	6.9	3.9	17.7	85.2	3.81	
Barium	84.4	15,600	100,000	60,200	13,500	
Cadmium	1.0	39.0	564	154	21.6	
Chromium, total	24.6	210 [4]	450 [4]	500 [4]	**290**	
Lead	12.3	400	800	800	***1,900***	
Mercury	--	6.11 [6]	68.4 [6]	23.8 [6]	0.08	
Radiological Parameters (pCi/g)						
Alpha, Gross	NA	--	--	--	3.06	
Beta, Gross	NA	--	--	--	16.6	
Bismuth-214	NA	--	--	--	0.528	
Cesium-137	NA	18.3 [7]	1,530,000 [8]	--	1.01	
Lead-210	NA	0.298 [7]	1,310 [8]	--	**3.62**	
Lead-214	NA	--	--	--	0.592	
Potassium-40	NA	12.8 [7]	1,760,000 [8]	--	11	
Radium-226	NA	1.09 [7]	1,570 [8]	--	**2.88**	
Radium-228	NA	0.347 [7]	3,470 [8]	--	**0.53**	
Thallium-208	NA	--	--	--	0.148	
Thorium-228	NA	0.981 [7]	127 [8]	--	0.533	

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) m-Xylenes screening levels used as a surrogate for m,p-Xylenes
(4) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(5) Diesel fuel NMED TPH SSL obtained from Table 2a (NMED, 2006a)
(6) Methyl mercury screening criteria used as a surrogate for mercury
(7) Direct ingestion of soil generic SSL obtained from Table A.1 (U.S. EPA, 2000)
(8) Inhalation of fugitive dusts generic SSL obtained from Table A.1 (U.S. EPA, 2000)

NMED = New Mexico Environment Department
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
pCi/g = picocuries per gram
ft = feet
Val = validated result
Q = data qualifier
-- = not detected; not applicable
J = estimated positive detection
SSL = soil screening level

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL

Table 5.5
Soil Analytical Results
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Analyte	Background [1]	NMED Soil Screening Level [2]			SB27-01 16-May-2006		SB27-02 16-May-2006				SB27-03 16-May-2006				SB27-04 16-May-2006		SB27-05 18-May-2006	
					6.00-8.00 ft.		6.00-8.00 ft.		11.00-13.00 ft.		11.00-13.00 ft.				16.00-18.00 ft.		8.00-10.00 ft.		7.00-8.00 ft.	
		Residential	Industrial	Construction Worker	Val	Q	Val	Q	Val	Q	Val [3]	Q [3]	Val	Q	Val [3]	Q [3]	Val	Q	Val	Q	Val	Q
Volatile Organic Compounds (µg/kg)																				
1,2,4-Trimethylbenzene	NA	58,000	213,000	190,000	5.95	J	0.148	U	53,800		NA		5,850	J	5,950		2.67	J	4.16	J	0.0535	U
1,3,5-Trimethylbenzene (mesitylen	NA	24,800	69,200	69,200	10	U	10	U	17,000		NA		2,310	J	1,910		0.21	U	10	U	0.21	U
Benzene	NA	10,300	25,800	174,000	0.236	U	0.236	U	6,170		NA		34.4		42.8	J	0.0644	U	0.236	U	0.0644	U
Ethylbenzene	NA	128,000	128,000	128,000	10	U	10	U	61,000		NA		3,490	J	2,880		10	U	10	U	0.0376	U
Isopropylbenzene (cumene)	NA	271,000	389,000	389,000	2.35	J	2.62	J	14,200		NA		1,410		1,080		0.13	U	0.105	U	0.13	U
m,p-Xylene (sum of isomers)	NA	82,000 [4]	82,000 [4]	82,000 [4]	3.12	J	7.29	J	74,900		NA		5,170	J	5,340		0.0714	U	2.43	J	0.0714	U
Methylene chloride	NA	182,000	490,000	2,630,000	50	U	50	U	0.315	U	NA		50	U	50.6	J	50	U	50	U	50	U
n-Butylbenzene	NA	62,100	62,100	62,100	0.116	U	6.37	J	9,680		NA		1,210		932		10	U	1.83	J	0.0979	U
n-Propylbenzene	NA	62,100	62,100	62,100	10	U	10	U	21,600		NA		2,450	J	1,740		1.08	J	10	U	0.0421	U
Naphthalene	NA	79,500	300,000	262,000	14.1	J	32.6	J	11,500		NA		1,050		1,130		37.7	U	8.71	J	0.441	U
o-Xylene	NA	99,500	99,500	99,500	1.62	J	4.44	J	33,600		NA		2,480	J	2,320		0.0679	U	1.76	J	0.0679	U
p-Cymene (p-Isopropyltoluene)	NA	--	--	--	0.105	U	3.92	J	6,160		NA		1,070		730		2.6	J	1.48	J	0.0679	U
Sec-Butylbenzene	NA	60,600	60,600	60,600	30.5		10	U	7,830		NA		1,330		874		2.53	J	10	U	0.0632	U
Toluene	NA	252,000	252,000	252,000	10	U	10	U	49,900		NA		1,500		1,110		10	U	10	U	10	U
Semi-Volatile Organic Compounds (µg/kg)																				
1-Methylnaphthalene	NA	--	--	--	47.5	U	47.5	U	15,800		NA		1,420		1,580		47.5	U	47.5	U	47.5	U
2-Methylnaphthalene	NA	--	--	--	41	U	41	U	16,700		NA		1,440		1,600		41	U	41	U	41	U
Fluoranthene	NA	2,290,000	24,400,000	8,730,000	45.6	U	45.6	U	45.6	U	NA		45.6	U	45.6	U	45.6	U	45.6	U	85.3	J
Other Compounds (mg/kg)																				
G-TPH	NA	-- [5]	-- [5]	-- [5]	309		0.121	U	4,790		NA		419		282		0.121	U	0.121	U	0.121	U
D-TPH	NA	520 [5]	1,120 [5]	-- [5]	124		7.28	U	***3,480***		NA		435		288		7.28	U	7.28	U	7.28	U
Metals (mg/kg)																				
Barium	84.4	15,600	100,000	60,200	7.34		11.5		9.5		NA		60.2		49.9		38.4		11		8.84	
Chromium, total	24.6	210 [6]	450 [6]	500 [6]	1.31		47.7		5.6		NA		4.76		3.72		5.75		1.51		0.456	J
Lead	12.3	400	800	800	0.367	U	1		7.03		NA		6.26		4.46		7.8		0.886	J	0.65	U
Silver	0.73	391	5,680	1,550	0.0044	U	0.0044	U	0.0044	U	NA		0.0044	U	0.0044	U	0.0044	U	0.0044	U	0.565	
Radiological Parameters (pCi/g)																				
Beta, Gross	NA	NA	NA	--	2.1		3.97		5.11		5.72		3.66		NA		7.89		1.63	U	NA	
Bismuth-214	NA	NA	NA	--	0.129		0.351		0.371		0.351		0.251		NA		0.579		0.326		NA	
Lead-210	NA	0.298 [7]	1,310 [8]	--	**1.19**		1.25	U	**1.56**		1.22	U	1.45	U	NA		1.66	U	1.68	U	NA	
Lead-214	NA	NA	NA	--	0.201		0.364		0.341		0.491		0.362		NA		0.505		0.354		NA	
Potassium-40	NA	12.8 [7]	1,760,000 [8]	--	1.87		2.75		5.03		5.56		2.58		NA		10.6		2.2		NA	
Radium-226	NA	1.09 [7]	1,570 [8]	--	1.45	U	**2.58**		1.68	U	1.41	U	1.53	U	NA		1.98	U	2.48	U	NA	
Radium-228	NA	0.347 [7]	3,470 [8]	--	0.318	U	0.408	U	0.241	U	**0.353**		0.425	U	NA		0.332	U	0.404	U	NA	
Thallium-208	NA	NA	NA	--	0.055		0.072	U	0.084		0.115		0.108	U	NA		0.152		0.121	U	NA	
Thorium-228	NA	0.981 [7]	127 [8]	--	0.097	U	0.126	U	0.27		0.33		0.194		NA		0.48		0.184		NA	
Uranium-235	NA	48.7 [7]	1,800 [8]	--	0.344	U	0.174		0.102	U	0.401	U	0.418	U	NA		0.121	U	0.77	U	NA	

Notes:
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) Obtained from Table A-1 (NMED, 2006c)
(3) duplicate
(4) m-Xylenes screening levels used as a surrogate for m,p-Xylenes
(5) Obtained from Table 2a (NMED, 2006a)
(6) Obtained from Region 6 Human Health Medium Specific Screening Levels (EPA Reg VI, 2007)
(7) Direct ingestion of soil generic SSL obtained from Table A.1 ()
(8) Inhalation of fugitive dusts generic SSL obtained from Table A.1 ()

NMED = New Mexico Environment Department
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
pCi/g = picocuries per gram
ft = feet
Val = validated result
Q = data qualifier
NA = not analyzed
J = estimated positive detection
SSL = soil screening level
-- = not applicable

Bolded value indicates analyte concentration exceeds NMED residential SSL
Bolded and *italiciced* value indicates analyte concentration exceeds NMED residential and industrial SSL

Table 5.6
Groundwater Analytical Results
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Analyte	Background [1]	U.S. EPA MCL [2]	NMGWQ Standard [2][3]	GW27-02 16-May-2006 Val	Q	GW27-02 20-May-2006 Val	Q	GW27-03 16-May-2006 Val	Q	GW27-03 16-May-2006 Val [5]	Q [5]	GW27-07 16-Jun-2006 Val	Q	GW27-08 [4] 16-Jun-2006 Val	Q
Volatile Organic Compounds (µg/L)															
1,2-Dichloroethane	NA	5	10	0.0557	U	NA		***52.4***	***J***	0.0557	U	0.0557	U	0.0557	U
1,2,4-Trimethylbenzene	NA	--	--	412		NA		940		1,460		1	U	1	U
1,3,5-Trimethylbenzene (mesitylen	NA	--	--	118		NA		266		427		1	U	1	U
Acetone	NA	--	--	0.854	U	NA		0.854	U	850	J	0.854	U	0.854	U
Benzene	NA	5	10	***7,750***		NA		***2,360***		***2,800***		1.57	U	1	U
Ethylbenzene	NA	700	750	***1,030***		NA		***2,330***		***3,080***		1	U	1	U
Isopropylbenzene (cumene)	NA	--	--	82	J	NA		230		374		1	U	1	U
m,p-Xylene (sum of isomers)	NA	10,000 [6]	620 [6]	*1,430*		NA		*1,460*		*1,930*		1	U	1	U
n-Butylbenzene	NA	--	--	33.2	J	NA		44.8	J	95.6	J	1	U	0.04	U
n-Propylbenzene	NA	--	--	110		NA		264		443		1	U	1	U
Naphthalene	NA	--	--	133	J	NA		163	J	232	J	0.4	U	0.4	U
o-Xylene	NA	10,000 [4]	620 [4]	*755*		NA		*1,020*		*1,390*		1	U	1	U
p-Cymene (p-Isopropyltoluene)	NA	--	--	20.2	J	NA		39.8	J	75.6	J	0.0513	U	1	U
Sec-Butylbenzene	NA	--	--	28	J	NA		51.6	J	105		1	U	1	U
Toluene	NA	1,000	750	***5,690***		NA		***1,940***		***2,430***		1.14	U	1	U
Trichloroethene (TCE)	NA	5	100	**6.89**	***J***	NA		0.0495	U	0.0495	U	*0.22*	*J*	0.17	J
Semi-Volatile Organic Compounds (µg/L)															
1-Methylnaphthalene	NA	--	--	21.1		NA		23.2		29.8		0.5	U	0.5	U
2-Methylnaphthalene	NA	--	--	15.2		NA		15.3		21.1		0.4	U	0.4	U
2,4-Dimethylphenol	NA	--	--	15.2		NA		0.9	U	0.9	U	0.9	U	0.9	U
Acetophenone	NA	--	--	20		NA		17.8		22.8		0.6	U	0.6	U
Benzoic acid	NA	--	--	106		NA		0.7	U	0.7	U	0.7	U	0.7	U
Cresols, m & p	NA	--	--	53.8		NA		2.4	J	0.4	U	0.4	U	0.4	U
Diethyl phthalate	NA	--	--	10.9		NA		0.8	U	0.8	U	0.8	U	0.8	U
Total Cresols	NA	--	--	13.3		NA		0.6	U	0.6	U	0.6	U	0.6	U
Other Compounds (mg/L)															
G-TPH	NA	--	--	56.4		NA		24.2		23.6		0.0272	U	0.0272	U
D-TPH	NA	--	1.72 [7]	*4.17*	J	NA		*29.1*		*60.2*		0.106	U	0.106	U
Metals (µg/L)															
Barium	929.3	2,000	1,000	40		NA		22		36		345		52	
Chromium, total	234	100	50	*3*	*J*	NA		1.4	U	1.4	U	48		1.4	U
Lead	19.9	15	50	1.6	U	NA		1.6	U	1.6	U	**17**		1.6	U
Silver	7.3	--	50	0.2	U	NA		11		14		13		11	
Filtered Metals (µg/L)															
Barium (Filtered)	85.2	2,000	1,000	NA		17		22		23		*39*		29	
Selenium (Filtered)	85.3	50	50	NA		***289***		***97***		***81***		7	J	10	
Silver (Filtered)	6.7	--	50	NA		0.2	U	0.2	U	0.2	U	*11*		0.2	U
Radiological Parameters (pCi/L)															
Beta, Gross	NA	--	--	33.7	U	NA		37.4	U	33.6	U	44.5	U	61.5	
Bismuth-214	NA	--	--	12.2		NA		12.5	U	10.6		25.5		15.6	
Lead-214	NA	--	--	10	U	NA		9.51	U	9.45	U	17		12.4	
Radium-223	NA	--	--	6.35		NA		6.9		6.69		5.79	U	6.28	
Radium-228	NA	5 [8]	30 [9]	**14.1**	**U**	NA		**13.3**	**U**	**16.1**		**14.9**		-0.809	
Thallium-208	NA	--	--	5.95	U	NA		5.39	U	6.45	U	6.22		5.39	
Uranium-235	NA	--	--	18.1	U	NA		19.3		18.4		17.9	U	15	
Filtered Radiological Parameters (pCi/L)															
Bismuth-214	NA	--	--	12.2		NA		12.537	U	15.647	U	NA		NA	
Radium-223	NA	--	--	9.68		NA		6.903		6.694	U	NA		NA	
Radium-228	NA	5 [8]	30 [9]	**14.092**	U	NA		**13.338**	U	**15.392**		NA		NA	
Uranium-235	NA	--	--	18.084	U	NA		22.630		18.414	U	NA		NA	

Notes
(1) Radian, 1992 and 1993. Background provided for reference only.
(2) U.S. EPA MCLs and NMGWQ standards are provided for refernce only in cases where TDS exceeds 10,000 mg/L
(3) NMAC 20.6.2.3103
(4) Site-specific background groundwater sample
(2) NMAC 20.6.2.3103
(5) Duplicate
(6) Total xylenes EPA MCL and NWGWQ sceening level used as surrogate for m,p-Xylene
(7) Obtained from Table 2a (NMED, 2006a)
(8) Radium-226 and Radium-228 combined
(9) Combined Radium-226&Radium-228 NMGWQ standard used as surrogate for Radium-228

µg/L = micrograms per liter
mg/L = milligrams per liter
pCi/L = picocuries per liter
TDS = total dissolved solids
Val = analytical result
Q = data qualifier
J = positive detection, value between RL and the MDL
U = non-detect result
NA = not analyzed

MDL = method detection limit
RL = reporting limit
G-TPH = gasoline-range total petroleum hydrocarbons
D-TPH = diesel-range total petroleum hydrocarbons
EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
NMAC = New Mexico Administrative Code
-- = not applicable

Bolded value indicates analyte concentration exceeds U.S. EPA MCL
Italicized value indicates analyte concentration exceeds NMGWQ standard
Bolded and *italicized* value indicates analyte concentration exceeds U.S. EPA MCL and NMGWQ standard

Table 5.7
SD-27 Supplemental RFI Sample Delivery Group Summary
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

Sample Identification:		Sample Delivery Group						
		6051928	6052223	6052304	6061925	ARS-06-01000-GAGB	ARS-06-01001-GAGB	ARS-06-01184
Soil	HGLSB27-01-0608	X				X	X	
	HGLSB27-02-0608	X				X	X	
	SBDUP03	X				X	X	
	HGLSB27-02-1113	X				X	X	
	HGLSB27-03-1113	X				X	X	
	SBDUP02	X						
	HGLSB27-03-1618	X				X	X	
	HGLSB27-04-0810	X				X	X	
	HGLSB27-05-0708		X					
Sediment	HGLSD27-01-0002	X				X	X	
Groundwater	HGLGW27-02-051606	X				X	X	
	HGLGW27-02-052006			X				
	GWDUP01	X				X		
	HGLGW27-03-051606	X				X	X	
	HGLGW27-07				X			X
	HGLGW27-008				X			X

Table 5.8
SD-27 Summary of Analyte Exceedances by Media
SD-27 (SWMU 141) – Pad 9 Washrack Area
Supplemental RFI
Holloman AFB, New Mexico

MEDIA	Soil and Terrestrial Sediment			Groundwater	
	Residential SSL	Industrial SSL	Construction Worker SSL	U.S. EPA MCLs[1]	NMGWQ[1]
Sediment[2]	Benzo(a)pyrene, Dibenzo(a,h)anthracene, Chromium (total), Lead, Lead-210[3], Radium-226[3], Radium-228[3]	Benzo(a)pyrene, Lead	Lead	--	--
Soil	Benzene, Total-Xylenes, Kerosene/Jet Fuel, D-TPH, Lead-210[3], Radium-226[3], Radium-228[3]	Total-Xylenes, Kerosene/Jet Fuel, D-TPH	Total-Xylenes	--	--
Groundwater	--	--	--	1,2-Dichloroethane, Benzene, Ethylbenzene, Toluene, Trichloroethene, Lead (total), selenium (dissolved), Radium-228 (total and dissolved)	1,2-Dichloroethane, Benzene, Ethylbenzene, Toluene, Total Xylenes, D-TPH, selenium (dissolved)

Notes:
(1) U.S. EPA MCLs and NMGWQ standards are provided for refernce only in cases where TDS exceeds 10,000 mg/L
(2) Sediment within former drainage sump was removed from Holloman AFB on September 12, 2006 and disposed as non-hazardous waste
(3) Exceeds the generic SSL for direct ingestion of soil from Table A.1 (U.S. EPA, 2000)

SSL = soil screening level
U.S. EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMGWQ = New Mexico Groundwater Quality
PCB = polychlorinated biphenyl
TCE = trichloroethene
D-TPH = diesel-range total petroleum hydrocarbons
-- = not applicable

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APPENDIX A

PHOTOGRAPHS

DP-30/SD-33

PHOTOGRAPHS

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

DP-30/SD-33 (SWMU 113) - Grease Trap/Cooking Grease Disposal Pits

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Brett Brodersen

Date:
May-06

Direction:
North-northeast

Photograph: DP30SD33-01

Description:
Surface expression of a NNE trending linear depression at DP-30

Photographer:
Sarah Gillette

Date:
June-06

Direction:
South

Photograph: DP30SS33-02

Description:
View of DPT soil sampling at DP-30 within NNW trending linear depression

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

DP-30/SD-33 (SWMU 113) - Grease Trap/Cooking Grease Disposal Pits

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Brett Brodersen

Date:
May-06

Direction:
West

Photograph: DP30SD33-03

Description:
View of the area surrounding DP-30 and SD-33

Photographer:
Sarah Gillette

Date:
May-06

Direction:
South

Photograph: DP30SS33-04

Description:
Soil berm along northern edge of SD-33

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

DP-30/SD-33 (SWMU 113) - Grease Trap/Cooking Grease Disposal Pits

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Sarah Gillette

Date:
June-06

Direction:
Northwest

Photograph: DP30SD33-05

Description:
View of a NNW trending linear depression at DP-30

Photographer:
Sarah Gillette

Date:
June-06

Direction:
West

Photograph: DP30SD33-06

Description:
Soil cuttings from SB33-04 (surface to 8 feet bgs)

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

DP-30/SD-33 (SWMU 113) - Grease Trap/Cooking Grease Disposal Pits

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Sarah Gillette

Date:
June-06

Direction:
Southeast

Photograph: DP30SD33-07

Description:
View of a SSE trending linear depression at SD-33 (pin flags identify soil boring locations)

Photographer:
Sarah Gillette

Date:
June-06

Direction:

Photograph: DP30SD33-08

Description:
Installation drilling of monitoring well MW-30/33-05

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

DP-30/SD-33 (SWMU 113) - Grease Trap/Cooking Grease Disposal Pits

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Sarah Gillette

Date:
June-06

Direction:
Southeast

Photograph: DP30SD33-09

Description:
Surface completion of monitoring well MW-30/33-05

Photographer:
Sarah Gillette

Date:
July-06

Direction:

Photograph: DP30SD33-10

Description:
Groundwater sampling at DP-30/SD-33

SS-39

PHOTOGRAPHS

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

SS-39 (SWMUs 165, 177, 179, AND 181) - MISSILE FUEL SPILL AREA

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Sarah Gillette

Date:
June-06

Direction:
South-southeast

Photograph: SS39-01

Description:
Surface completion of monitoring well MW39-05

Photographer:
Sarah Gillette

Date:
September-06

Direction:
South-southeast

Photograph: SS39-02

Description:
View of the Lost River drainage basin when flooded (viewed from MW39-05)

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

SS-39 (SWMUs 165, 177, 179, AND 181) - MISSILE FUEL SPILL AREA

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Sarah Gillette

Date:
June-06

Direction:
South

Photograph: SS39-03

Description:
Well development of new monitoring wells MW39-06 (foreground) and MW39-06D (background)

Photographer:
Sarah Gillette

Date:
September-06

Direction:
South

Photograph: SS39-04

Description:
View of the Lost River drainage basin when flooded (viewed from MW39-06 and MW39-06D)

HGL, Inc.

Photo Record - Supplemental RCRA Facility Investigation

SS-39 (SWMUs 165, 177, 179, AND 181) - MISSILE FUEL SPILL AREA

SITE LOCATION:
Holloman AFB, Alamogordo, NM

PROJECT:
AFC002-037

CLIENT: AFCEE

Photographer:
Kim Evers

Date:
July-06

Direction:
Northeast

Photograph: SS39-05

Description:
Groundwater sampling pre-pack well MW39-08 located within the Lost River drainage basin, due south of MW39-06 and MW39-06D

Photographer:
Sarah Gillette

Date:
September-06

Direction:
South

Photograph: SS39-06

Description:
View of the Lost River drainage basin when flooded

APPENDIX B

BORING LOGS

DP-30/SD-33

SUPPLEMENTAL RFI BORING LOGS

HydroGeoLogic Inc.
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Herndon VA 20170
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Fax: 703-471-4180

BORING NUMBER SB30-01

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES Outside of waste, S. East side of DP-30 **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1		No waste	SM		Medium brown, fine silty SAND, dry	0.0
2						0.0
					2.0	
3			SM		Grayish-brown, silty SAND, some white precipitate	0.0
4						0.0
5						0.0
6						0.0
7						0.0
					7.0	
8			SM		Grayish-brown, silty SAND, hard	0.0
					7.4	
9	HGLSB30-01-0809		SM		Medium reddish-brown, fine silty SAND	0.0
					9.0	
10			SM		Reddish-brown with white, black, and red precipitate-crystalline	0.0
					10.0	
					Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-02

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** —

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					Medium brown, silty SAND	0.6
1		No waste	SM			0.6
2					2.0	0.6
3					Layered silty SAND with clay	
4	HGLSB30-02					0.0
5			SM		Some white precipitate	0.0
6					Medium brown with white crystalline, red and some black precipitate	0.0
7						0.0
8					8.0	0.0
9			SM		Medium brown, layered silty SAND with clay	0.0
10					10.0	0.0
					Bottom of hole at 10.0 feet.	

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BORING NUMBER SB30-03

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Medium brown silty SAND, medium grain	0.0
				1.0	
2		SM		Silty SAND with clay, layered, roots & root staining	0.0
				2.0	
3	HGLSB30-03-0203	SM		Grayish light brown, silty SAND, with some white precipitate, dry	0.0
4				Light reddish-brown with white precipitate, crumbly, dry	0.0
5					0.0
				5.0	
				Bottom of hole at 5.0 feet.	0.0

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BORING NUMBER SB30-04

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown, silty SAND, layers of silty sand with clay	0.0
2				1.5 Whitish light brown, layered silty SAND with clay	0.0
3	HGLSB30-04-0204	SM		White precipitate	0.0
4				4.0	
5		CL		Reddish-brown silty CLAY with white precipitate	0.0
				5.0 Bottom of hole at 5.0 feet.	0.0

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BORING NUMBER SB30-05

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Medium to light brown, fine grain silty SAND with roots	0.0
				1.0	
2		SM		Grayish to very light brown, silty SAND with some clay	0.0
				2.5	0.0
3		SM		Light reddish-brown, silty SAND with some crystalline deposits	0.0
4					0.0
5				5.0	0.0
6		SM		Reddish-brown, silty SAND, fine grain	0.0
7				7.0	
8	HGLSB30-05-0709	SM		Fine grain silty SAND with clay, dry, no odor	0.0
9				9.0	
10		SM		Reddish-brown, silty SAND with red, black, and white crystalline precipitate	0.0
				10.0	0.0
				Bottom of hole at 10.0 feet.	

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BORING NUMBER SB30-06

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown, silty SAND, very dry, roots and root staining	0.0
2					0.0
				2.0	
3		SM		Light gray, silty SAND	0.0
				3.0	
4		SM		Whitish-gray, silty SAND with clay	0.0
				4.0	
5		SM		Reddish-brown silty SAND with white and brown precipitate	0.0
6					0.0
7					0.0
				7.0	
8		SM		Reddish-brown, silty SAND, hard, with crystalline precipitate	0.0
9	HGLSB30-06-0609				0.0
10					0.0
				10.0	
				Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-07

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION ___ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0		SM		Brown silty SAND, dry	0.0
0.5					
1		SM		Brown silty SAND with white precipitate	0.0
2					0.0
3					
3.0					
4	HGL9835-07-0304	SM		Light grayish-brownish yellow, silty SAND with clay	0.0
4.5					
5		SM		Light reddish-brown, silty SAND with white precipitate (web-like)	0.0
6					0.0
6.5					
7		ML		Light brown, sandy SILT, dry	0.0
7.5					
8		ML		Brown, sandy SILT	0.0
8.0					
9		SM		Light brown, silty SAND, medium to fine grain	0.0
9.5					
10		SM		Medium brown with white precipitate	0.0
10.0					
				Bottom of hole at 10.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-08

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES S-central area outside of waste
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
		SM		Medium brown, fine grain silty SAND, dry	0.0
1					0.0
2				White precipitate in soil fractures	0.0
				2.5	
3		SM		Grayish to light brown, medium grain silty SAND, dry	0.0
4				4.0	0.0
5		SM		Medium brown, silty SAND with white crystalline precipitate	0.0
6					0.0
7					0.0
				7.4	
8		SM		Fine grain to very fine grain silty SAND	0.0
9	HGLSB30-08-0809				0.0
				9.5	
10		SM		Light reddish-brown silty SAND with red, white, and black crystalline precipitate	0.0
				10.0	
				Bottom of hole at 10.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-09

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Located within low conductivity anomaly - no waste observed
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
			SM		Medium brown silty SAND	0.0
					0.5	
1			SM		Light reddish-brown silty SAND, medium grain	
					1.0	0.0
			SM		Light brown silty SAND	
2		80% Recovery			2.0	0.0
			SM		Very light gray silty SAND, fine to medium grain	
3						0.0
4						0.0
					4.5	
5			SM		Light reddish-brown, silty SAND, hard	
					5.0	0.0
					Bottom of hole at 5.0 feet.	

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BORING NUMBER SB30-10

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 COMPLETED 5/19/06
GROUND ELEVATION ____ HOLE SIZE 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette CHECKED BY B.T. Brodersen
AT END OF DRILLING ---
NOTES Located NE within low conductivity anomaly - no waste observed
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1		No trench, no visible voids	SM		Medium brown silty SAND	0.0
					1.0	
2			SM		Reddish-brown silty SAND, roots and root staining	0.0
					2.0	
3			SM		Medium light brown, silty SAND	0.0
					3.0	
4			SM		Light grayish-brown, silty SAND	0.0
					4.0	
5			SM		Reddish-brown with white precipitate	0.0
					5.0	
					Bottom of hole at 5.0 feet.	0.0

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BORING NUMBER SB30-11

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1	HGL393011-0309	SM		Medium brown, silty SAND, fine grain, dry	0.0
1.0					
		SM		Light brown, silty SAND	0.0
1.5					
2		SM		Medium reddish-brown silty SAND, fine to medium grain	0.0
3					0.0
3.4					
4		SM		Very dark brown soil staining, silty SAND, dry, strong sweet odor, plastic bags	0.0
5					0.0
6				Plastic bags	
				Changes to black soil	0.0
7					
7.0					
8		SM		Dark gray silty SAND	0.0
8.0					
9		SM		Very dark brown silty SAND, sweet odor	0.0
10					0.0
10.0					
				Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-12

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Medium brown silty SAND with gray pebbles, roots and root staining	0.0
2					0.0
3				3.0	0.0
4	HGLSB3012-0306	SM		Dark brown, silty SAND - waste material	0.0
5					0.0
6				6.0	0.0
7		SM		Reddish-brown silty SAND 7.0	0.0
8	HGLSB30-12-0709	SM		Light brown silty SAND, fine grain	0.0
9					0.0
10				10.0	0.0
				Bottom of hole at 10.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-13

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Medium brown, silty SAND, hard, dry, roots and some root staining	0.0
				1.0	
2				VOID space within former trench	0.0
				2.0	
3		SM		Light yellow/reddish-brown, fine grain silty SAND, pieces of plastic	0.0
				3.0	
4		SM		Very dark brown silty SAND, sweet odor	0.0
5				Iron oxides in soil fractures	0.0
6	HGLSB3013-0507				25.7
7					16.4
8					7.4
9					2.1
				9.0	
10		SM		Light reddish-brown silty SAND, dry	1.2
11					

(Continued Next Page)

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BORING NUMBER SB30-13

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					
12	HGLSB3013-1012	SM		Light reddish-brown silty SAND, dry *(continued)*	0.0
				12.0 Bottom of hole at 12.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-14

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Southern end of low cond. area - no waste observed
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0		SM		Medium brown, fine silty SAND, dry	0.0
0.5				Striated medium brown silty SAND with white precipitate in soil fractures	
1					0.0
2					0.0
3					0.0
3.0					
		SM		Grayish light brown, medium grain silty SAND, dry	0.0
4					
4.0					
		SM		Light reddish-brown silty SAND, with black, white, and red precipitate, hard	0.0
5					0.0
6					0.0
6.5					
		SM		Medium grain silty SAND with some white precipitate	0.0
7					0.0
8					0.0
9					0.0
9.0					
		SM		Reddish-brown silty SAND with black, white, and red crystalline precipitate	0.0
10					
10.0					
				Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1_DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-15

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/19/06 **COMPLETED** 5/19/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES New boring East of SB30-14; no waste observed
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
		SM		Light brown silty SAND, fine grain, dry	0.0
1					0.0
				1.5	
		SM		Medium brown silty SAND with some white precipitate	
2					0.0
				2.5	
		SM		Grayish light brown silty SAND, hard	
3					0.0
4					0.0
5					0.0
6				6.0	
		SM		Light gray (greenish) silty SAND	0.0
7					0.0
				7.5	
		SM		1" layer of light brown silty SAND surrounded by layer of oxidized soil; red and brown lines at 7.5' and 8'.	
8				8.0	0.0
		SM		Medium brown silty SAND, dry, hard	
9					0.0
10				10.0	
				Bottom of hole at 10.0 feet.	0.0

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BORING NUMBER SB30-16

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/19/06 **COMPLETED** 5/19/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES Waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1		Did not sample waste: waste was taken from SB11	SP		Medium brown silty SAND, medium grain, dry, poorly sorted	0.0
					1.0	
2			SP		Medium brown silty SAND with white precipitate	0.0
3						0.0
					3.0	
4			SM		Waste material - very dark brown, silty SAND, sweet odor, plastic pieces	0.0
5						0.0
6						0.0
7						0.0
					7.0	
8			SM		Gray silty SAND, hard, dry	0.3
					8.0	
9			SM		Waste material - very dark brown silty SAND, plastic pieces	1.2
					9.0	
10	HGLSB3016-0910		SM		Light grayish-brown silty SAND, hard	2.5
					10.0	
					Bottom of hole at 10.0 feet.	0.4

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-17

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/20/06 **COMPLETED** 5/20/06
GROUND ELEVATION ___ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1		20% Recovery from 2-3' bgs	SM		Medium brown silty SAND, dry, roots and root staining	0.0
2						0.0
3					2 ft. VOID space; near 2 trenches	0.0
4			SM		Very light gray silty SAND, dry, with some clay	0.0
5			SM		Medium brown silty SAND with some crystaline precipitate, more sandy than native	0.0
6						
7	HGLSB3017-0607		SM		Very dark brown/black silty SAND, pieces of plastic sheets, sweet odor (low odor)	0.0
8			SM		Light gray silty SAND, hard, white precipitate	0.0
9	HGLSB3017-0809					0.0
10						0.0
					Bottom of hole at 10.0 feet.	

1.5 / 3.5 / 4.5 / 6.0 / 7.0 / 10.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-18

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/20/06 **COMPLETED** 5/20/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Medium brown silty SAND with roots	0.0
				1.0	
				VOID space in former trench	0.0
2					0.0
3					0.0
4					0.0
5				4.5	
		SM		Very dark brown silty SAND with clay, sweet odor, pieces of plastic, pieces of metal shavings	
6	HGLSB30I8-0506			6.0	0.0
7		SM		Reddish-brown silty SAND, hard, with white precipitate	0.0
8	HGLSB30I8-0709				0.0
9					
10				10.0	0.0
				Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-19

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/20/06 **COMPLETED** 5/20/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES Waste encountered; Midpoint of trench running SW & NE, it is roughly 50 FT FROM SB30-4 **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
			SM		Medium brown silty SAND, medium to fine grain, dry	0.0
					0.5	
1					Grayish to very light brown silty SAND with some clay	0.0
2		50% Recovery from .5-3' bgs	SM			0.0
3					3.0	0.0
					Light reddish-brown silty SAND with some crystalline deposit	
4			SM			0.0
5					5.0	0.0
					Bottom of hole at 5.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB30-20

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/20/06 **COMPLETED** 5/20/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING —
NOTES Waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1		40% Recovery from 0-7' bgs	SM		Very fine grain silty SAND	0.0
2						0.0
3			CL		Clay deposits	0.0
4						0.0
5			SM		Grayish-brown silty SAND with some clay, roots and root staining	0.0
6						0.0
7			SM		Brown silty SAND with some clay and some iron oxide staining	0.0
8	HGLSB30-20-0708		SM		Dark brown silty SAND, soil staining, sweet odor, pieces of plastic - look like coffee stirrers	0.0
9	HGLSB3020-0909		SM		Grayish light brown silty SAND with white precipitate	0.0
					Bottom of hole at 9.0 feet.	0.0

2.0 4.0 5.5 7.0 8.0 9.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-01

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 5/18/06 **COMPLETED** 5/18/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown silty SAND, medium to fine grain, Roots and root staining top 3"	0.0
				1.0	
2		SM		Medium light brown silty SAND, dry	0.0
3					0.0
4					0.0
				4.0	
5		SM		Light reddish brown, silty SAND, medium grain	0.0
6					0.0
7					0.0
8					0.0
				7.5	
9	HGLSB33-01-0809	SM		Medium brown silty SAND, very fine grain	0.0
10					0.0
				9.5	
		SM		Reddish-brown, silty SAND with black, red, and white crystalline precipitate	0.0
				10.0	
				Bottom of hole at 10.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-02

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/18/06 **COMPLETED** 5/18/06
GROUND ELEVATION ___ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Medium brown silty SAND with white precipitate in soil fractures	0.0
				1.0	
2		ML		Medium grain sandy SILT wth hard nodules	0.0
				2.5	
3		SM		Medium brown silty SAND with white precipitate in soil fractures	0.0
4					0.0
5				5.0	0.0
6		SM		Medium brown, very fine silty SAND	0.0
7				7.0	
		SM		7.3 3" layer of light reddish brown silty SAND	0.0
8		SM		Light brown silty SAND	
9	HGLSB3302-0609				0.0
10				10.0	0.0
11		SM		Medium brown silty SAND	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-02

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11		SM		Medium brown silty SAND *(continued)*	0.0
				11.5	
12		SM		Light brown silty SAND, dry	0.0
13				13.0	0.0
14		SM		Reddish-brown silty SAND with red, white, and black crystalline precipitate	0.0
				15.0	
				Bottom of hole at 14.0 feet.	

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BORING NUMBER SB33-03

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/18/06 **COMPLETED** 5/18/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
		SM		Light brown silty SAND, roots and root staining	0.0
				0.5 Very light brown silty SAND, medium grain	
1					0.0
2					0.0
3		SM			0.0
4					0.0
				4.0 Brown silty SAND, dry	0.0
5					0.0
6					0.0
7		SM			0.0
8					
				7.5 Light brown, silty SAND, fine	
9	HGLSB33-03-0809	SM			0.0
				9.0 Reddish-brown silty SAND, with red, black, and white precipitate	0.0
10		SM		10.0	
				Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-04

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		ML		Very dry sandy SILT with hard nodules 1/2" across	0.0
2		ML		Roots and brown root-staining from 1-2 ft.	0.0
3		SM		2.0 Light brown silty SAND	0.0
4		SM			0.0
5		SM		4.5 Medium brown, slightly moist	0.0
6		SW		5.5 Grayish-greenish-light brown, very fine SAND, well-sorted	0.0
7		SW			0.0
8		SW			0.0
9		SW		8.5 Light brown very fine SAND with calcite deposits, bottom 4" reddish brown with large white crystalline deposits	0.0
10		SW		10.0	0.0
11		SM		Light brown silty SAND, very hard, dry, white precipitate in soil fractures	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-04

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					
12		SM		Light brown silty SAND, very hard, dry, white precipitate in soil fractures *(continued)*	0.0
				12.0 Reddish-brown silty SAND, somewhat moist	0.0
13		SM		13.0 Light brown silty SAND	0.0
14		SM		14.0 Medium brown silty SAND with white precipitate in soil fractures	0.0
15		SM		14.8 15.0 greenish-gray caliche layer	0.0
				Medium brown with white precipitate in soil fractures	
16		SM		15.5 Reddish-brown with caliche layers deposited	0.0
17					0.0
18				18.0 Increasing moisture with depth silty CLAY with white deposits	0.0
19		CL			0.0
20		CL		Drillers filled hole with bentonite so they will macro down to 24' again	0.0
21				20.5 Reddish-brown silty CLAY	0.0
22		CL			0.0
23		CL		Light brown silt CLAY, saturated, water table encountered at 24.0' bgs	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-04

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
24		CL		Light brown silt CLAY, saturated, water table encountered at 24.0' bgs *(continued)*	0.0
				24.0 Bottom of hole at 24.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-05

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown, very fine SAND, large gravel	0.0
				1.0	
2		SM		Grayish light brown, silty SAND, hard, with some hard nodules	0.0
3					0.0
4					0.0
				4.0	
5		SM		Light reddish brown silty SAND, dry	0.0
6					0.0
7					0.0
				7.0	
8		SM		LIght brown, silty SAND, dry	0.0
9					0.0
				9.0	
10		SM		Light brown silty SAND with white, brown, black, and gray precipitate	0.0
				10.0	
11		CL		Brown silty CLAY, dry	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-05

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					
		CL		Brown silty CLAY, dry *(continued)*	0.0
12				12.0	
				boring caved in due to unconsolidated sand near surface Bottom of hole at 12.0 feet.	0.0

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BORING NUMBER SB33-06

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING —
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0		SM		Top 6" dry silty SAND with small gravel pieces	0.0
0.5					
1		SM		Brown silty SAND, medium grain	0.0
2				2.0	0.0
		SM		Light brown silty SAND	
3					0.0
3.5					
4		SM		Meddium reddish-brown silty SAND	
4.0					0.0
5		SM		Light brown silty SAND	
5.0					0.0
6		SM		Medium brown silty SAND with black, red, and white precipitate	
6.0					0.0
7		SM		Medium brown, very fine SAND	0.0
8					0.0
9					0.0
10				10.0	0.0
				Bottom of hole at 10.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-07

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES 10 ft. East of SB33-04; waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown, silty SAND, loose	0.0
				1.0	
2		SM		Medium brown silty SAND with large hard pebbles 2" diameter	0.0
				2.0	
3	HGLSB33-07-0203			Blackish-brown staining, sweet odor, fill, hard	0.0
				3.5	
4				Light brown, fill, sandy, dry	0.0
				4.0	
5	HGLSB33-07-0405	SM		Medium brown silty SAND, with crystalline deposits, white, black, red precipitate	0.0
				5.0	
				Bottom of hole at 5.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-08

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING —
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING —
NOTES 25 ft. NE of SB33-03; waste encountered
AFTER DRILLING —

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown, very fine SAND, roots and root-staining	0.0
2					0.0
2.5					
3		SM		Reddish-brown silty SAND	
3.0					
4		SM		Dark brown staining, silty SAND, fine grain, sweet odor	0.0
5	HGLSB33-08-0405				0.0
5.0					
6		SM		Light reddish-brown silty SAND, with some white precipitate	0.0
6.0					
7		SM		Silty SAND, light brown soil staining, medium grain, sweet odor, small wood pieces	0.0
8					0.0
8.2					
9		SM		Sandy fill - yellow-brown very fine beach-like SAND, no odor	0.0
9.5					
10		SM		Reddish brown silty SAND, hard, with white crystalline deposits in soil fractures	
11		SM		Reddish-brown silty SAND	

HGL_BOREHOLE_1_DP-30_SD-33.GPJ_GINT US.GDT 5/21/07

(Continued Next Page)

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER SB33-08

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					
12	HGLSB33-08-1012	SM		Reddish-brown silty SAND *(continued)* White precipitate deposits, crystalline 12.0	0.0
13					0.0
14					0.0
15				Bottom of hole at 15.0 feet.	0.0

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BORING NUMBER SB33-09

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0		SM		0.3 Light brown silty SAND, dry	0.0
1		SM		Silty SAND, dark brown root staining 1.0	
2		SM		Light brown silty SAND, dry	0.0
3				3.0	0.0
4		SM		Medium brown silty SAND, hard, medium grain	0.0
5					0.0
6					0.0
7				7.0	0.0
8		SM		Silty SAND, fine grain, hard	0.0
9				9.0	0.0
10		SM		Reddish-brown silty SAND with black, white, and red precipitate 10.0	0.0
				Bottom of hole at 10.0 feet.	

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

HydroGeoLogic Inc.
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Herndon VA 20170
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BORING NUMBER SB33-10

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD Hand Auger
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Waste encountered; No PIDs taken
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0				
1		SM		Light brown silty SAND
				1.0
2		SM		Darker brown, silty SAND, white and brown precipitate
3				
4				Pieces of thin clear plastic, 4 layers
5	HGLSB3310-0405			Very dark brown soil staining, sweet odor
				5.0
				Refusal at 5 ft., to collect below waste, will move 2 ft. off of boring (not in trench)
				Bottom of hole at 5.0 feet.

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

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BORING NUMBER SB33-11

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-08-05
PROJECT LOCATION Holloman AFB DP-30&SD33
DATE STARTED 5/17/06 **COMPLETED** 5/17/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No waste encountered
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			SM		0.3 Medium brown, very fine silty SAND	0.0
1			SM		Brown silty SAND, dry, roots and root staining 1.0	
2			SM		Light brown, silty SAND, dry	0.0
3						0.0
4						0.0
5		90% Recovery from 1-5' bgs				0.0
6			SM		4.5 Brown, silty SAND, hard 5.5 Brown silty SAND with red and white crystalline structure	0.0
7	HGLSB33-11-0607		SM		7.0 Light brown SAND, very fine	0.0
8			SM			0.0
9			SM		9.0 Medium brown silty SAND with white precipitate	0.0
10			SM		10.0 Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

DP-30/SD-33

SUPPLEMENTAL RFI MONITORING WELL LOG AND WELL CONSTRUCTION INFORMATION

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW30&33-05

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DATE STARTED 6/12/06 **COMPLETED** 6/12/06 **GROUND ELEVATION** _____ **HOLE SIZE** 6.25"

DRILLING CONTRACTOR ESN **GROUND WATER LEVELS:**

DRILLING METHOD HSA ▽ **AT TIME OF DRILLING** 21.5 ft

LOGGED BY Gillette/Gerike **CHECKED BY** B.T. Brodersen **AT END OF DRILLING** ---

NOTES _____ **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
0							
1			SM		10YR 4/2 Pale Red, silt and very fine SAND, dry, packed powder	0.0	
					1.0		
2			ML		10R 8/2 Grayish orange pink, SILT, dry, hard, abundant calcium	0.0	
					2.0		
3			SM		5R 9/2 Grayish pink, silt and very fine SAND, dry, less calcium	0.0	
4						0.0	
5		60% Recovery				0.0	
6						0.0	
7						0.0	
8						0.0	Portland
					8.5		
9			SM		10R 5/2 Grayish orange pink, silt and very fine SAND, dry, dense	0.0	
10		80% Recovery				0.0	
					10.2		
11			ML		5R 8/2 Pale pink, SILT, dry, dense, calcium		

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

(Continued Next Page)

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Fax: 703-471-4180

WELL NUMBER MW30&33-05

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
11			ML		5R 8/2 Pale pink, SILT, dry, dense, calcium *(continued)*	0.0	
					11.5		
12			SM		5Y 8/1 Yellowish gray, silt and ver fine SAND, damp, calcium, dense	0.0	
13					13.0	0.0	
					10R 5/4 Pale reddish brown, silt and very fine SAND, crystalline calcite, hard, dry		
14						0.0	
15						0.0	
			SM		10R 4/6 Moderate reddish brown, same as above but becomes clayey, damp, stiff		
16						0.0	◄Enviroplug No. 8
17					Less calcium	0.0	
18						0.0	
					18.5		
19			CL		10R 4/6 Moderate reddish brown, CLAY, very stiff and very fine sand, dry	0.0	
20						0.0	
21					21.0	0.0	
					10YR 8/2 Very pale orange, clean very fine SAND, oxidized in upper 0.2 ft., wet, poorly graded, soft to moderately stiff, ▽ subangular to rounded		
22		Saturated sands at 21'-23.5' & 25.3'-26.5'	SP			0.0	
23						0.0	
					23.5		◄Silica Sand

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

(Continued Next Page)

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WELL NUMBER MW30&33-05

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-08-05 **PROJECT LOCATION** Holloman AFB DP-30&SD33

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
24			SP		10R 6/2 Pale red, very moist, no free water (??) as above, subangular to subrounded *(continued)*	0.0	PVC
			SP		24.5		
25			ML		White to very light gray, (N8-N9), SILT, very stiff, damp	0.0	
					25.3		
26			SP		10YR 8/2 Very pale orange, very fine SAND, wet, clean, subangular to rounded	0.0	
					26.5		
27		1305 begin overdrilling hole with HSA			10R 6/2 Pale red, very moist, no free water, subangular to subrounded	0.0	
					27.0 TD=27 ft. below ground surface at 1300 hrs.		
28					Dashed line indicate gradational contacts		
29							
30					30.0 Bottom of hole at 30.0 feet.		

HGL_BOREHOLE_1 DP-30_SD-33.GPJ GINT US.GDT 5/21/07

HGL HydroGeoLogic, Inc. WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: GREG GERIKE & SARAH GILLETTE
DRILLING CONTRACTOR: ENS

DRILLING TECHNIQUE: HSA
AUGER SIZE AND TYPE: 6.25" OD

BOREHOLE IDENTIFICATION: MW 30 & 33-05
BOREHOLE DIAMETER: 6.25"
WELL IDENTIFICATION:

WELL CONSTRUCTION START DATE: 06/02/06
WELL CONSTRUCTION COMPLETE DATE:

SCREEN MATERIAL: PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 19-29

CASING MATERIAL: PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: SILICA SAND
GRADIATION: 10-20
AMOUNT OF FILTER PACK USED: 5.5 50 lbs. bags

TYPE OF BENTONITE: ENVIROPLUG NO. 8
AMOUNT BENTONITE USED:

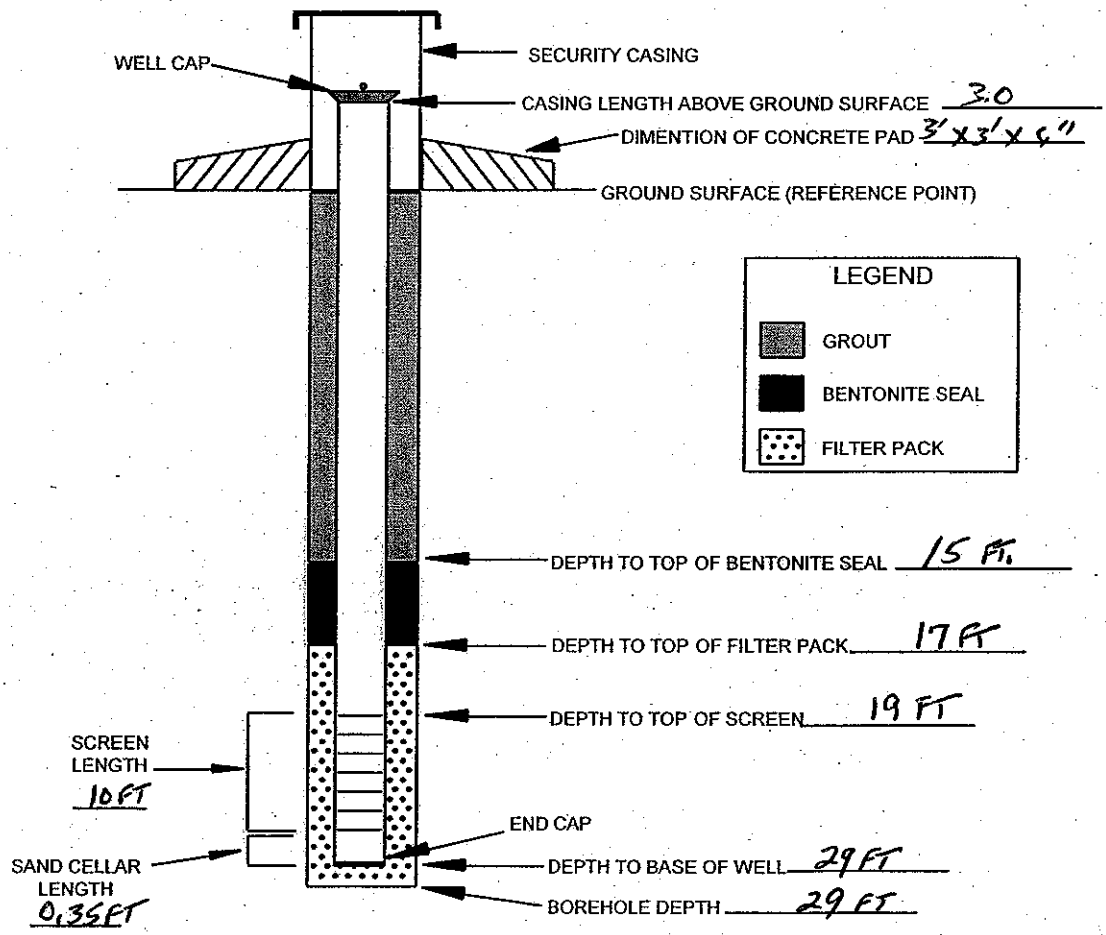
TYPE OF CEMENT: PORTLAND
AMOUNT CEMENT USED: 2 ea 90 lb bags } GROUT MIX
GROUT MATERIALS USED: ~0.3 bags bent. Powder }

DIMENSIONS OF SECURITY CASING: 4' x 4" x 5'

TYPE OF WELL CAP: PVC
TYPE OF END CAP: PVC, FLUSH THREAD, 0.30'

COMMENTS: Used 9ea Bags Conc. Mix FOR Pad, Bollards, & Security Casing

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

INSTALLED BY: ESN
INSTALLATION OBSERVED BY: Gillette/Gerike

DISCREPANCIES:

DP-30/SD-33

PREVIOUS INVESTIGATION BORING LOGS

DRILLING LOG

HOLE NO. SB-30&33-01

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 675908.37(Y), 553031.37(X)
	9. SURFACE ELEVATION: 4100.80
	10. DATE STARTED: 26 AUG 91 — 11. DATE COMPLETED: 26 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 10.0 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILTY SAND: dark yellowish-orange (10YR 6/6), dry, gravelly, well graded, sand fine grained, waste just present in tip at 1.3 ft.	HS=0.0ppm			2,4,2,4	1.5/2.0 ft
	2				91JULH030 &033-001		composite sample 1.5 ft to 4.6 ft
		WASTE, SAND & SILT: black (N1) some woody material.	HS=0.0ppm			0,2,1,1	1.6/2.0 ft
	3						VOA collected 2 ft to 4 ft
	4	WASTE, as above:	HS=0.0ppm			0,0,0,2	1.0/2.0 ft
	5	SAND: very pale orange (10YR 8/2), soft, moist, fine to very fine grained, poorly graded. (SP)					
	6	SAND, as above: in tip.				0,10,0,16	no recovery
	7						
	8	SAND, as above: light brown (5YR 6/4)			91JULH030 &033-002	3,12,10,14	2.0/2.0 ft
	9						TD= 10.0 ft

PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES — HOLE NO. SB-30&33-01

DRILLING LOG

HOLE NO. SB-30&33-02

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 2 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ALEX SANCHEZ	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676057.2 (Y),552837.3 (X)
	9. SURFACE ELEVATION: 4100.95
	10. DATE STARTED: 27 AUG 91 — 11. DATE COMPLETED: 27 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 12.0 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	LEM

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	0	SILTY SAND: light brown (5YR 6/4), sand very fine to fine grained, poorly graded. (SM)				4,4,2,2	2.0/2.0 ft
	1	CLAYEY SILT, some sand: moderate brown (5YR 4/4), medium plasticity, sand fine grained, poorly graded. (MH)					
	2	CLAYEY SILT, some sand: moderate brown (5YR 4/4). (MH)	HS=0.2ppm			4,2,6,2	2.0/2.0 ft
	3	WASTE: dark yellowish-orange (10YR 6/6).					
	4	WASTE: pale yellowish-brown (10YR 6/2).	HS=238ppm		91JULH030 &33-003		1.0/1.0 ft samples composited from 2-8 ft except VOA's
	5	WASTE: black (N1).					
	6	WASTE, as above.	HS=98ppm			2,1,1,2	VOA samples taken
	7	WASTE: moderate yellowish-brown (10YR 5/4).					
	8	SILTY SAND: very pale orange (1)YR 8/2), sand very fine to fine grained, poorly graded. (SM)			91JULH030 &33-004	8,20,50,4	samples composited from 8-12 ft except VOA's
	9						

DRILLING LOG

HOLE NO. SB-30&33-02

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR LEM

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SILTY SAND, as above: stained yellow. (SM)					VOA samples taken
	12						TD= 12.0 ft
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						

DRILLING LOG

HOLE NO. SB-30&33-03

1. COMPANY NAME: RADIAN CORPORATION
2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES
4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA
6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"
8. HOLE LOCATION: 675898.57(Y), 552774.62(X)
9. SURFACE ELEVATION: 4101.98
10. DATE STARTED: 26 AUG 91
11. DATE COMPLETED: 26 AUG 91
12. OVERBURDEN THICKNESS:
13. DEPTH DRILLED INTO ROCK:
14. TOTAL DEPTH OF HOLE: 8 ft.
15. DEPTH GROUNDWATER ENCOUNTERED:
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):
18. GEOTECHNICAL SAMPLES: DISTURBED / UNDISTURBED
19. TOTAL NUMBER OF CORE BOXES:
20. SAMPLES FOR CHEMICAL ANALYSIS: VOC / METALS / OTHER (SPECIFY) / OTHER (SPECIFY) / OTHER (SPECIFY)
21. TOTAL CORE RECOVERY: %
22. DISPOSITION OF HOLE: BACKFILLED / MONITORING WELL / OTHER (SPECIFY): GROUT
23. SIGNATURE OF INSPECTOR: TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	FILL: disturbed soils-sand, clay, silt, colors vary from very pale orange (10YR 8/2) to moderate brown (5YR 4/4)				1,1,2,1	2.0/2.0 ft
	2	FILL: to 2.7 ft then	HS=16.8ppm			1,0,1,1	1.1/2.0 ft
	3	WASTE: black (N1) composed of SILTY CLAY(?), wet, unidentifiable tape or plastic.			91JULH030 &33-005		composite sample from 2.7 ft to 5.5 ft
	4	WASTE, as above: to 5.5 ft then	HS=21.2ppm			0,0,0,10	2.0/2.0 ft VOA sampled from 4.0 to 5.0 ft
	5						
	6	SAND: greyish-orange (10YR 7/4), soft, moist, very poorly graded, fine sand. (SP) SAND, as above.			91JULH030 &33-006	5,10,13,19	2.0/2.0 ft some waste on top of the core
	7						
	8						TD= 8.0 ft
	9						

DRILLING LOG

F2544

HOLE NO.	SB-30&33-04
1. COMPANY NAME	RADIAN CORPORATION
2. DRILLING SUBCONTRACTOR	SOUTHWEST ENG INC
SHEET 1 OF 2 SHEETS	
3. PROJECT	HOLLOMAN AFB RI/FS FOR 29 SITES
4. LOCATION	30, 33
5. NAME OF DRILLER	ART VALTIERRA
6. MANUFACTURER'S DESIGNATION OF DRILL	HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	BOREHOLE DIA.: 7.5"
8. HOLE LOCATION	675928.58(Y), 552741.03(X)
9. SURFACE ELEVATION	4102.06
10. DATE STARTED	26 AUG 91
11. DATE COMPLETED	26 AUG 91
12. OVERBURDEN THICKNESS	
15. DEPTH GROUNDWATER ENCOUNTERED	
13. DEPTH DRILLED INTO ROCK	
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	12 ft.
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	FILL-SAND: moderate yellow brown (10YR 5/4), soft, dry to 0.9 ft then moist, moderately well graded, minor silt, fine grained. (SM)				0,1,0,1	1.2/2.0 ft
	2	SAND, as above: to 2.6 ft then				0,0,0,0	0.7/2.0 ft
	3	WASTE: dark yellow brown (10YR 4/2) to dusky yellow brown (10YR 2j/2), rusty sand, small tinsel type plastic.			91JULH030 &33-007		composite sample from 2.6 ft to 7.4 ft
	4	WASTE: soft black (N1), saturated waste colloidal to sludgy, grey, hairy layers, medium grey to greyish-black (N4)-(N2).	HS=19.4ppm			0,0,9,4	2.0/2.0 ft
	5						
	6	WASTE, as above: to 7.4 ft then				0,0,4,5	2.0/2.0 ft VOA collected at 6.0 ft to 7.4 ft
	7						
	8	SAND: very light grey (N8), hard, fine grained, black zones/mottling. SAND, as above: moist, hard.	HS=12.6ppm		91JULH030 &33-008	13,22,15, 25	2.0/2.0 ft VOA collected at 8.0 ft to 10.0 ft
	9						

DRILLING LOG

HOLE NO. SB-30&33-04

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR TAC

SHEET 2 OF 2 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SAND: light brown (5YR 6/4), medium hard, moist, poorly graded, fine. (SP)				9,14,20,25	2.0/2.0 ft
	12	SILTY SAND: very pale orange (10YR 8/2), gypsum. (SM)					TD= 12.0 ft
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						

DRILLING LOG

HOLE NO. SB-30&33-05

12469

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ALEX SANCHEZ	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676056.3 (Y),552823.8 (X)
	9. SURFACE ELEVATION: 4100.76
	10. DATE STARTED: 26 AUG 91 — 11. DATE COMPLETED: 26 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 12.0 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	LEM

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILTY SAND: pale yellowish-brown (10YR 6/2), stained moderate yellowish-brown (10YR 5/4), with depth. (SM)			91JULH030 &33-009	1,3,3,2	1.0/2.0 ft composite sample from 1.5-8.0 ft
	2	SILTY SAND, as above. (SM)	HS=3.6ppm			1,0,0,1	1.5/2.0 ft
	3						
	4	SILTY SAND, as above. (SM)	HS=10.6ppm			1,0,0,1	1.0/2.0 ft VOA's collected from 4.0-6.0 ft
	5						
	6	SILTY SAND: greyish-orange (10YR 7/4), slightly stained. (SM)				10,12,15, 17	2.0/2.0 ft
	7						
	8	SILTY SAND, as above: very pale orange (10YR 8/2), not stained. (SM)			91JULH030 &33-010	24,33,35, 40	2.0/2.0 ft composite sample from 8.0-12.0 ft VOA's collected from 8.0-10.0 ft
	9	CLAYEY SILT: greyish-orange (10YR 7/4), low plasticity. (ML)					

DRILLING LOG

HOLE NO. SB-30&33-05

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR LEM

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SANDY CLAY: very pale orange (10YR 8/2), medium plasticity, sand very fine to coarse grained, well graded. (CH) SANDY CLAY, as above: pale yellowish-brown (10YR 5/2). (CH)				15,25,39, 43	2.0/2.0 ft
	12						TD= 12.0 ft
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						

DRILLING LOG

HOLE NO. SB-30&33-06

F2430

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ALEX SANCHEZ	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676078.6 (Y),552836.8 (X)
	9. SURFACE ELEVATION: 4101.34
	10. DATE STARTED: 27 AUG 91 — 11. DATE COMPLETED: 27 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 10.0 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	LEM

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILTY SAND: moderate yellowish-brown (10YR 5/4), sand very fine to fine grained, poorly graded. (SM)				3,3,2,8	1.5/2.0 ft
	2	SILTY SAND, as above. (SM)				1,2,0,1	1.3/2.0 ft composite sample from 2.0-6.0 ft. RAS dup taken
	3	WASTE: pale yellowish-brown (10YR 6/2), bluish-white (5B 9/1), dusky yellow (5Y 6/4).			91JULH030 &33-011 91JULH030 &33-022		
	4	SILTY SAND: light brown (5YR 5/6), (SM) grading into WASTE: black (1N), moderate yellowish-brown (10YR 5/4). (SM)				1,0,0,1	1.5/2.0 ft VOAs collected from 4.0-6.0 ft.
	5	WASTE.					
	6	SILTY SAND: pale yellowish-orange (10YR 8/6), sand very fine to fine grained, poorly graded. (SM)			91JULH030 &33-012	7,18,21,27	2.0/2.0 ft composite sample from 6-10 ft. VOAs collected from 6.0-8.0 ft.
	7						
	8	SILTY SAND, as above. (SM)				24,39,49, 50+	2.0/2.0 ft
	9	CLAYEY SILT: moderate yellowish-brown (10YR 5/4), low plasticity. (ML)					TD= 10.0 ft

DRILLING LOG

HOLE NO. SB-30&33-07

1. COMPANY NAME: RADIAN CORPORATION
2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES
4. LOCATION: 30, 33
5. NAME OF DRILLER: ALEX SANCHEZ
6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"
8. HOLE LOCATION: 676060.7 (Y),552868.7 (X)
9. SURFACE ELEVATION: 4101.02
10. DATE STARTED: 27 AUG 91
11. DATE COMPLETED: 27 AUG 91
12. OVERBURDEN THICKNESS:
15. DEPTH GROUNDWATER ENCOUNTERED:
13. DEPTH DRILLED INTO ROCK:
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:
14. TOTAL DEPTH OF HOLE: 8.0 ft.
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):
18. GEOTECHNICAL SAMPLES: DISTURBED / UNDISTURBED
19. TOTAL NUMBER OF CORE BOXES:
20. SAMPLES FOR CHEMICAL ANALYSIS: VOC / METALS / OTHER (SPECIFY) / OTHER (SPECIFY) / OTHER (SPECIFY)
21. TOTAL CORE RECOVERY: %
22. DEPOSITION OF HOLE: BACKFILLED / MONITORING WELL / OTHER (SPECIFY): GROUT
23. SIGNATURE OF INSPECTOR: LEM

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILTY SAND: moderate brown (5YR 4/4), sand very fine to fine grained, poorly graded. (SM)				3,9,6,4	2.0/2.0 ft
	2	CLAYEY SILT: moderate brown (5YR 4/4), low plasticity, gypsum crystals, small waste body at top, olive grey (5Y 4/1). (ML)			91JULH030 &33-013	4,7,12,15 2,5,10,10 2,4,7,10 3,2,6,10	2.0/2.0 ft composite sample from 2.0-4.0 ft VOAs collected from 2.0-4.0 ft
	4	CLAYEY SILT, as above: no waste. (ML)			91JULH030 &33-014	7,10,10,11	2.0/2.0 ft composite sample from 4.0-8.0 ft VOAs collected from 4.0-6.0 ft
	6	CLAYEY SILT, as above. (ML)				5,11,12,22	2.0/2.0 ft
	8						TD= 8.0 ft
	9						

DRILLING LOG

HOLE NO. SB-30&33-08

F1545

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676069.88(Y), 552875.26(X)
	9. SURFACE ELEVATION: 4101.04
	10. DATE STARTED: 27 AUG 91 — 11. DATE COMPLETED: 27 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 6 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	FILL, SAND, SILT & CLAY: very pale orange (10YR 8/2), to moderate brown (5YR 3/4), dry crumbly, disturbed sediment, to 1.4 ft.				0,1,2,0	2.0/2.0 ft
	2	WASTE: moderate brown (10YR 4/4), with minor black (N2) zones composed of stained sand.			91JULH030 &33-015		
	3	WASTE, as above.				0,0,2,4	2.0/2.0 ft VOA from 2.0 to 2.5 ft
	4	SILT: very pale orange (10YR 8/2), hard, dry, non-plastic, crumbly. (ML)					
	5	SILT, as above.			91JULH030 &33-016	0,0,0,0	1.7/2.0 ft
	6						TD= 6.0 ft
	7						
	8						
	9						

DRILLING LOG

HOLE NO. SB-30&33-09

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676083.95(Y), 552889.61(X)
	9. SURFACE ELEVATION: 4101.15
	10. DATE STARTED: 27 AUG 91 — 11. DATE COMPLETED: 27 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 6 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	0	SILTY SAND: moderate brown (5YR 4/4), hard, dry fine to very fine grained, then at 0.9 ft. (SM)				2,4,2,5	1.0/2.0 ft
	1	WASTE: dusky yellow brown (10YR 2/2) to dark yellow brown (10YR 4/2), moist, sandy, plastic material common.			91JULH030 &33-017		composite sample from 0.9 ft to 2.7 ft
	2	WASTE, as above: plastic material common.				5,13,12,11	1.4/2.0 ft VOA from 2.0 ft to 2.7 ft
	3	SILT: very pale orange (10YR 8/2), hard, dry, crumbly, non-plastic. (ML)			91JULH030 &33-018		
	4	SILT, as above.				6,5,9,15	2.0/2.0 ft
	5						
	6						TD= 6.0 ft
	7						
	8						
	9						

DRILLING LOG

HOLE NO. SB-30&33-10

12547

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 2 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ALEX SANCHEZ	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676059.06(Y), 552953.17(X)
	9. SURFACE ELEVATION: 4100.65
	10. DATE STARTED: 27 AUG 91 — 11. DATE COMPLETED: 27 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 14 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SANDY SILT: light brown (5YR 6/4), dry, soft, non-plastic. (ML)				2,4,6,4	2.0/2.0 ft
	2	SANDY SILT, as above: to 2.6 ft.	HS=0.0ppm			0,0,0,0	0.9/2.0 ft
	3	WASTE: dark yellowish-brown (10YR 4/2), dry, silty and sandy, paper fragments.			91JULH030 &33-019		composite sample from 2.6 ft to 8.9 ft
	4	WASTE, as above, sandy: dry.	HS=0.0ppm			0,0,1,5	0.8/2.0 ft
	5						
	6					0,0,0,0	0.0/2.0 ft
	7						installed sand catcher in SS
	8	WASTE, as above: with black soft sludge and plant material, to 8.9 ft, grading to	HS=67.0ppm			0,2,16,30	2.0/2.0 ft VOA collected from 8.0 ft to 8.9 ft
	9	SILT: medium light grey (N6), hard, dry, crumbly. (ML)					

PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES — HOLE NO. SB-30&33-10

DRILLING LOG

HOLE NO. SB-30&33-10

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR TAC

SHEET 2 OF 2 SHEETS

F2547

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SANDY SILT: grey (N6), hard, dry, cumbly, gypsum, non-plastic. (ML)			91JULH030 &33-020	7,18,50+	1.5/2.0 ft composite sample 10.0 to 14.0 ft VOA collected at 10.0 to 12.0 ft
	12	SANDY SILT, as above				9,13,14,18	2.0/2.0 ft
	13						
	14						TD= 14.0'
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						

DRILLING LOG

HOLE NO. SB-30&33-11

T2542

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 1 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 675881.04(Y), 552831.57(X)
	9. SURFACE ELEVATION: 4101.37
	10. DATE STARTED: 26 AUG 91 — 11. DATE COMPLETED: 26 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 8 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
			GROUT	TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	0	FILL: everything to 1.0 ft, clay, sand, gravel then at 1.0 ft				5,6,8,9	2.0/2.0 ft
	1	SAND: greyish-orange (10YR 7/4), soft, moist, poorly graded, fine grained. (SP)					
	2	SILT: very pale orange (10YR 8/2), gypsum, non-plastic, moderately hard, dry. (ML)				6,11,10,10	1.6/2.0 ft
	3						
	4	SILT, as above: to 4.4 ft then				6,9,10,17	1.7/2.0 ft
	5	CLAYEY SILT: moderate brown (5YR 4/4), moderately plastic, gypsum mottling, slightly moist. (ML)					
	6	SANDY SILT: moderate red brown (5YR 4/4), non-plastic, slightly moist, soft. (ML)				6,12,10,12	2.0/2.0 ft
	7						
	8	grades to SAND: light brown (5YR 6/4), soft, very poorly graded, fine to very fine grained. (SP)					TD= 8.0 ft no waste body encountered
	9						

DP-30/SD-33

PREVIOUS INVESTIGATION MONITORING WELL LOGS AND WELL CONSTRUCTION INFORMATION

DRILLING LOG

HOLE NO. MW-30&33-01

f2519

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 3 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 676333.33(Y), 552710.92(X)
	9. SURFACE ELEVATION: 4103.31
	10. DATE STARTED: 28 AUG 91 — 11. DATE COMPLETED: 28 AUG 91
12. OVERBURDEN THICKNESS:	15. DEPTH GROUNDWATER ENCOUNTERED: 21.2 ft bgl
13. DEPTH DRILLED INTO ROCK:	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 22.4 FT/ 30 minutes
14. TOTAL DEPTH OF HOLE: 31 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): 04 NOV 91 23.87 ft bmp

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
						%

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILTY SAND: moderate brown (5YR 4/4), dry, fine to very fine grained. (SM)					
	2						
	3						
	4						
	5	SILTY SAND, as above: SOFT, very poorly graded, very fine to fine grained, some gypsum mottling. (SM)	DH=0.0ppm			2,4,8,9	2.0/2.0 ft
	6						
	7	CLAYEY SILT: moderate brown (5YR 4/4), hard, dry, moderate plasticity, abundant gypsum mottling. (ML)					
	8						
	9						

DRILLING LOG

HOLE NO. MW-30&33-01

PROJECT: HOLLOMAN AFB RI/FS

INSPECTOR: TAC

SHEET 2 OF 3 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SILTY SAND: moderate brown (5YR 4/4), soft, moist.	DH=0.0ppm			3,8,8,25	2.0/2.0 ft
	12	grading to CLAYEY, SANDY SILT: moderate brown (5YR 4/4), hard, moderate plasticity, gypsum mottling, slightly moist. (ML)					
	13						
	14						
	15	SANDY SILT: moderate brown (5YR 4/4), hard, moderate plasticity, slightly moist. (ML)	DH=0.0ppm			4,20,11,11	2.0/2.0 ft
	16	grading to CLAYEY SILT: moderate brown (5YR 4/4), moist, highly plastic, abundant gypsum mottling. (MH)					
	17						
	18						
	19						
	20	SILTY, CLAYEY SAND: moderate brown (5YR 4/4), soft, moist. (SM)	DH=1.6ppm			4,7,10,20	2.0/2.0 ft
	21	grading to SAND: light brown (5YR 5/6), soft, wet, fine to very fine grained, very poorly graded. (SP)					
	22						▽ -water at 21.87 ft
	23						
	24	SAND: moderate brown (5YR 4/4), soft, saturated, fine to medium grained, abundant gypsum crystals and clusters 1" across. (SP)	DH=1.0ppm			0,4,4,10	1.6/2.0 ft
	25	CLAYEY SILT: very pale orange (10YR 8/2), moderately hard, non-plastic, black material at bottom of core looks organic, composed of gypsum. (ML)					
	26			MW-30/33-01			26.1 to 28.6 ft sent for geotechnical analysis
	27						

DRILLING LOG

HOLE NO. MW-30&33-01

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR TAC

SHEET 3 OF 3 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	29						5.0/5.0 ft
	30		HS= 0.0ppm on dark material				
	31						TD= 31.0 ft
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						
	41						
	42						
	43						
	44						
	45						

DRILLING LOG

HOLE NO. MW-30&33-02

F2408

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 3 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 675765.27(Y), 552844.20(X)
	9. SURFACE ELEVATION: 4102.38
	10. DATE STARTED: 28 AUG 91 — 11. DATE COMPLETED: 28 AUG 91
12. OVERBURDEN THICKNESS:	15. DEPTH GROUNDWATER ENCOUNTERED: 21.02 ft bgl
13. DEPTH DRILLED INTO ROCK:	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 04 NOV 91 23.52 ft bmp
14. TOTAL DEPTH OF HOLE: 32 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		HTH

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1						cuttings
	2						
	3						
	4						
	5	CLAYEY SILT: moderate brown (5YR 3/4), dry, medium plasticity, mottled with white. (ML)				13,14,20, 29	1.3/2.0 ft
	6	SILTY SAND: light brown (5YR 6/4), very fine grained, poorly graded. (SM)					
	7						
	8	SILTY SAND: as above.				10,3,2,7	1.6/2.0 ft
	9						

DRILLING LOG

HOLE NO. MW-30&33-02

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR HTH

SHEET 2 OF 3 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SILTY CLAY: light brown (5YR 4/4), dry, medium plasticity, mottled, small gypsum crystals, interbedded silts. (CL)				11,16,37, 34	1.9/2.0 ft
	12	SILT: light brown (5YR 6/4), dry, (11.1-11.9 ft). (ML)					
	13	CLAYEY SILT: greyish-orange (10YR 7/4), dry, low plasticity, trace fine to very fine grained sand. (ML)				14,33,48, 36	0.1/2.0 ft
	14						
	15	SILTY CLAY: light brown (5YR 5/6), dry, medium plasticity, small gypsum crystals. (CL)				12,17,19, 21	2.0/2.0 ft
	16						
	17	SILTY SAND: light brown (5YR 5/6), dry, fine to very fine grained, poorly graded, trace clay, gypsum cement. (SM)				13,14,16, 18	2.0/2.0 ft
	18						
	19						
	20	CLAYEY SILT: light brown (5YR 5/6), dry, low plasticity, trace fine sand. (ML)				12,14,14, 12	2.0/2.0 ft
	21						water at 21.02 ft bgl
	22						
	23						
	24						
	25	SILTY CLAY: moderate brown (5YR 4/4), wet, trace sand, medium plasticity, small gypsum crystals. (CL)				6,6,6,8	2.0/2.0 ft
	26						
	27						

PROJECT HOLLOMAN AFB RI/FS FOR 29 SITES

HOLE NO. MW-30&33-02

72408

DRILLING LOG

HOLE NO. MW-30&33-02

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR HTH

SHEET 3 OF 3 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	29						
	30	SANDY CLAY: moderate brown (5YR 4/4), wet, moderate plasticity, medium to fine sand, clay and sand content varies. (SC)					2.0/2.0 ft
	31						
	32						TD= 32.0 ft
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						
	41						
	42						
	43						
	44						
	45						

DRILLING LOG

HOLE NO. MW-30&33-03

F2308

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 2 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ALEX SANCHEZ	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 675815.63(Y), 552958.61(X)
	9. SURFACE ELEVATION: 4101.35
	10. DATE STARTED: 28 AUG 91 / 11. DATE COMPLETED: 28 AUG 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED: 20.03 ft bgl
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED
14. TOTAL DEPTH OF HOLE: 27 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): 04 NOV 91

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		ATC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SANDY SILT: pale brown (5YR 5/2), very fine, powdery, roots (topsoil). (ML)				2,8,15,37	2.0/2.0 ft
	2	grades to greyish-orange pink (10R 8/2).					
	3						
	4						
	5	SILTY SAND: moderate reddish-orange (10R 6/6), very fine, slightly moist. (SM)				10,15,11, 13	2.0/2.0 ft
	6						
	7						
	8						
	9						

DRILLING LOG

HOLE NO. MW-30&33-03

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR ATC

SHEET 2 OF 2 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	10	CLAYEY, SILTY SAND: moderate reddish brown (10R 4/6). (SM)				7,13,20,23	2.0/2.0 ft
	11	grades to pale reddish brown (10R 5/4). (SM)					
	12						
	13						
	14						
	15	SILTY SAND: fine, moist, pale reddish brown (10R 5/4).				10,10,16, 17	2.0/2.0 ft
	16						
	17						
	18						
	19						
	20	SANDY CLAY: moderate reddish brown (10R 4/6). medium to fine, saturated. (CL)					water at 20.03 ft bgl
	21					4,5,6,10	2.0/2.0 ft
	22						
	23						
	24						
	25						
	26						TD=27.0'
	27						

PROJECT HOLLOMAN AFB RI/FS FOR 29 SITES

HOLE NO. MW-30&33-03

DRILLING LOG

HOLE NO. MW-30&33-04

F2520

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 3 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 30, 33
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 675912.54(Y), 553036.27(X)
	9. SURFACE ELEVATION: 4100.91
	10. DATE STARTED: 28 AUG 91 / 11. DATE COMPLETED: 28 AUG 91
12. OVERBURDEN THICKNESS:	15. DEPTH GROUNDWATER ENCOUNTERED: 22.0 ft bgl
13. DEPTH DRILLED INTO ROCK:	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 04 NOV 91 21.76 ft bmp
14. TOTAL DEPTH OF HOLE: 25 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
		X	

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		TAC

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1						Drilled to 5' bgl
	2						
	3						
	4						
	5	SANDY SILT: greyish-orange pink (10R 8/2), dry, non-plastic, crumbly, hard, gypsum, becoming more sandy near 7 ft. (ML)	DH=0.2ppm			5,8,25,28	2.0/2.0 ft
	6						
	7						
	8						
	9						

DRILLING LOG

HOLE NO. MW-30&33-04

PROJECT: HOLLOMAN AFB RI/FS

INSPECTOR: TAC

SHEET 2 OF 3 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SANDY, CLAYEY SILT: moderate brown (5YR 4/4), hard, moist, moderately plastic, gypsum mottlin. (ML)	DH=0.2ppm			9,9,15,30	2.0/2.0 ft
	12	SANDY SILT: very pale orange (10YR 8/2), soft, moist, non-plastic. (ML)					
	13						
	14						
	15	SILTY SAND: light brown (5YR 5/6), minor clay, moist, fine to very fine, poorly graded, soft, abundant gypsum zones and mottling. (SM)	DH=1.0ppm			4,10,18,22	2.0/2.0 ft
	16						
	17						
	18						
	19						▽ -water at 19.15 ft
	20	SILTY SAND, as above.				3,6,10,11	2.0/2.0 ft
	21						
	22	SILTY SAND: yellowish-grey (5Y 7/2), soft to moderately hard, moist to saturated, poorly graded. (SM)					
	23						
	24	CLAYEY, SANDY SILT: moderate brown (5YR 4/4), moderately hard, moist to wet, highly plastic, abundant gypsum crystals. (ML)				10,12,11, 24	2.0/2.0 ft
	25						graditional contact
	26	SILTY CLAY: moderate brown (5YR 4/4) as above. (CL)				6,11,12,8	2.0/2.0 ft
	27						

DRILLING LOG

HOLE NO. MW-30&33-04

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR TAC

SHEET 3 OF 3 SHEETS

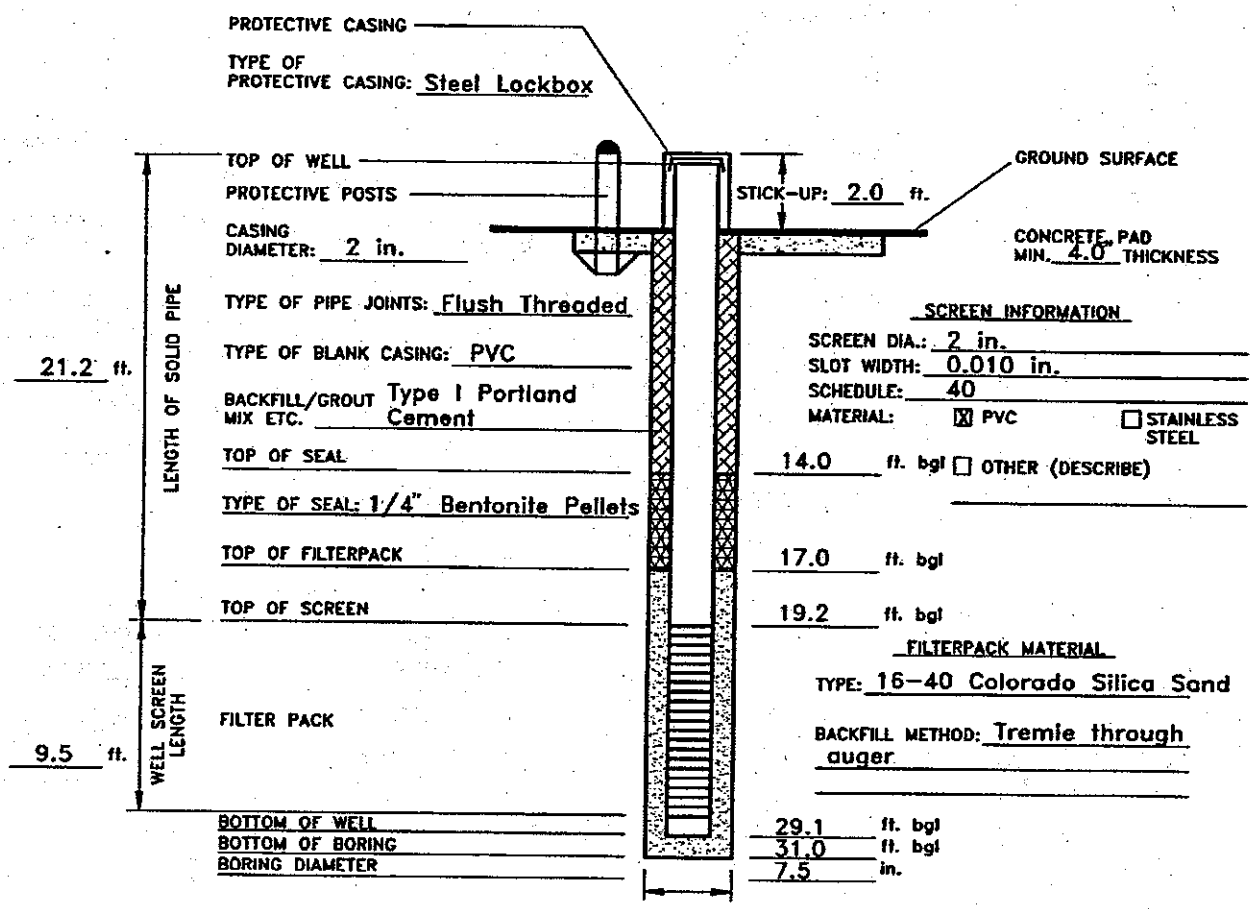
F2520

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	29			MW-030/033 -04			2.5/2.5 ft geotechnical sample taken 28.0 ft to 30.5 ft
	30						TD= 30.5 ft
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						
	41						
	42						
	43						
	44						
	45						

ELEVATION GROUND WATER: 4080.8			PROJECT: HOLLOMAN AFB RI/FS	
DATE INSTALLED: 28 AUG 91	STARTED: 0800	COMPLETED: 1200	LOCATION (Coordinates or Station): 30, 33	
ELEVATION TOP OF CASING: 4104.7			SIGNATURE OF INSPECTOR/INSTALLER: TAC	
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-30&33-01	

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



WELL DEVELOPMENT

METHOD: See well development record

TIME SPENT DEVELOPING:

VOLUME OF WATER REMOVED:

VOLUME OF WATER ADDED:

DESCRIPTION OF PREDEVELOPMENT WATER:

DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS

DATE/TIME/LEVEL: 17 OCT 91/1115/23.81 ft bgl

04 NOV 91/1356/23.87 ft bmp

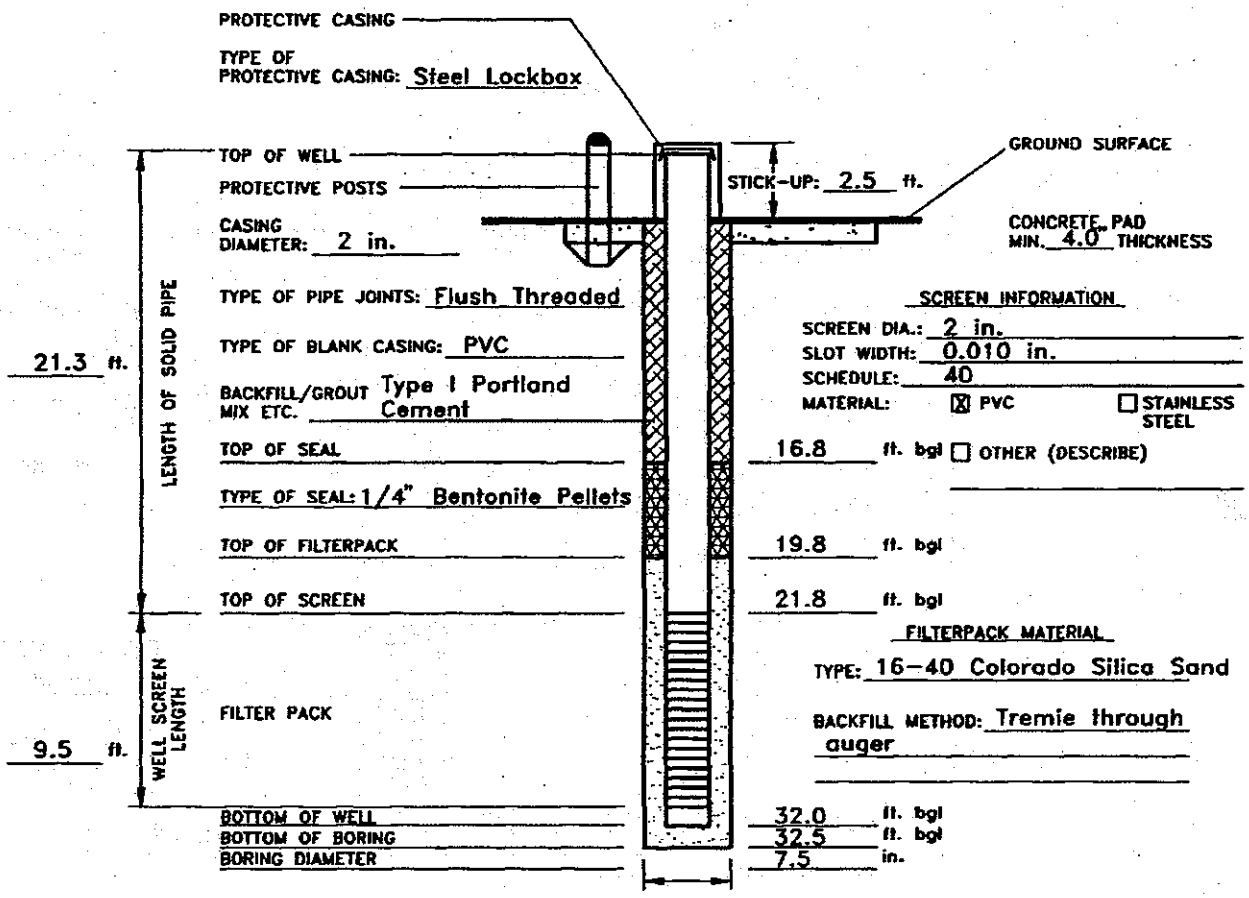
DEPTH FROM TOP CASING AFTER DEVELOPMENT:

F2559

ELEVATION GROUND WATER			PROJECT: HOLLOMAN AFB RI/FS
DATE INSTALLED: 27 AUG 91	STARTED	COMPLETED	LOCATION (Coordinates or Station): 30, 33
ELEVATION TOP OF CASING: 4104.00			SIGNATURE OF INSPECTOR/INSTALLER: HTH & ATC
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-30+33-02

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



SCREEN INFORMATION

SCREEN DIA.: 2 in.
SLOT WIDTH: 0.010 in.
SCHEDULE: 40
MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER (DESCRIBE)

FILTERPACK MATERIAL

TYPE: 16-40 Colorado Silica Sand
BACKFILL METHOD: Tremie through auger

WELL DEVELOPMENT

METHOD: See well development record
TIME SPENT DEVELOPING:
VOLUME OF WATER REMOVED:
VOLUME OF WATER ADDED:
DESCRIPTION OF PREDEVELOPMENT WATER:
DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS
DATE/TIME/LEVEL: 15 OCT 91/1100/23.60 ft bmp
04 NOV 91/1404/23.52 ft bmp

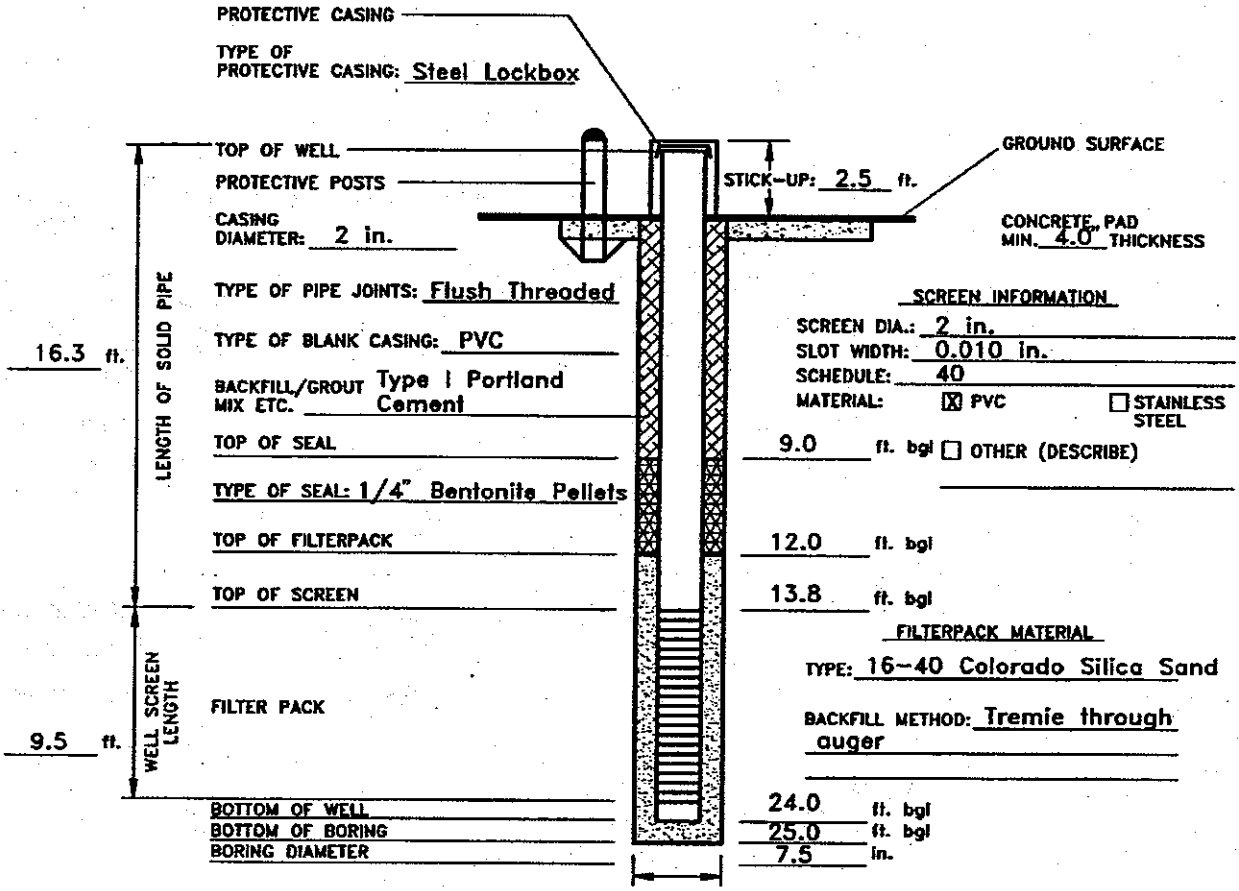
DEPTH FROM TOP CASING AFTER DEVELOPMENT:

300

ELEVATION GROUND WATER			PROJECT: HOLLOMAN AFB RI/FS
DATE INSTALLED: 28 AUG 91	STARTED	COMPLETED	LOCATION (Coordinates or Station): 30,33
ELEVATION TOP OF CASING			SIGNATURE OF INSPECTOR/INSTALLER: ATC
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-30 & 33-03

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



SCREEN INFORMATION

SCREEN DIA.: 2 in.
SLOT WIDTH: 0.010 in.
SCHEDULE: 40
MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER (DESCRIBE)

FILTERPACK MATERIAL

TYPE: 16-40 Colorado Silica Sand
BACKFILL METHOD: Tremie through auger

WELL DEVELOPMENT

METHOD: See well development record
TIME SPENT DEVELOPING:
VOLUME OF WATER REMOVED:
VOLUME OF WATER ADDED:
DESCRIPTION OF PREDEVELOPMENT WATER:
DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS
DATE/TIME/LEVEL 04 NOV 91/1402/22.53 ft bgl

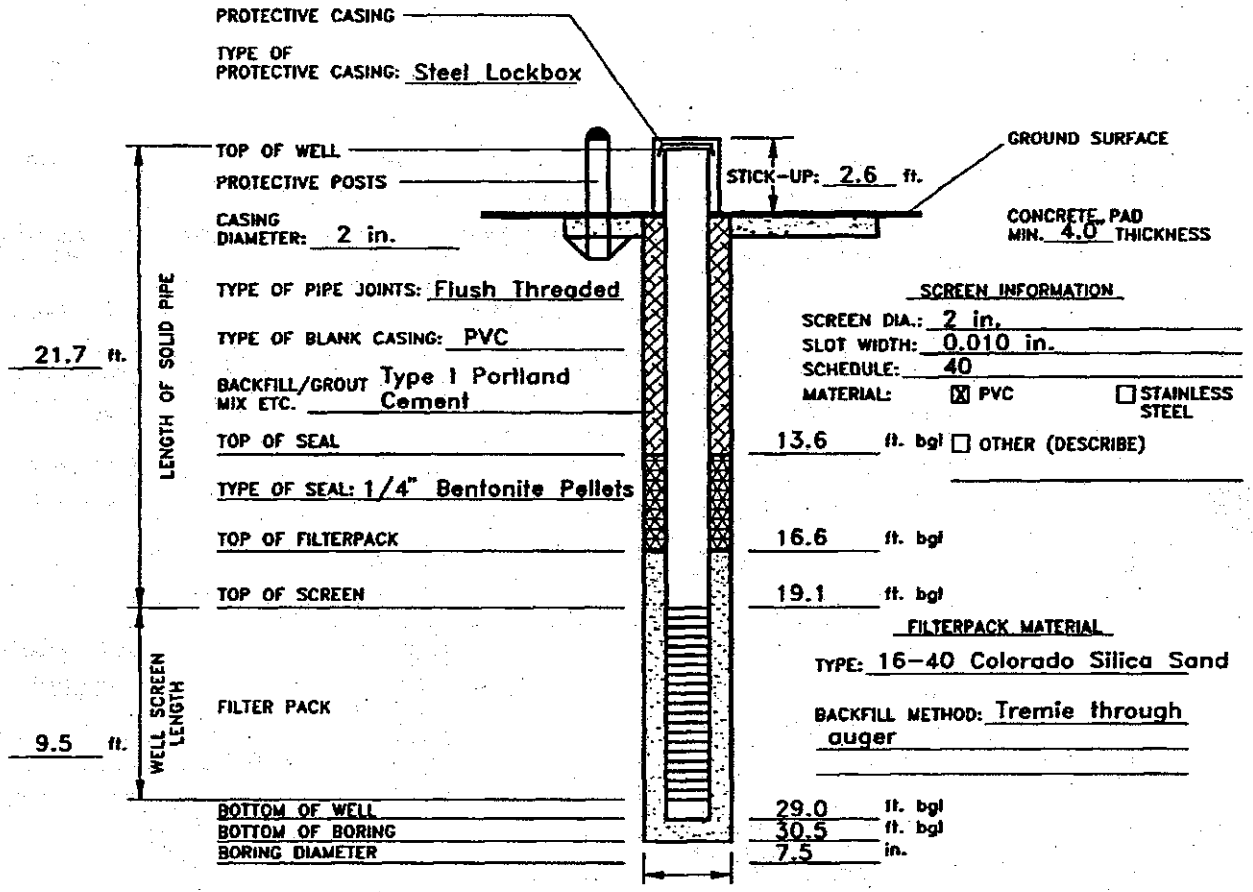
DEPTH FROM TOP CASING AFTER DEVELOPMENT:

FF878

ELEVATION GROUND WATER: 4080.5			PROJECT: HOLLOMAN AFB RI/FS
DATE INSTALLED: 28 AUG 91	STARTED: 1330	COMPLETED: 1700	LOCATION (Coordinates or Station): 30, 33
ELEVATION TOP OF CASING: 4102.3			SIGNATURE OF INSPECTOR/INSTALLER: TAC
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-30&33-04

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



WELL DEVELOPMENT

METHOD: See well development record

TIME SPENT DEVELOPING:

VOLUME OF WATER REMOVED:

VOLUME OF WATER ADDED:

DESCRIPTION OF PREDEVELOPMENT WATER:

DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS

DATE/TIME/LEVEL: 15 OCT 91/1630/23.53 ft bgl

04 NOV 91/1400/21.76 ft bmp

DEPTH FROM TOP CASING AFTER DEVELOPMENT:

560

SS-39

SUPPLEMENTAL RFI BORING LOGS

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER HA3901R

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DATE STARTED 5/18/06 **COMPLETED** 5/18/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** _____ **AT END OF DRILLING** ---

NOTES Waste encountered; hole collapsed frequently **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
				Light brown silty SAND	0.0
1		SM		Piece of wire	0.0
2					
	HGL-HA3901R-0204			Plastic bag	
2.5					
3		SM		Medium brown, very fine silty SAND, roots and root staining	0.0
4				Silty SAND, very dry, very fine with some gravel chunks	
					0.0
5					0.0
6		SM			0.0
7					
	HGLHA3901R0708				0.0
8					0.0
8.5					
				Bottom of hole at 8.5 feet.	0.0
					0.0

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/21/07

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER HA3902R

CLIENT AFCEE
PROJECT NAME RFI Field Work
PROJECT NUMBER AFC002-037-04-11-05
PROJECT LOCATION Holloman AFB (SS-39)
DATE STARTED 5/18/06 **COMPLETED** 5/18/06
GROUND ELEVATION _____ **HOLE SIZE** 2"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY S. Gillette **CHECKED BY** _____
AT END OF DRILLING ---
NOTES No waste encountered; Fallout point of Western drainage ditch
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0				Light brown, silty SAND with 2" gravel pieces	0.0
1					0.0
2		SM			
3	HGLHA3902R				0.0
3.0				Medium brown, silty SAND, dry	
4					0.0
5					0.0
6		SM			0.0
7					0.0
8					
9	HGLHA3902				0.0
9.0				Bottom of hole at 9.0 feet.	0.0

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/21/07

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER SB3901R

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DATE STARTED 5/18/06 **COMPLETED** 5/18/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** _____ **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** —

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1					Grout or concrete-dark gray, concrete pebbles	0.0
2						0.0
3	HGLSB3901R		SM		2.0 Light brown silty SAND matrix, 2" pebbles	
4					3.0 Light brown, SAND, sugary-fine, no odor	0.0
5		60% Recovery from 2-3' bgs				0.0
6			SM		Gravel and grout in light brown silty SAND matrix	0.0
7						0.0
8						0.0
9	HGLSB3901R		SM		8.0 Medium brown silty SAND, medium to fine grain, increasing moisture with depth	0.0
10					10.0	
					Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1_SS-39.GPJ_GINT US.GDT 5/21/07

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER SB3902R

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DATE STARTED 5/18/06 **COMPLETED** 5/18/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** —

LOGGED BY S. Gillette **CHECKED BY** _____ **AT END OF DRILLING** —

NOTES Waste encountered **AFTER DRILLING** —

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1				Light gray, grout and gravel	0.0
2				2.0	0.0
3	SB3902R-0204			Medium brown, silty SAND, dry	0.0
4					
5		SM		Slough from top gravel	0.0
6					0.0
7				6.5 Dark brown silty SAND with red precipitate	0.0
8		SM			
9	SB3902R-0810			White crystalline precipitate in brown silty SAND matrix 9.0	3.8
10		SM		Black silty SAND, strong odor, 10-12 pieces of curved 3mm diameter plastic 10.0	9.7
				Bottom of hole at 10.0 feet.	62.7

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/21/07

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER SB3917

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DATE STARTED 5/18/06 **COMPLETED** 5/18/06 **GROUND ELEVATION** _____ **HOLE SIZE** 2.5"

DRILLING CONTRACTOR Bhate/ESN **GROUND WATER LEVELS:**

DRILLING METHOD DPT **AT TIME OF DRILLING** ---

LOGGED BY S. Gillette **CHECKED BY** _____ **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					
1		SM		Light brown silty SAND, very fine, with 1" concrete or grout pieces	0.0
2					0.0
3	HGLSB3917-0204				0.0
4					0.0
				4.0	
5		SM		Medium brown silty SAND	0.0
6					0.0
				6.4	
7		SW		Silty SAND, very fine, well-sorted, fine to medium grain, somewhat moist	0.0
8					0.0
				8.0	
9		SM		Reddish-brown, silty SAND, hard, with black and white crystalline precipitate	
				9.0	
10	HGLSB3917-0910	SM		Light yellowish-brown silty SAND, very fine grain	0.0
				10.0	
				Bottom of hole at 10.0 feet.	0.0

HGL_BOREHOLE_1_SS-39.GPJ GINT US.GDT 5/21/07

SS-39

SUPPLEMENTAL RFI MONITORING WELL LOGS AND WELL CONSTRUCTION INFORMATION

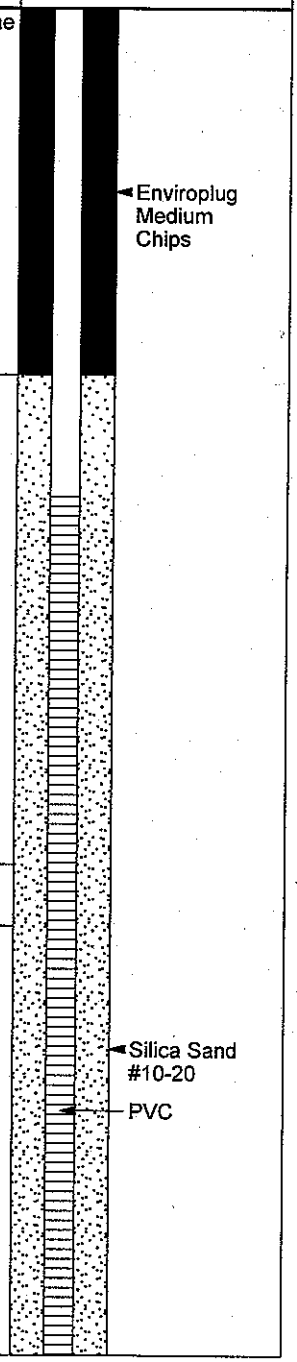
HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW39-05

CLIENT AFCEE
PROJECT NAME RFI Field Work
PROJECT NUMBER AFC002-037-04-11-05
PROJECT LOCATION Holloman AFB (SS-39)
DATE STARTED 6/14/06 **COMPLETED** 6/15/06
GROUND ELEVATION _____ **HOLE SIZE** 6.25"
DRILLING CONTRACTOR ESN
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING ---
LOGGED BY Gillette/Gerike **CHECKED BY** _____
AT END OF DRILLING ---
NOTES Logged from soil cuttings
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0				
1–3		SP		10R 8/2 Grayish orange pink, SAND, damp, loose, clean, subangular to subrounded, fine grain, poorly graded
3.0				
4–7		SM		5YR 7/2 Grayish orange pink, fine and very fine SAND with silt, wet, poorly graded
7.0				
7.5		SP		5YR 8/4 poorly-graded SAND, moderate orange pink, wet
8–11		SP-SM		Very fine SAND, some silt, poorly graded

WELL DIAGRAM



HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/15/07

(Continued Next Page)

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW39-05

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
11				Very fine SAND, some silt, poorly graded *(continued)*	
12		SP-SM			
13				5R 8/2 Grayish pink, less wet (less soupy cuttings), fine and very fine SAND, some silt, caliche fragments, poorly graded, trace dark minerals, no obvious felspar, subrounded grains	
14				14.0	
				Bottom of hole at 14.0 feet.	

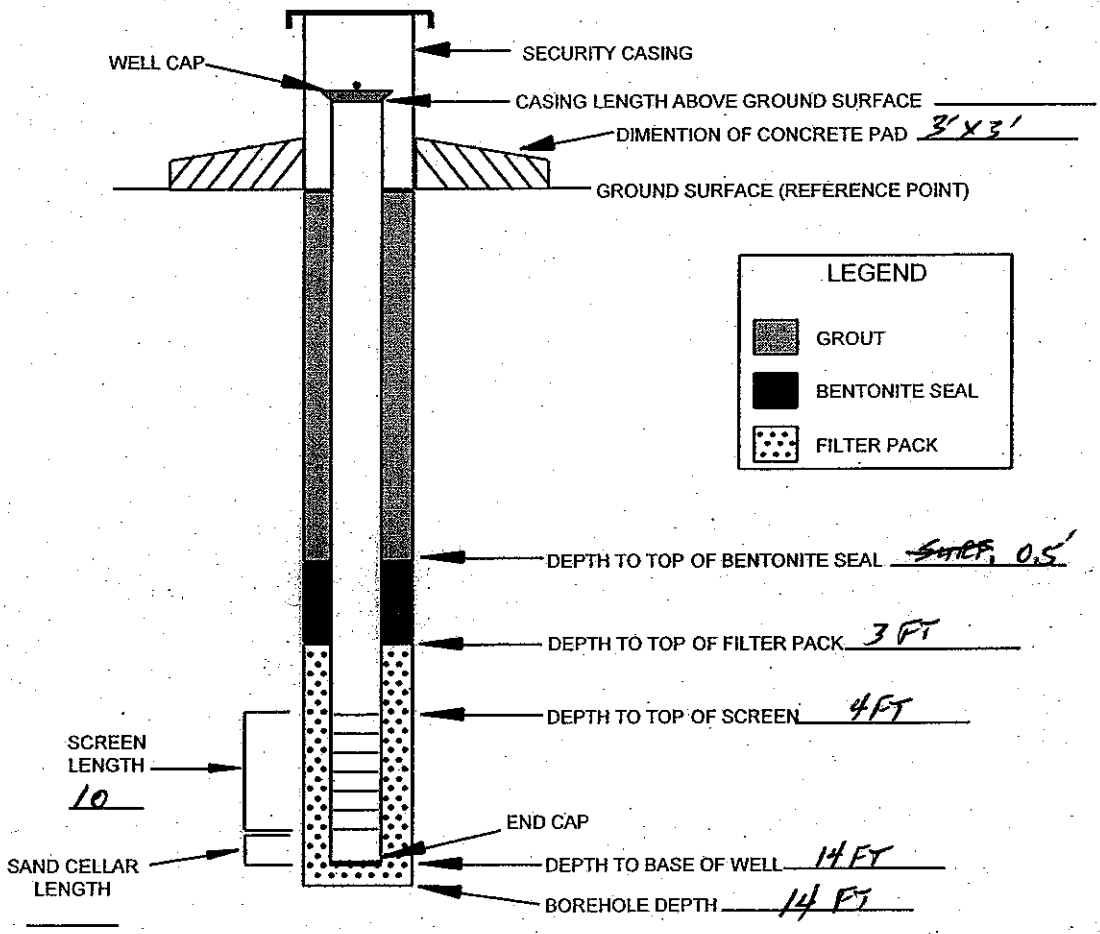
HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/15/07

HGL HydroGeologic, Inc WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: GERIKE
DRILLING CONTRACTOR: ~~ENS~~ ESN
DRILLING TECHNIQUE: HSA
AUGER SIZE AND TYPE: 6.25 OD
BOREHOLE IDENTIFICATION: MW39-05
BOREHOLE DIAMETER: 6.25"
WELL IDENTIFICATION:
WELL CONSTRUCTION START DATE: 6-14-06
WELL CONSTRUCTION COMPLETE DATE: ~~6-14-06~~ 6-15-06
SCREEN MATERIAL: PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 4-14
CASING MATERIAL: PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: SILICA SAND
GRADIATION: #10-20
AMOUNT OF FILTER PACK USED: 5 ea 50 lb. bags
TYPE OF BENTONITE: ENVIROPLUG MED. CHIPS
AMOUNT BENTONITE USED: 1 BAG (50 lb)
TYPE OF CEMENT:
AMOUNT CEMENT USED:
GROUT MATERIALS USED: CHIPS TO SURF.
DIMENSIONS OF SECURITY CASING: 4' x 4" x 5'
TYPE OF WELL CAP: J-PLUG
TYPE OF END CAP: FLUSH THREAD
COMMENTS:

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

INSTALLED BY: ~~ENS~~ ESN ~~GILLETTE~~/GERIKE
INSTALLATION OBSERVED BY: Gillette/Gerike
DISCREPANCIES:

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
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Fax: 703-471-4180

WELL NUMBER MW39-06

CLIENT AFCEE
PROJECT NAME RFI Field Work
PROJECT NUMBER AFC002-037-04-11-05
PROJECT LOCATION Holloman AFB (SS-39)
DATE STARTED 6/13/06 **COMPLETED** 6/13/06
GROUND ELEVATION ___ **HOLE SIZE** 6.25
DRILLING CONTRACTOR ESN
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 3.8 ft
LOGGED BY Gillette/Gerike **CHECKED BY** ___
AT END OF DRILLING ---
NOTES No waste encountered; log from auger cuttings
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0				Grayish orange-pink (10R 8/2), damp, silty SAND, very fine subangular sand, trace small (2-3mm) gravel	Enviroplug No. 8 Bentonite Chips
2.0		SM		Medium gravel, grayish pink (5R 8/2), caliche chunks broken by bit on lead auger	
4.0		SM		Wet cuttings ▽	
7.0		SM		Yellowish-gray (5Y 7/2), wet, very fine subangular/sub-round sand, trace feldspars and dark minerals, some silt	
11.0		SM		Wet, yellowish gray (5Y 7/2), same as above with trace medium sand and trace pea gravel	Silica Sand #10-20 PVC

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/15/07

(Continued Next Page)

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW39-06

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
11					
12		SM		Yellowish-gray (5Y 7/2), subangular and sub-round very fine sand with silt, wet, minor (<5%) feldspars and dark minerals	
13				13.0 White to very light gray (N9-N8), wet, very fine sand, subangular and sub-round, trace medium sand, less feldspars and dark minerals Bottom of hole at 13.0 feet.	

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/15/07

HGL HydroGeoLogic Inc. WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: Gillette/Genike
DRILLING CONTRACTOR: ~~ENS~~ ESN

DRILLING TECHNIQUE: HSA
AUGER SIZE AND TYPE: 6.25 OD

BOREHOLE IDENTIFICATION:
BOREHOLE DIAMETER: 6.25"
WELL IDENTIFICATION: MW39-06

WELL CONSTRUCTION START DATE: 06-13-06
WELL CONSTRUCTION COMPLETE DATE: 06-14-06

SCREEN MATERIAL: PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 5-15

CASING MATERIAL: PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: SILICA SAND
GRADIATION: # 10-20
AMOUNT OF FILTER PACK USED:

TYPE OF BENTONITE: ENVIROPLUG NO. 8
AMOUNT BENTONITE USED: 1/2 50 lb BAG

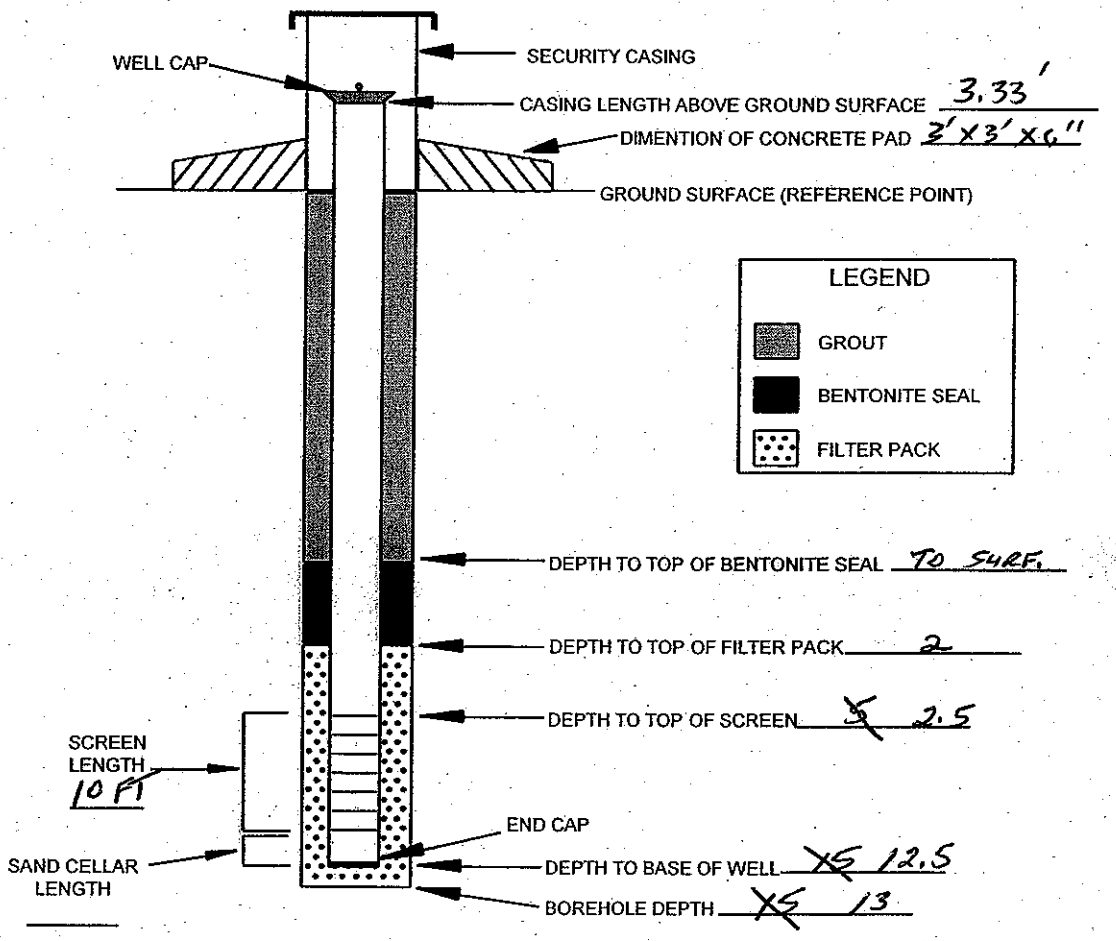
TYPE OF CEMENT: ~~N/A~~ QUICKCRETE
AMOUNT CEMENT USED: ~~N/A~~ 6 EA 80LB BAGS
GROUT MATERIALS USED: CHIPS TO ~~N/A~~ SURFACE

DIMENSIONS OF SECURITY CASING: 4" x 4" x 5'

TYPE OF WELL CAP: ~~PVC~~ J-PLUG
TYPE OF END CAP: PVC 0.3' FLUSH THREAD

COMMENTS:

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

INSTALLED BY: ENS
INSTALLATION OBSERVED BY: Gillette/Genike

DISCREPANCIES:

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW39-06D

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DATE STARTED 6/13/06 **COMPLETED** 6/14/06 **GROUND ELEVATION** _____ **HOLE SIZE** 6.25"

DRILLING CONTRACTOR ESN **GROUND WATER LEVELS:**

DRILLING METHOD HSA ▽ **AT TIME OF DRILLING** 1.0 ft

LOGGED BY Gillette/Gerike **CHECKED BY** _____ **AT END OF DRILLING** ---

NOTES No waste encountered **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
0				5YR 5/4 Moderate pink, fine SAND with silt, damp, rootlets (tracé) ???? becomes wet at 1.0 ft., trace pea gravel, subangular to subrounded	0.3	
1				▽	0.5	
2					0.5	
3		SM				
4						
5				5YR 8/1 Pinkish gray	0.4	
6				10Y 5/4 Light olive brown staining	0.4	3/8" Bentonite Chips
				6.0		
7		SP		5Y 8/1 Yellowish gray, SAND, very fine, clean	0.7	
8				7.7 5Y 8/1 Yellow gray SAND, with iron oxide staining, damp, stiff, subangular	0.8	
9		ML		5Y 8/1 Yellowish gray, SILT, with iron oxide staining, stiff, damp	0.9	
				9.5		
10				10YR 8/2 Very pale orange, SILT, stiff, damp		
				10.5		
11		SM		10YR 8/2 Very pale orange, silt and SAND, damp, stiff		

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/15/07

(Continued Next Page)

HydroGeoLogic Inc.
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WELL NUMBER MW39-06D

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11		SM		11.2	0.0
12		SP		5Y 8/1 Pinkish gray, SAND, wet, subrounded, 10% feldspar and dark minerals, fine sand 12.5	0.0
13		SP		5YR 7/2 Grayish orange pink, very fine SAND, wet, less feldspar and dark minerals 13.5	1.6
14		SM		5YR 7/2 Grayish orange pink, silt and very fine SAND, damp, very stiff	0.3
15				15.5	
16		SP		5YR 7/2 Grayish orange pink, fine SAND, wet, subangular to subrounded, trace felspar and dark minerals, soft	0.0
17				17.5	0.0
18		SM		10R 8/2 Grayish orange pink, fine SAND, silt, dry, very stiff, calcium, caliche from 17'4" to 18'6" bgs 18.5	0.0
19		SP		10R 8/2 Grayish orange pink, very fine SAND, wet, subrounded, trace felspar's, dark minerals, soft 19.2	0.0
20		SM		10YR 8/2 Grayish orange pink, very fine SAND, silt, very stiff, calcium, caliche 20.5	0.0
21		SM		10YR 8/2 Grayish orange pink, silt/SAND, dry, very stiff 21.0	0.0
22		SP		10YR 5/4 Moderate yellow brown, very fine SAND, wet, rounded, poorly graded, stiff 21.7	0.0
23		SM		10YR 5/4 Moderate yellow brown, silt/SAND, damp, very stiff 22.5	0.0
		SC		10YR 8/2 Very pale orange, clayey SAND, damp, very stiff	0.0

WELL DIAGRAM: Silica Sand #10-20; PVC

HGL_BOREHOLE_1_SS-39.GPJ GINT US.GDT 5/15/07

(Continued Next Page)

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW39-06D

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
24		SC		10YR 8/2 Very pale orange, clayey SAND, damp, very stiff *(continued)*	0.0	
25				25.0 Bottom of hole at 25.0 feet.	0.0	

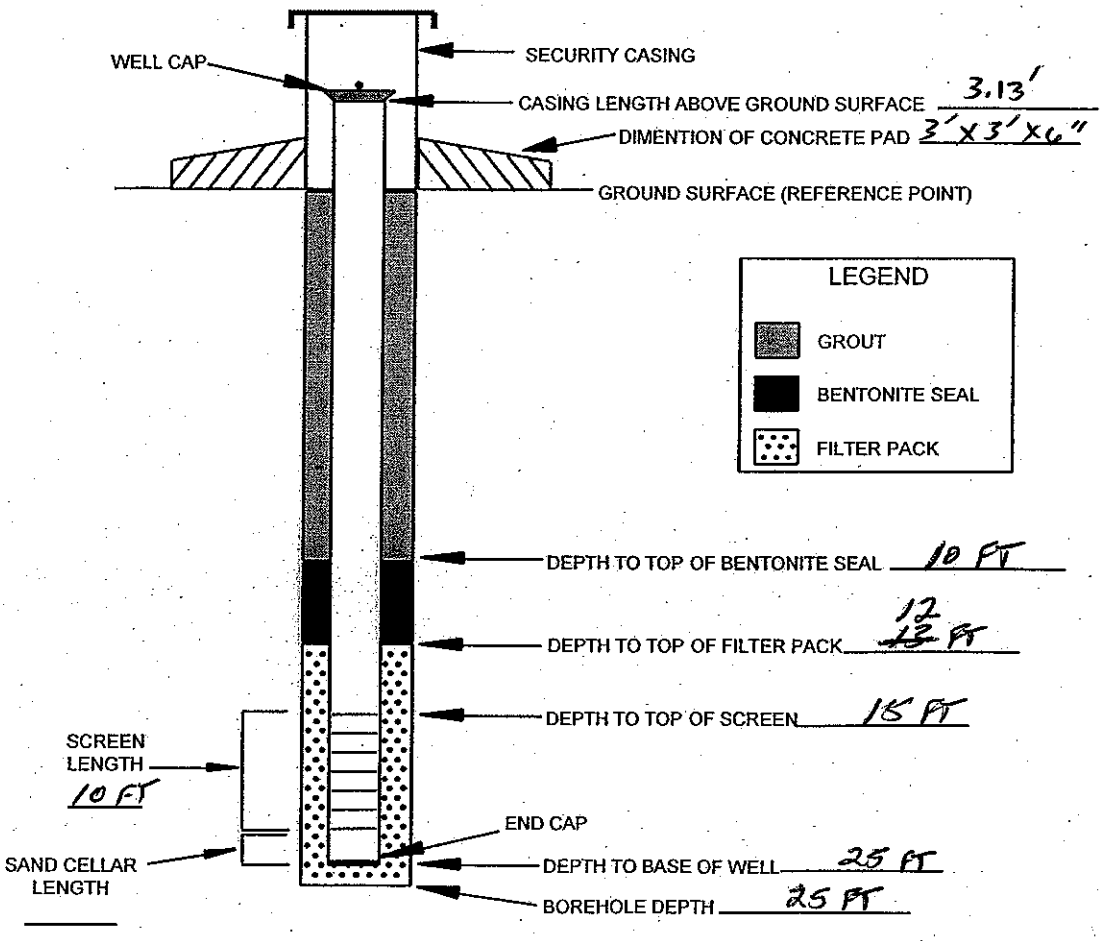
HGL HydroGeoLogic, Inc WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: G. GILLETTE
DRILLING CONTRACTOR: ESN
DRILLING TECHNIQUE: HSA
AUGER SIZE AND TYPE: 6.25" OD
BOREHOLE IDENTIFICATION: MW39 06 D
BOREHOLE DIAMETER: 6.25 OD
WELL IDENTIFICATION:
WELL CONSTRUCTION START DATE: 06-13-06
WELL CONSTRUCTION COMPLETE DATE: 06-14-06
SCREEN MATERIAL: PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 15-25
CASING MATERIAL: PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: SILICA SAND
GRADIATION: 10-20
AMOUNT OF FILTER PACK USED: 4.5 EA 50lb bags
TYPE OF BENTONITE: 3/8" CHIPS
AMOUNT BENTONITE USED: ~1.5 50 lb. bags
TYPE OF CEMENT: PORTLAND
AMOUNT CEMENT USED: 2 bgs
GROUT MATERIALS USED: ~0.3 bags
GROUT MIX
DIMENSIONS OF SECURITY CASING: 4" X 4' X 5'
TYPE OF WELL CAP: J-PLUG
TYPE OF END CAP: PVC 0.30'

COMMENTS: USED 7.5 EA 80 LB. BAGS QUICKCRETE FOR SECURITY CASING & PAD.

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

INSTALLED BY: ESN
INSTALLATION OBSERVED BY: GILLETTE/ GLOVER

DISCREPANCIES:

HydroGeoLogic Inc.
1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

WELL NUMBER MW39-07

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

DATE STARTED 6/14/06 **COMPLETED** 6/14/06 **GROUND ELEVATION** _____ **HOLE SIZE** 6.25"

DRILLING CONTRACTOR ESN **GROUND WATER LEVELS:**

DRILLING METHOD HSA ▽ **AT TIME OF DRILLING** 3.6 ft

LOGGED BY Gillette/Gerike **CHECKED BY** _____ **AT END OF DRILLING** ---

NOTES Logged from soil cuttings **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0					
1–4		SM		Grayish-orange (10YR 7/4), SAND with silt, damp, poorly graded, subangular-subround, <5% dark minerals and feldspars	Enviroplug Medium Chips
4.0				Pale yellowish-brown (10YR 6/2), SAND wish silt, wet, mostly sub-round grains, fine and very fine sand, porrly graded, caliche fragments	
5–11		SM			Silica Sand #10-20; PVC

HGL_BOREHOLE_1 SS-39.GPJ GINT US.GDT 5/15/07

(Continued Next Page)

HydroGeoLogic Inc.
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Herndon VA 20170
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Fax: 703-471-4180

WELL NUMBER MW39-07

CLIENT AFCEE **PROJECT NAME** RFI Field Work

PROJECT NUMBER AFC002-037-04-11-05 **PROJECT LOCATION** Holloman AFB (SS-39)

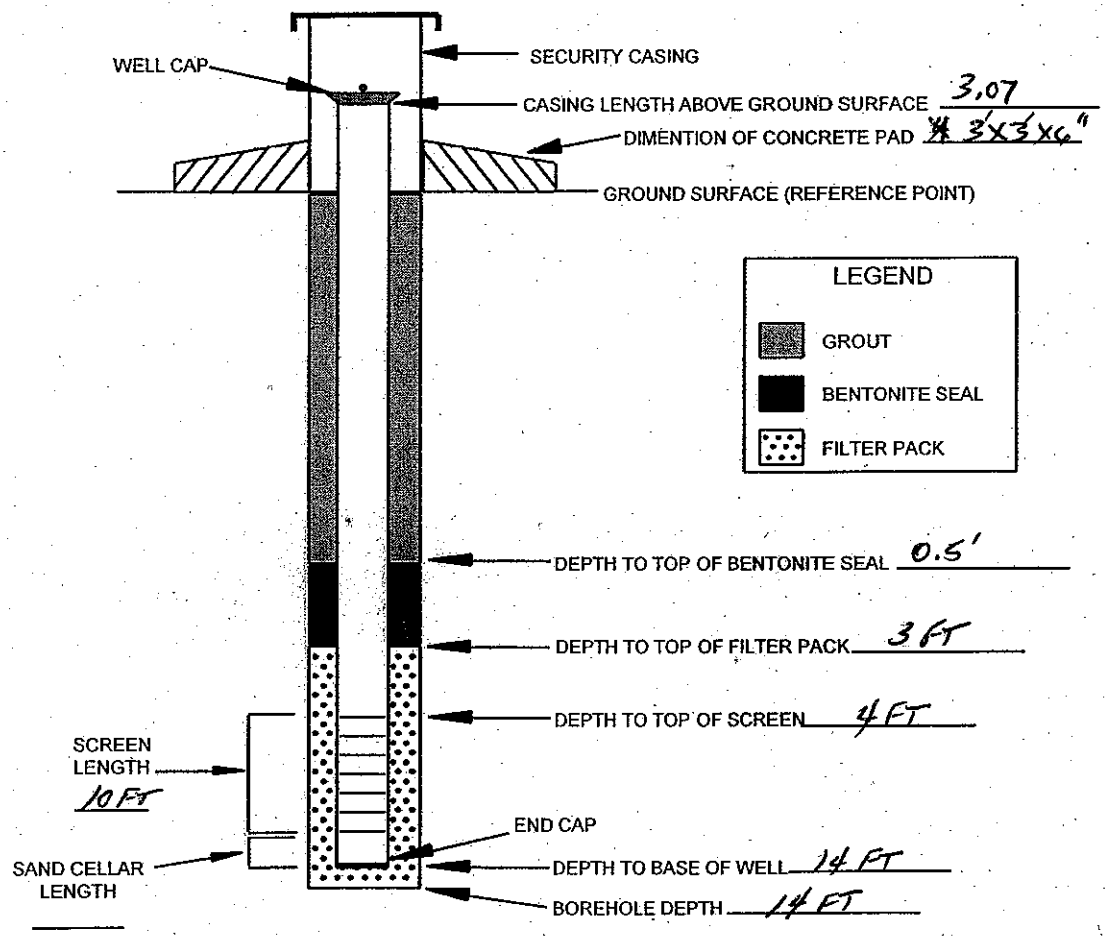
DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
11				Pale yellowish-brown (10YR 6/2), SAND wish silt, wet, mostly sub-round grains, fine and very fine sand, porrly graded, caliche fragments *(continued)*	
12				Turning to very fine sand	
13		SM		Turning to very fine sand *(continued)*	
14		SM		Pale yellowish-brown (10YR 6/2), very fine quartz SAND, sub-round with silt and caliche fragments, wet, <5% dark minerals and feldspars	
				14.0 Bottom of hole at 14.0 feet.	

HGL HydroGeoLogic, Inc WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: G. GERIKE
DRILLING CONTRACTOR: ESN
DRILLING TECHNIQUE: HSA
AUGER SIZE AND TYPE: 6.25" OD
BOREHOLE IDENTIFICATION:
BOREHOLE DIAMETER: 6.25"
WELL IDENTIFICATION: MW-39-07
WELL CONSTRUCTION START DATE: 06-14-06
WELL CONSTRUCTION COMPLETE DATE: 06-14-06
SCREEN MATERIAL: PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 4-14 FT BGS
CASING MATERIAL: PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: SILICA SAND
GRADIATION: # 10-20
AMOUNT OF FILTER PACK USED: 3.5 BAGS 50 LBS. EA.
TYPE OF BENTONITE: ENVIROPLUG MEDIUM CHIPS.
AMOUNT BENTONITE USED: 1 EA 50 LB BAG
TYPE OF CEMENT: QUICKCRETE
AMOUNT CEMENT USED: 7 EA 80 lb BAGS
GROUT MATERIALS USED: CHIP TO SURF.
DIMENSIONS OF SECURITY CASING: 4'x4"x 5'
TYPE OF WELL CAP: J-PLUG
TYPE OF END CAP: PVC FLUSH THREAD 0.30'
COMMENTS:

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

INSTALLED BY: ESN
INSTALLATION OBSERVED BY: Gillette / Gerike
DISCREPANCIES:

HGL HydroGeoLogic, Inc

BORING LOG

Borehole ID: MW-39-08
Sheet 1 of 1

Project Name: Supple RFI	Project Number: AFCOOJ-037-04	LTCCODE (IRPIMS)	Location: MW-39-08 / Site ID: SS-39	LPRCODE (IRPIMS)
Drilling Company: HGL	Driller: J. Gillette	Ground Elevation	Total Drilled Depth: 8 ft	
Drilling Equipment: HAND Auger / Drilling Method: HAND Auger / Borehole Diameter: 3"		Date/Time Drilling Started: 7/11/06	Date/Time Total Depth Reached: 7/15/06	
Type of Sampling Device: HAND Augers		Water Level (bgs): First 1.5 ft	Final 2.83' (gauged)	
Sample Hammer: Type / Driving Wt. / Drop		Hydrogeologist	Checked by/Date	
Location Description (include sketch in field logbook)				

Depth	Interval	Recovery	Blow Counts	Description (Include lithology, grain size, sorting, angularity, Munsell color name & notation, minerology, bedding, plasticity, density, consistency, etc., as applicable)	USCS Symbol	Lithology	Water Content	Remarks (Include all sample types & depth, odor, organic vapor measurements, etc.)
0				silty SAND (f-mgrd) w/ clay, wet, loose	SM	0		
2				silty/sandy CLAY, wet, stiff	CL	0		2 ft
						0		
						0		
						0		
						0		
						0		
8				BOB @ 8 ft generated by S. Fuoco for S. Gillette				

HGL HydroGeoLogic, Inc. WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: S. Gillette

DRILLING CONTRACTOR: HGL

DRILLING TECHNIQUE: Hand Auger
AUGER SIZE AND TYPE: 3" ; st. Steel

BOREHOLE IDENTIFICATION: MW-39-08
BOREHOLE DIAMETER: 3"
WELL IDENTIFICATION: MW-39-08

WELL CONSTRUCTION START DATE: 7/11/06
WELL CONSTRUCTION COMPLETE DATE: 7/11/06

SCREEN MATERIAL: Sch 40 PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT):

CASING MATERIAL: Sch 40 PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: Pre-Pack Well
GRADIATION:
AMOUNT OF FILTER PACK USED:

TYPE OF BENTONITE: NA
AMOUNT BENTONITE USED: NA

TYPE OF CEMENT: NA
AMOUNT CEMENT USED: NA
GROUT MATERIALS USED: NA

DIMENSIONS OF SECURITY CASING: NA

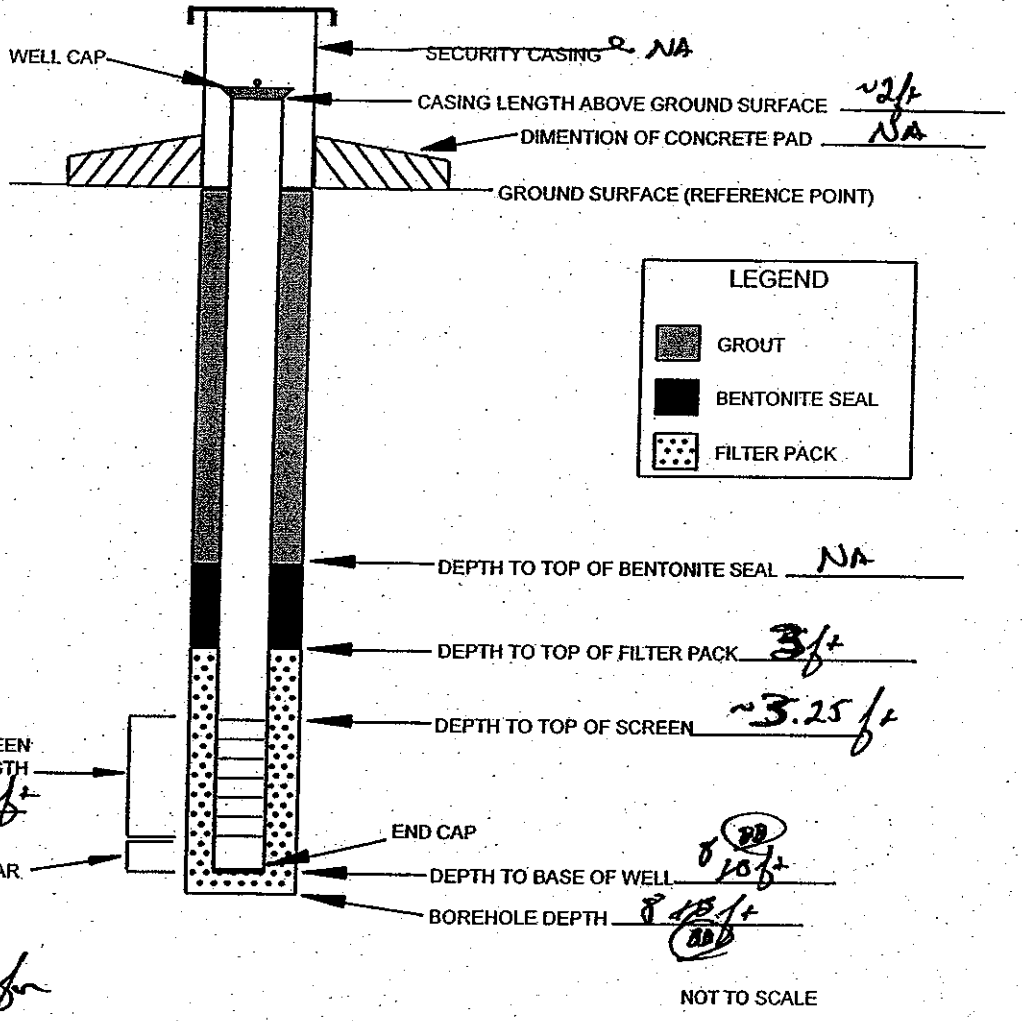
TYPE OF WELL CAP: 2". Locking Well Cap
TYPE OF END CAP: 2" Sch 40 PVC

COMMENTS: installed / removed for supplemental RFI report

SPECIAL CONDITIONS
(describe and draw)

2" Pre-pack well w/ 1/4" screen/filter pack

Installed



INSTALLED BY: S. Gillette for S. Bridgeman

INSTALLATION OBSERVED BY:

DISCREPANCIES:

HGL HydroGeoLogic, Inc

BORING LOG

Borehole ID: MW-39-09
Sheet 1 of 1

Project Name: Suppl RFI	Project Number: AFC002-037-04	LTCCODE (IRPIMS)	Location: MW-39-09 / Site ID: SS-39	LPRCODE (IRPIMS)
Drilling Company: HGL	Driller: S. Gillette	Ground Elevation	Total Drilled Depth: 8 ft	
Drilling Equipment: HAND Auger	Drilling Method: HAND Auger	Borehole Diameter: 3"	Date/Time Drilling Started: 7/11/07	Date/Time Total Depth Reached: 7/15/07
Type of Sampling Device: HAND AUGER			Water Level (bgs): First 1 ft	Final 2.09 gauged
Sample Hammer — Type: Driving Wt.: Drop:			Hydrogeologist	Checked by/Date
Location Description (include sketch in field logbook)				

Depth	Interval	Recovery	Blow Counts	Description (Include lithology, grain size, sorting, angularity, Munsell color name & notation, minerology, bedding, plasticity, density, consistency, etc., as applicable)	USCS Symbol	PID/Photoion	Water Content	Remarks (Include all sample types & depth, odor, organic vapor measurements, etc.)
0				silty SAND w/ clay (fine grad), wet (loose)	SM	0.0		
2'				- becomes clayier		0.0		
						0.0		
						0.0		
6'				— sandy/silty CLAY, dk brown, wet	CL	0.0		6 ft
						0.0		
				Refusal of HAND Auger @ 8 ft				
EOB 8				BOB @ 8 ft (due to lithology)				
				Generated by B. Boone for S. Gillette				

HGL HydroGeoLogic, Inc WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: S. Gillette

DRILLING CONTRACTOR: HGL

DRILLING TECHNIQUE: Hand Auger
AUGER SIZE AND TYPE: 3"; SS steel

BOREHOLE IDENTIFICATION: MW-39-09
BOREHOLE DIAMETER: 3"
WELL IDENTIFICATION: MW-39-09

WELL CONSTRUCTION START DATE: 7/11/06
WELL CONSTRUCTION COMPLETE DATE: 7/11/06

SCREEN MATERIAL: Sch 40 PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 5.0 ft

CASING MATERIAL: Sch 40 PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: Prepack Well
GRADIATION:
AMOUNT OF FILTER PACK USED: 1/4" surrounding well

TYPE OF BENTONITE:
AMOUNT BENTONITE USED: NA

TYPE OF CEMENT:
AMOUNT CEMENT USED: NA
GROUT MATERIALS USED:

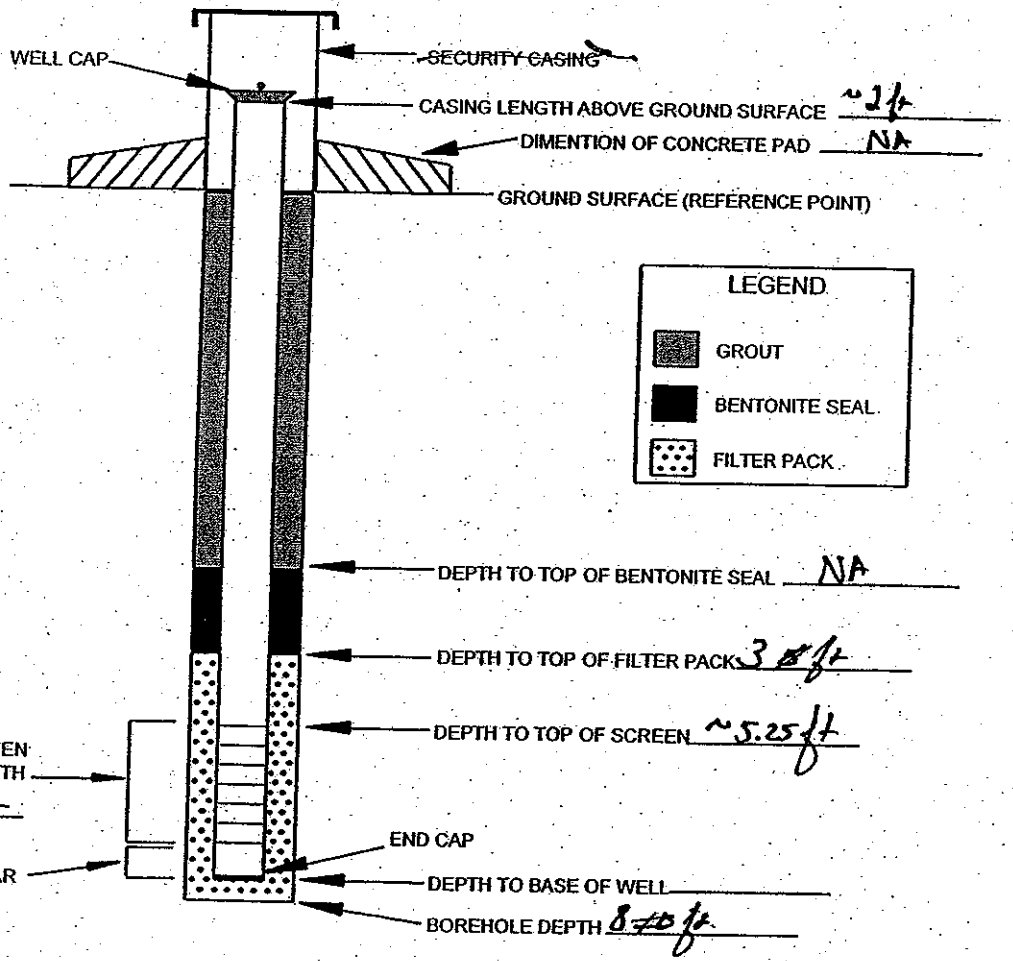
DIMENSIONS OF SECURITY CASING: NA

TYPE OF WELL CAP: 2"; Locking Well Cap
TYPE OF END CAP: 2"; Sch 40 PVC

COMMENTS:

SPECIAL CONDITIONS
(describe and draw)

2" Pre-pack well installed for supplem. RFI activities w/ 1/4" filter pack around well



NOT TO SCALE

INSTALLED BY: B Soderberg for S. Gillette

INSTALLATION OBSERVED BY:

DISCREPANCIES:

HGL HydroGeoLogic, Inc

BORING LOG

Borehole ID: MW-39-10
Sheet 1 of 1

			Location: MW-39-10	
Project Name: Supple RFI	Project Number: AFCO02-037-04	LTCCODE (IRPIMS)	Site ID: SS-39	LPRCODE (IRPIMS)
Drilling Company: HGL	Driller: S. Gillette	Ground Elevation	Total Drilled Depth: 5.02'	
Drilling Equipment: HAND Auger / Drilling Method: HAND Auger / Borehole Diameter: 3"		Date/Time Drilling Started: 7/14/06	Date/Time Total Depth Reached: 7/15/07	
Type of Sampling Device: HAND Auger		Water Level (bgs) First	Final: 1.62 gauged	
Sample Hammer Type: Driving Wt.: Drop:		Hydrogeologist	Checked by/Date	
Location Description (include sketch in field logbook)				

Depth	Interval	Recovery	Blow Counts	Description (Include lithology, grain size, sorting, angularity, Munsell color name & notation, minerology, bedding, plasticity, density, consistency, etc., as applicable)	USCS Symbol	Lithology	Water Content	Remarks (Include all sample types & depth, odor, organic vapor measurements, etc.)
0				silty SAND (f. grained) w/ clay, wet	(SM)			
				- becomes clayier		0		
						0		
						0		
				- silty CLAY				4/1
					(CL)	0		
5				5.02 @ 5 ft (Refusal of HAND Auger due to lithology)				
				Generated by R. Rivera for S. Gillette				

HGL HydroGeoLogic, Inc WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: S. Gillette

DRILLING CONTRACTOR: HGL

DRILLING TECHNIQUE: Hand Auger
AUGER SIZE AND TYPE: ~~Hand~~ 3"

BOREHOLE IDENTIFICATION: MW-39-10
BOREHOLE DIAMETER: 3"
WELL IDENTIFICATION: MW-39-10

WELL CONSTRUCTION START DATE: 7/11/06
WELL CONSTRUCTION COMPLETE DATE: 7/15/06

SCREEN MATERIAL: Sch 40 PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 5ft

CASING MATERIAL: Sch 40 PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: Prepack Well
GRADIATION:
AMOUNT OF FILTER PACK USED: 1/4" filter pack around ea

TYPE OF BENTONITE:
AMOUNT BENTONITE USED: NA

TYPE OF CEMENT:
AMOUNT CEMENT USED:
GROUT MATERIALS USED: NA

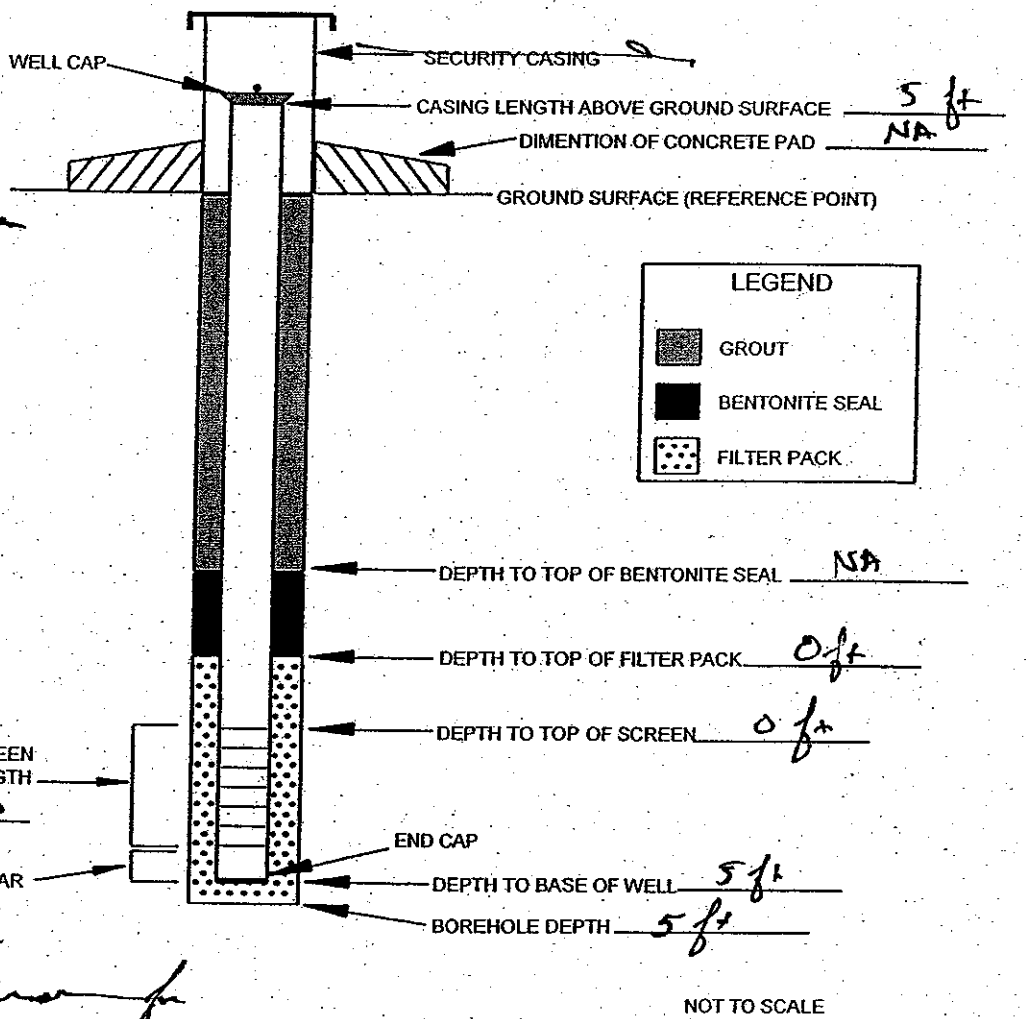
DIMENSIONS OF SECURITY CASING: NA

TYPE OF WELL CAP: 2" Locking Well Cap
TYPE OF END CAP: 2" Sch 40 PVC

COMMENTS:

SPECIAL CONDITIONS
(describe and draw)

2" Pre-pack well set for gw sampling - installed/removed after gw sampling complete



NOT TO SCALE

INSTALLED BY: S. Gillette

INSTALLATION OBSERVED BY:

DISCREPANCIES:

HGL HydroGeoLogic, Inc

BORING LOG

Borehole ID: MW-39-11
Sheet 1 of 1

Location: MW-39-11 (39)

Project Name	Project Number	LTCCODE (IRPIMS)	Site ID	LPRCODE (IRPIMS)
Supplem. RFI	AFCO02-037-04		SS-39	

Drilling Company	Driller	Ground Elevation	Total Drilled Depth
HGL	J. Gillette		8.5 ft

Drilling Equipment	Drilling Method	Borehole Diameter	Date/Time Drilling Started	Date/Time Total Depth Reached
HAND Auger	HAND Auger	3"	7/11/06	7/15/02

Type of Sampling Device	Water Level (bgs) First	Water Level (bgs) Final
HAND Auger	2 ft	3.47' (gauged)

Sample Hammer Type	Driving Wt.	Drop	Hydrogeologist	Checked by/Date

Location Description (include sketch in field logbook)

Depth	Interval	Recovery	Blow Counts	Description (Include lithology, grain size, sorting, angularity, Munsell color name & notation, mineralogy, bedding, plasticity, density, consistency, etc., as applicable)	USCS Symbol	Lithology	Water Content	Remarks (Include all sample types & depth, odor, organic vapor measurements, etc.)
0				silty SAND (fine grad) w/ clay, (loose), wet	SM			
8.5				BOBC 8.5 ft bgs				

Generated by S. Bridenstine
S. Gillette

HGL HydroGeoLogic, Inc WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: S. Gillette

DRILLING CONTRACTOR: HGL

DRILLING TECHNIQUE: Hand Auger
AUGER SIZE AND TYPE: 3"

BOREHOLE IDENTIFICATION: MW-39-01
BOREHOLE DIAMETER: 3"
WELL IDENTIFICATION: MW-39-11

WELL CONSTRUCTION START DATE: 7/11/06
WELL CONSTRUCTION COMPLETE DATE: 7/15/06

SCREEN MATERIAL: Sch 40 PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): 5ft

CASING MATERIAL: Sch 40 PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: Pre Pack well
GRADIATION:
AMOUNT OF FILTER PACK USED: 1/4" around well

TYPE OF BENTONITE:
AMOUNT BENTONITE USED: NA

TYPE OF CEMENT:
AMOUNT CEMENT USED: NA
GROUT MATERIALS USED:

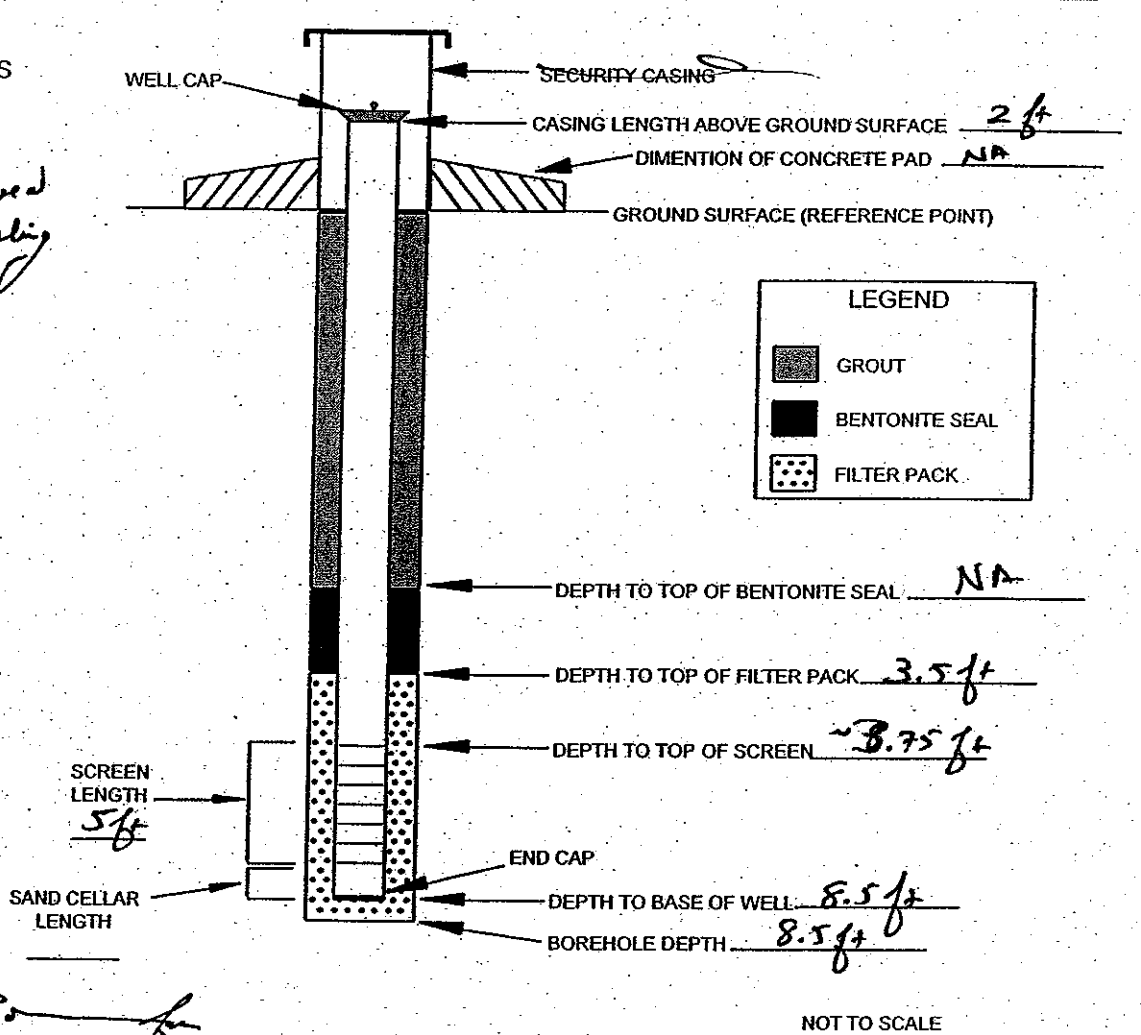
DIMENSIONS OF SECURITY CASING: NA

TYPE OF WELL CAP: 2" Locking Well Cap
TYPE OF END CAP: 2" Sch 40 PVC

COMMENTS:

SPECIAL CONDITIONS
(describe and draw)

Pre-pack well installed / removed after gas sampling



NOT TO SCALE

INSTALLED BY: S. Gillette

INSTALLATION OBSERVED BY:

DISCREPANCIES:

HGL HydroGeoLogic, Inc

BORING LOG

Borehole ID: MW-39-12
Sheet 1 of 1

			Location: MW-39-12	
Project Name: Suppl RFI	Project Number: AFC002-037-04	LTCCODE (IRPIMS)	Site ID: SS-39	LPRCODE (IRPIMS)
Drilling Company: HGL	Driller: S. Gillette	Ground Elevation	Total Drilled Depth: 8.8 ft	
Drilling Equipment: (BB) HGL HAND Auger	Drilling Method: HAND Auger	Borehole Diameter: 3"	Date/Time Drilling Started: 7/11/06	Date/Time Total Depth Reached: 7/15/06
Type of Sampling Device: HAND Auger			Water Level (bgs) First 1.5 ft	Final 3.4 ft (gauged)
Sample Hammer Type: Driving Wt.: Drop:			Hydrogeologist	Checked by/Date
Location Description (include sketch in field logbook)				

Depth	Interval	Recovery	Blow Counts	Description (Include lithology, grain size, sorting, angularity, Munsell color name & notation, minerology, bedding, plasticity, density, consistency, etc., as applicable)	USCS Symbol	Lithology	Water Content	Remarks (Include all sample types & depth, odor, organic vapor measurements, etc.)
0				silty SAND (f-m grad) w/ clay, wet, (60)c	SM			
8.8				BOB @ 8 ft				

generated by S. Gillette

AFCEE FORM BL.11

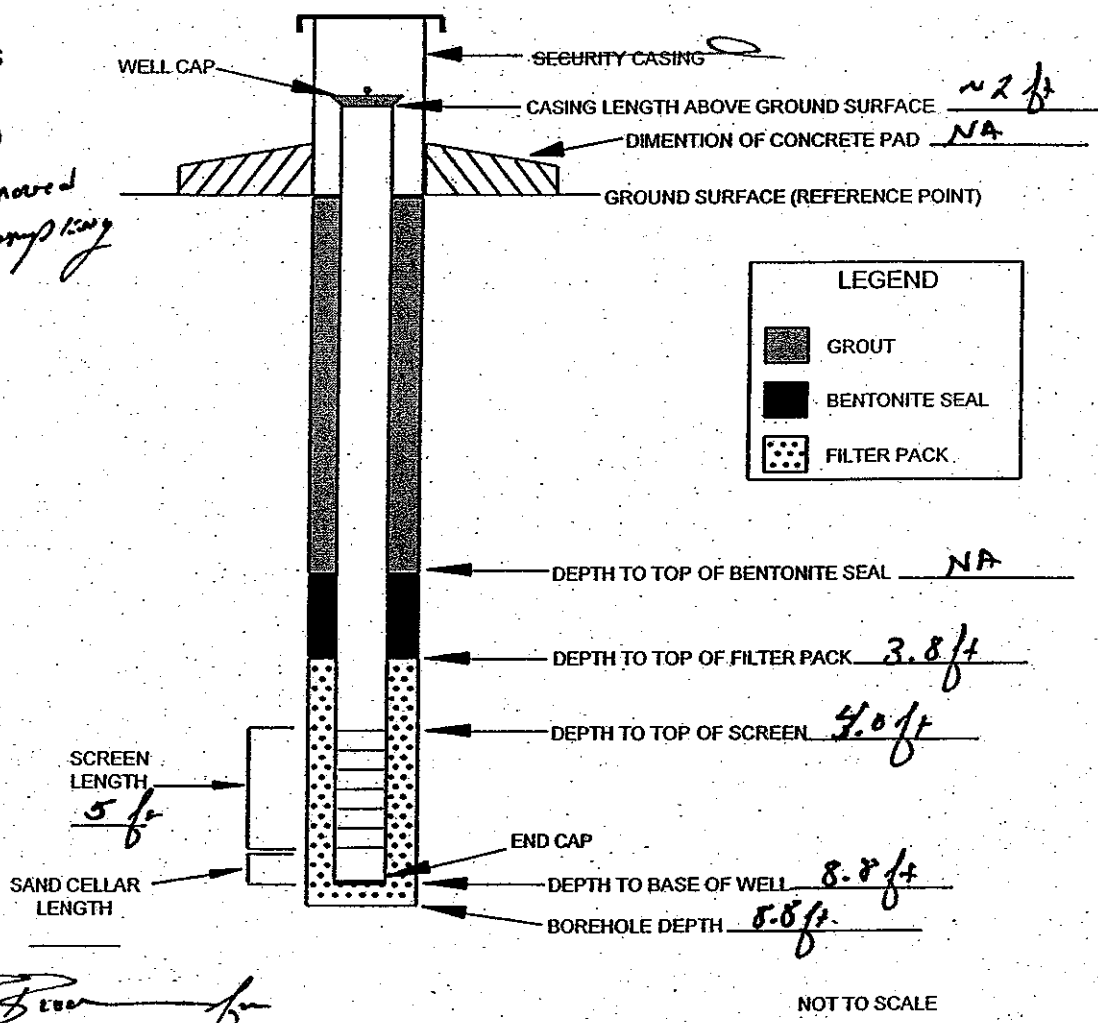
HGL HydroGeoLogic, Inc. WELL CONSTRUCTION DETAILS AND ABANDONMENT FORM

FIELD REPRESENTATIVE: S. Gillette
DRILLING CONTRACTOR: HGL
DRILLING TECHNIQUE: Hand Auger
AUGER SIZE AND TYPE: 3"
BOREHOLE IDENTIFICATION: MW-39-12
BOREHOLE DIAMETER: 3"
WELL IDENTIFICATION: MW-39-12
WELL CONSTRUCTION START DATE: 7/11/06
WELL CONSTRUCTION COMPLETE DATE: 7/15/06
SCREEN MATERIAL: Sch 40 PVC
SCREEN DIAMETER: 2"
STRATUM-SCREENED INTERVAL (FT): Sch 5 ft
CASING MATERIAL: Sch 40 PVC
CASING DIAMETER: 2"

TYPE OF FILTER PACK: Pre-Pack
GRADIATION:
AMOUNT OF FILTER PACK USED: ¼" around well
TYPE OF BENTONITE: NA
AMOUNT BENTONITE USED:
TYPE OF CEMENT:
AMOUNT CEMENT USED: NA
GROUT MATERIALS USED:
DIMENSIONS OF SECURITY CASING: NA
TYPE OF WELL CAP: 2" Well Locking Cap
TYPE OF END CAP: 2" Sch 40 PVC
COMMENTS:

SPECIAL CONDITIONS
(describe and draw)

Pre-pack well installed / removed after gw sampling



NOT TO SCALE

INSTALLED BY: S. Gillette
INSTALLATION OBSERVED BY:

DISCREPANCIES:

SS-39

PREVIOUS INVESTIGATION BORING LOGS

HTRW DRILLING LOG

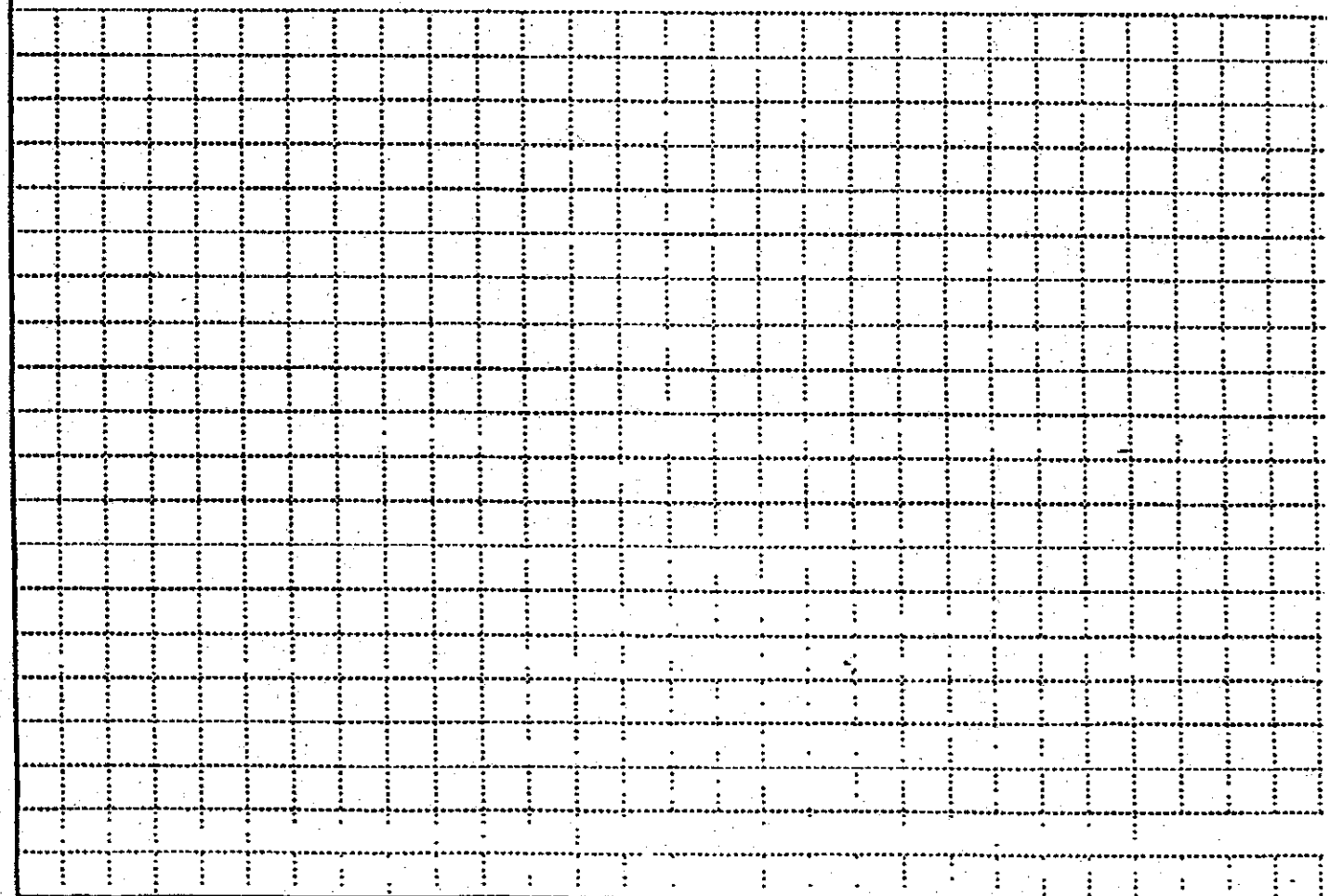
DISTRICT		HOLE NUMBER: SS39-01
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET 1 OF 2
3. PROJECT: SS-39	4. LOCATION: HOLLOMAN AFB, NM	
5. NAME OF DRILLER: Karis Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3' SS Split Spoons; 3'x1"x0.006 SS Screen; Peristaltic Pump	8. HOLE LOCATION: SEE MAP	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 5'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 8'	17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19 TOTAL NUMBER OF CORE BOXES
None			None

20 SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL COR RECOVERY
water	by 8260	—	—	—	—	%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	Bentonite	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO.
SS39	SS39-01

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER 553 (illegible)

PROJECT 5539-

INSPECTOR L. S. STEVENSON

SHEET 2 OF (illegible)

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	Gypsum Crust SAND, tan SW					begin SS sampling @ 2'
	2	SAND, brown (10YR 8/3) moist, soft, sl. plastic SM					
	3						
	4	silty fine SAND, brown (10YR 8/2), moist, soft, sl. plasticity. SM					
	5	SAND w/ silt and clay, brown (10YR 8/2) moist, plastic SM			5539-01-5		▽ water @ 5' sample screened @ 5' to 8'
	6						
	7	SAND, brown (10YR 4/4) moist, firm SW					
	8	SAND, gray (10YR 7/1), moist, firm SW					

PROJECT 5539-01

HOLE NO. 5539-01

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-

HTRW DRILLING LOG

1. COMPANY NAME: FLUOR DANIEL GTI	DISTRICT	HOLE NUMBER: SS39-02
2. DRILL SUBCONTRACTOR: —		SHEET 1 OF 2

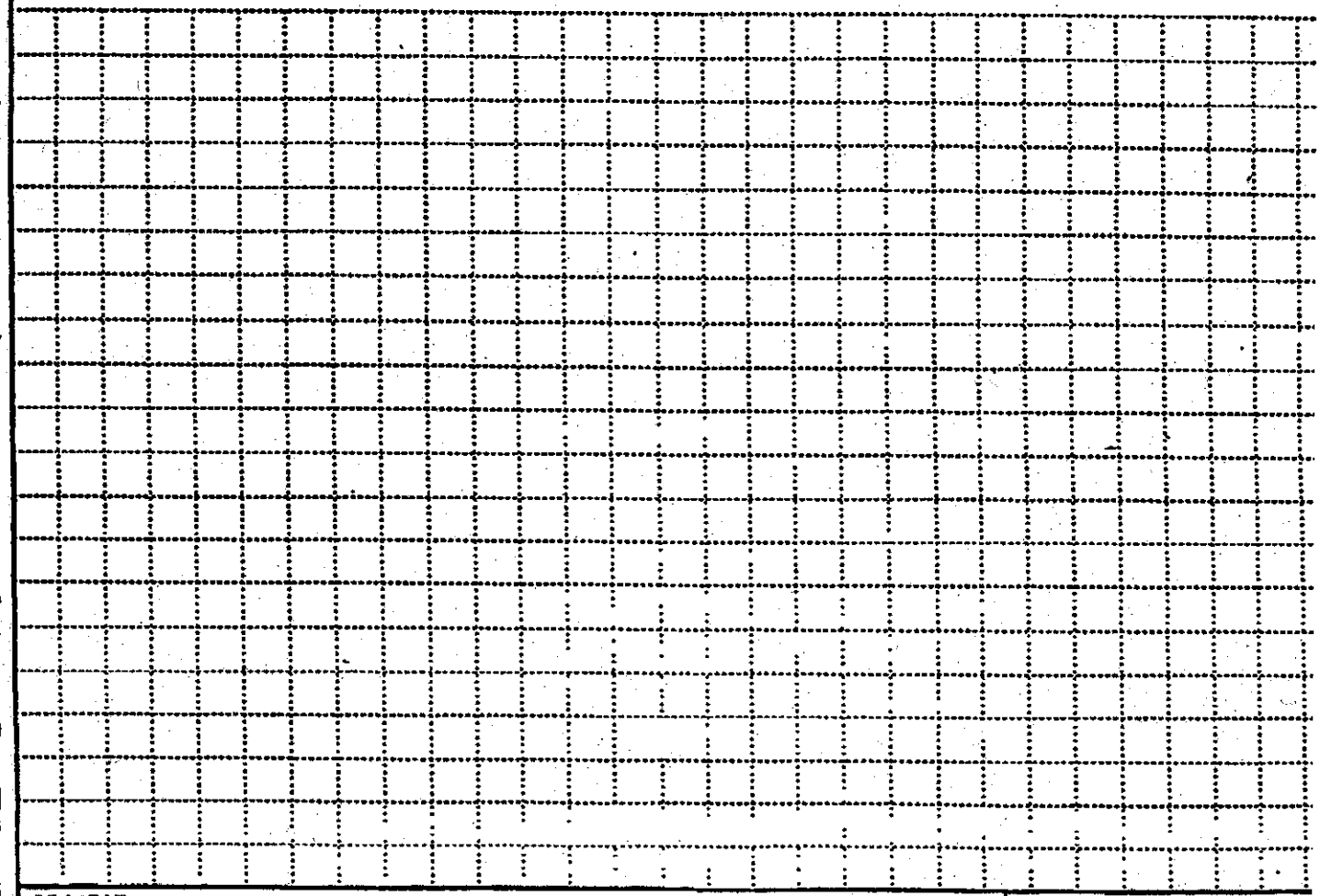
3. PROJECT: SS39	4. LOCATION: HOLLOMAN AFB, NM
5. NAME OF DRILLER: —	6. MANUFACTURER'S DESIGNATION OF DRILL: —
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: post hole; SS screen / peristaltic pump	8. HOLE LOCATION: See Map
	9. SURFACE ELEVATION: —
	10. DATE STARTED: 18 MAY 1998 / 11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: —	15. DEPTH GROUNDWATER ENCOUNTERED: 0.8'
13. DEPTH DRILLED INTO ROCK: —	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —
14. TOTAL DEPTH OF HOLE: 31'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
None			

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Water	by 8260	—	—	—	—	100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Cuttings	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO.
SS39	SS39-02

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER 5539-02

PROJECT 5539

INSPECTOR L. S. STEVENSON

SHEET 2 OF 2

ELEV (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	Sandy CLAY, red (2.5 YR 4/4), moist, hard CL			5539-02-1		Post Hole tool Clay adhere strongly to equipment, itself. Approx. 1/8" surface crus evaporite gy
	2	silty SAND, brown (2.5 YR 6/3), wet, hard grading to soft @ 2.5 ft. SM					
	3						

PROJECT 5539

HOLE NO 5539-02

ENG FORM 5056A-R, AUG 94

(Proponent: CECW

HTRW DRILLING LOG

1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: –	HOLE NUMBER: 5539-03
	DISTRICT	SHEET 1 OF 2

3. PROJECT: 5539	4. LOCATION: HOLLOMAN AFB, NM
5. NAME OF DRILLER: –	6. MANUFACTURER'S DESIGNATION OF DRILL: –
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: POST HOLE, SS screen w/ peristaltic pump	8. HOLE LOCATION: SEE MAP
	9. SURFACE ELEVATION: –
10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 1.5'
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: –
14. TOTAL DEPTH OF HOLE: 3'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): –

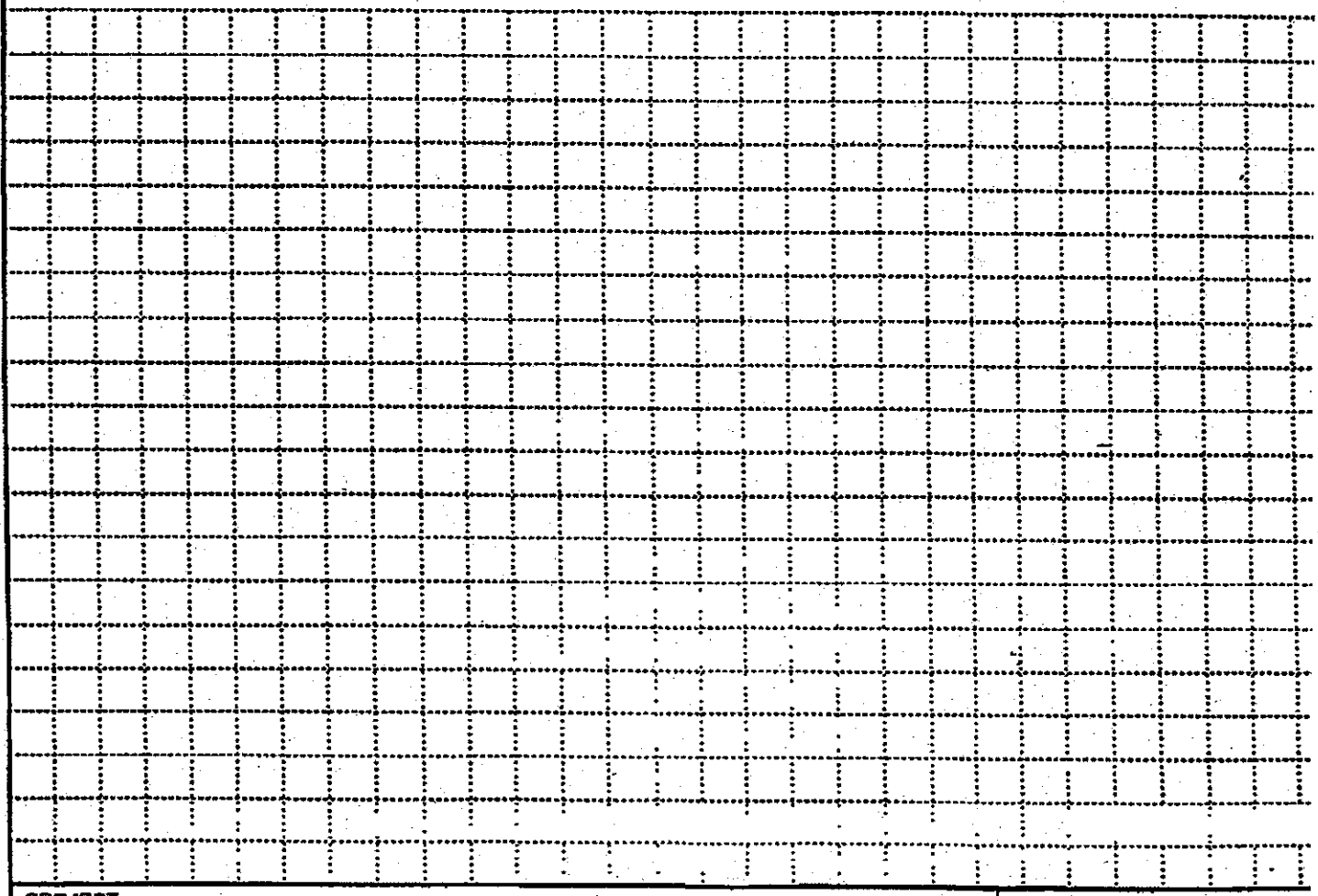
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	–	–	–

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	–	–	–	–	100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	cuttings	–	–	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO
5539	5539-03

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SS3-03

PROJECT: 5539

INSPECTOR: L. S. STEVENSON

SHEET: 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	Silty CLAY, brown (5YR3/3) moist, firm, cohesive. CL					Post Hole to 3'
	2	SAND, white (5YR7/1), moist, firm. SP					▽ water @ 2' rose to 1.5'
	3	– as above, wet, soft. SP					

PROJECT: 5539

HOLE NO. 5539-03

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-

HTRW DRILLING LOG

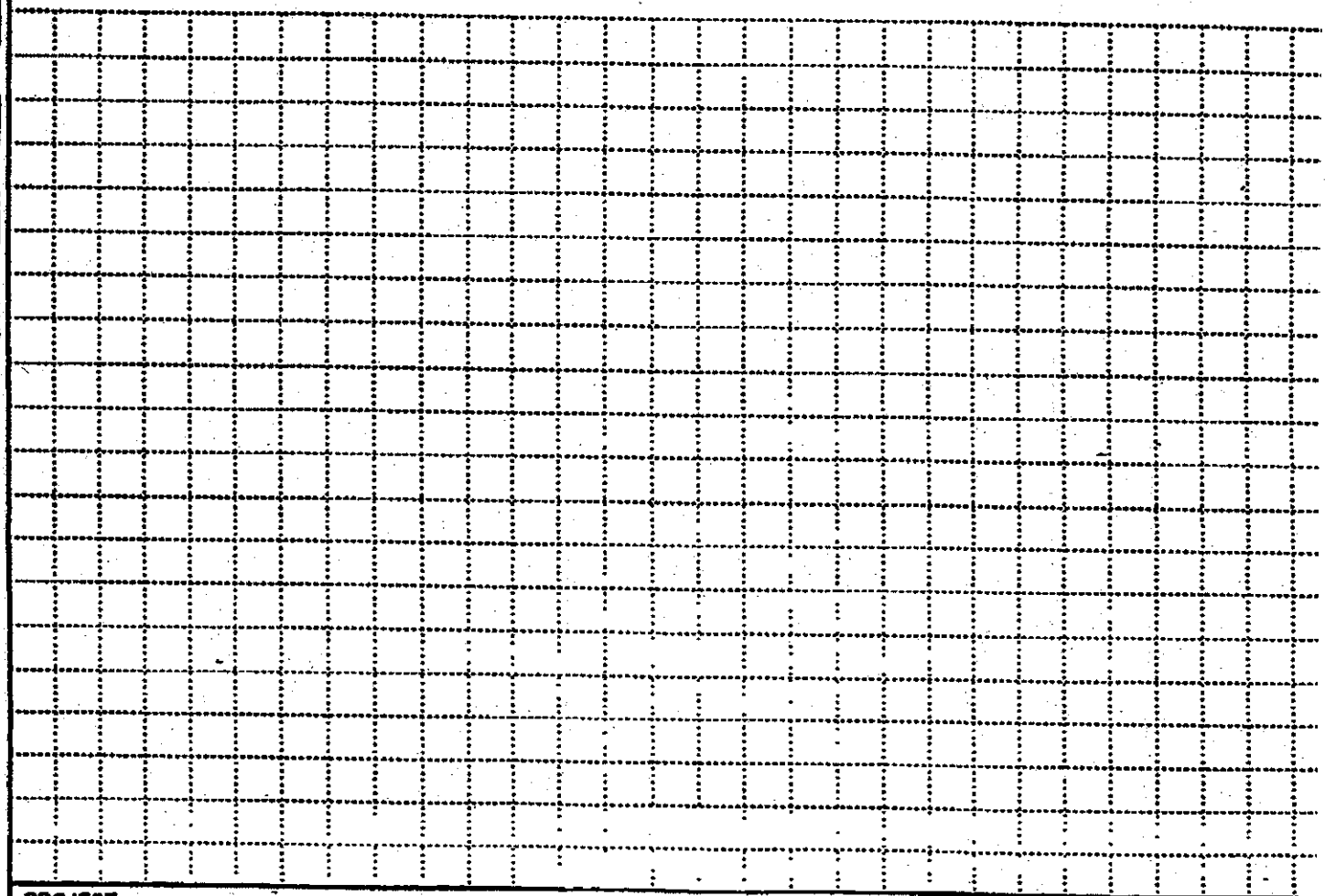
1. COMPANY NAME: FLUOR DANIEL GTI	DISTRICT	HOLE NUMBER: SS39-04
2. DRILL SUBCONTRACTOR: —		SHEET 1 OF 2 SHEETS
3. PROJECT: SS39	4. LOCATION: HOLLOMAN AFB NM	
5. NAME OF DRILLER: —	6. MANUFACTURER'S DESIGNATION OF DRILL: —	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: POST HOLE; SS Screen / Peristaltic Pump	8. HOLE LOCATION: See MAP	
	9. SURFACE ELEVATION: —	
	10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: ~3'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 3.5'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	100
22. DISPOSITION OF HOLE	**BACKFILLED**	**MONITORING WELL**	**OTHER (SPECIFY)**	**23. SIGNATURE OF INSPECTOR**		
ABANDONED	cuttings	—	—	Lee Scott Stevenson		

LOCATION SKETCH/COMMENTS

SCALE



PROJECT	HOLE NO.
SS39	SS39-04

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EC

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SS7 C

PROJECT 5539

INSPECTOR L. S. STEVENSON

SHEET 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	1	silty SAND, brown (5YR6/3) moist, soft SM					Post Hole to
	2	CLAY, brown (5YR3/3), moist, firm, "sticky", plastic CL					
	3	SAND, white (5YR 8/1), moist, firm SP					▽ water @ ~3'
	4						

PROJECT 5539

HOLE NO 5539-04

HTRW DRILLING LOG

1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: —	HOLE NUMBER: SS39-0
		SHEET 1 OF 2

3. PROJECT: SS 39	4. LOCATION
5. NAME OF DRILLER: —	6. MANUFACTURER'S DESIGNATION OF DRILL: —
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: POST HOLE; SS screen/peristaltic pump	8. HOLE LOCATION: See Map
	9. SURFACE ELEVATION: —
	10. DATE STARTED: 18 MAY 1998 / 11. DATE COMPLETED: 19 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: ~4'
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 1.8' after overnight
14. TOTAL DEPTH OF HOLE: -4'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —

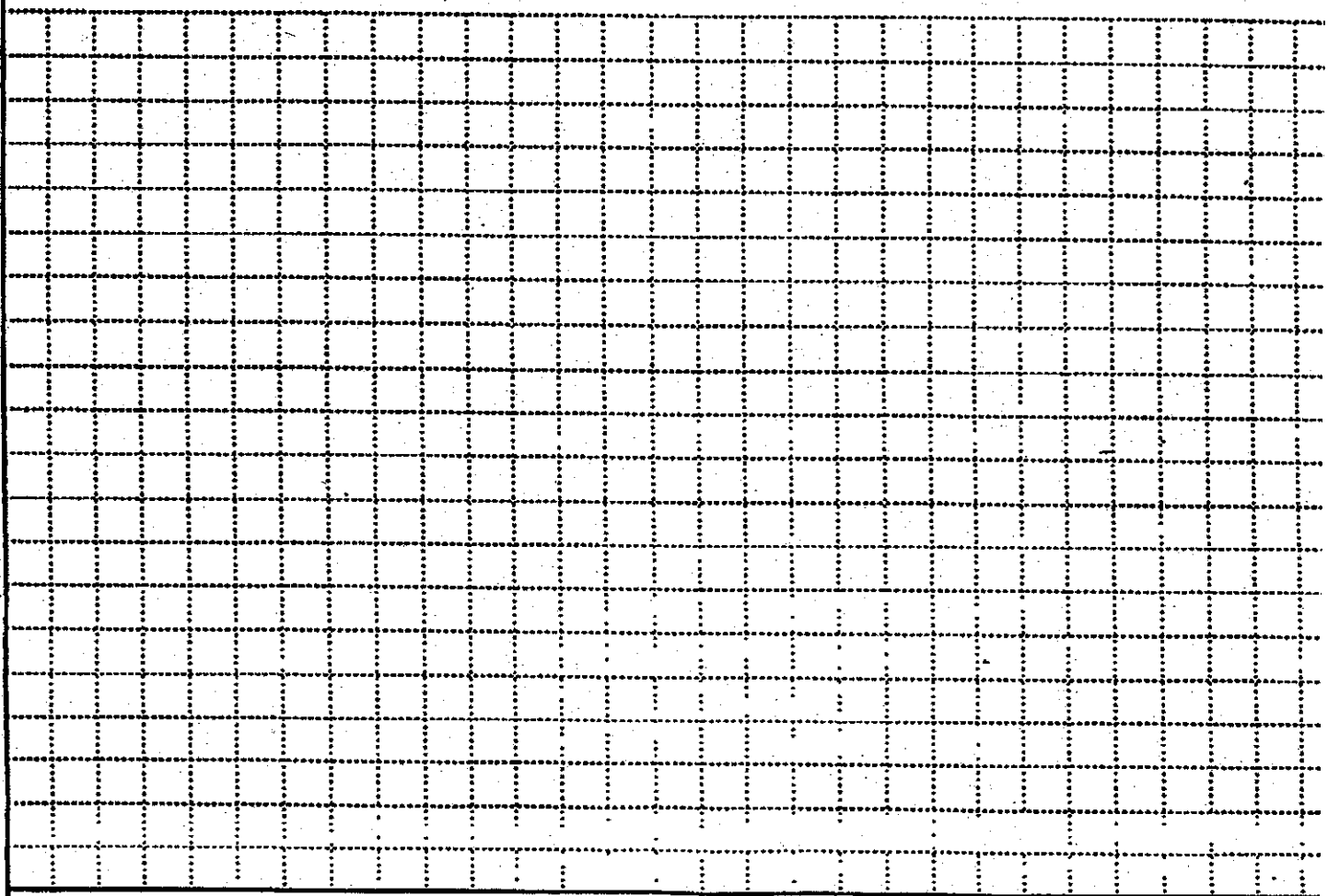
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
— NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	00

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	Cuttings	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO
SS 39	SS39 - 05

ENG FORM 5056-R, AUG 94

(Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER 55?
SHEET 2 OF 2

PROJECT 5539

INSPECTOR L. S. STEVENSON

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	silty SAND, brown (5YR3/3) moist, firm. SM					POST HOLE.
	2	CLAY, brown (5YR3/3), moist, firm, "sticky", SAND, white (5YR7/1), moist, hard CL	--				
	3						
	4	TD					▽ flowing water @ 4', rose to 1.8' depth overnight.
							~3 gal purged from hole prior to sampling

PROJECT 5539 HOLE NO. 5539-05

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-

HTRW DRILLING LOG

DISTRICT		HOLE NUMBER: SS39-06
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET 1 OF 2
3. PROJECT: SS 39	4. LOCATION: HOLLOMAN AFB, NM	
5. NAME OF DRILLER: Kanis Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" x 3' SS split spoons, 3' x 1" x 0.006 SS sample screen Peristaltic pump	8. HOLE LOCATION: SEE MAP	
	9. SURFACE ELEVATION: —	
	10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 3.4'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 8'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
None	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	00

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	BENTONITE	—	—	Lee Scott

LOCATION SKETCH/COMMENTS — SCALE:

PROJECT: SS39- HOLE NO.: SS39-06

ENG FORM 5056-R, AUG 94 (Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SS39 06
SHEET: 2 OF 2

PROJECT: SS39
INSPECTOR: L.S. STEVENSON

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	1						
	2	Silty SAND, brown (7.5YR 7/3), moist, soft SM					
	3	Silty SAND, tan (7.5YR7/4) moist, firm, sl. plastic, sl. cohesive. SM					▽ water @ 3.4'
	4						
	5	fine SAND, brown (7.5YR 5/3), moist, firm SP					sample screen 5' to 8'
	6	Silty fine SAND, tan (7.5YR 8/2), soft, moist, sl. cohesive SM					
	7						
	8	fine SAND, white/gray mottled (7.5YR 7/1), hard, w/ gyp crystals SP					

PROJECT: SS39
HOLE NO: SS39-06

ENG FORM 5056A-R, AUG 94
(Proponent: CECW-

HTRW DRILLING LOG

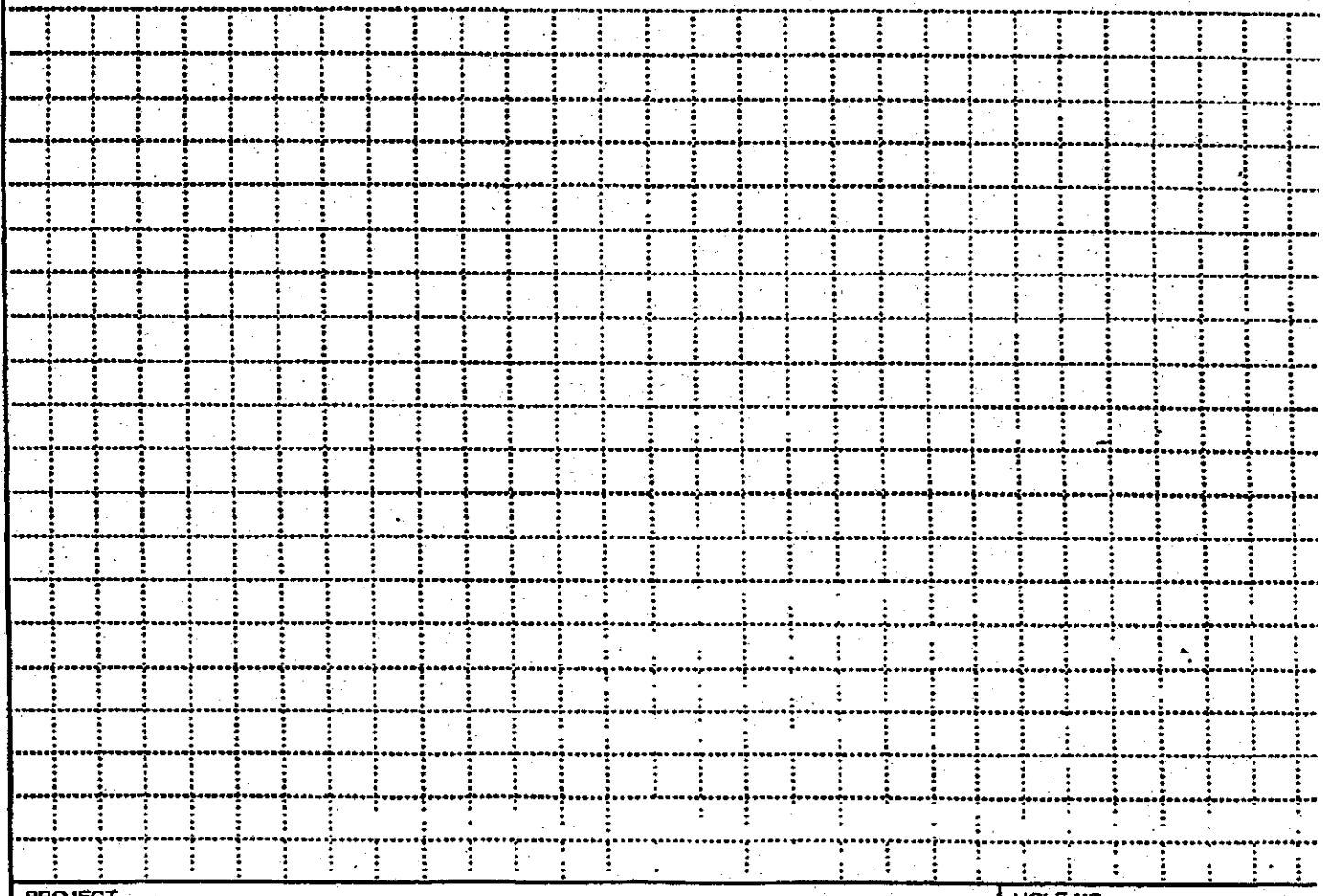
DISTRICT		HOLE NUMBER SS39-07
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET 1 OF 2
3. PROJECT: SS 39	4. LOCATION: HOLLOMAN AFB, NM	
5. NAME OF DRILLER: Karis Vandeheyg	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3'x2" SS Split Spoon; 3'x1"x 0.006 SS sample screen; Peristaltic pump	8. HOLE LOCATION: SEE MAP	
	9. SURFACE ELEVATION: —	
	10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: ~3.5'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE: 5'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19 TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Water	by 8260	—	—	—	—	100%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	BENTONITE	—	—	Lee S. Stevenson

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO.
SS 39	SS39-07

ENG FORM 5056-R, AUG 94 (Proponent: CECW-E)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SS3[illegible]

PROJECT: SS39

INSPECTOR: L.S STEVENSON

SHEET: 2 OF [illegible]

ELEV (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1						Push to 2'
	2	SAND, tan (10YR 8/3), wet, soft, well graded SW	--				
	3	sandy SILT, gray (10YR 7/1), wet, firm ML					▽ water ~ 3.5 ft.
	4						
	5	CLAY w/ sand, yellow 10YR 8/8, wet, hard CL					

PROJECT: SS39

HOLE NO.: SS39-07

ENG FORM 5056A-R, AUG 94

(Proponent: CECW

HTRW DRILLING LOG

DISTRICT		HOLE NUMBER 5539-08
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET 1 OF 2 SHEETS
3. PROJECT: 5539	4. LOCATION: HOLLOMAN AFB, NM.	
5. NAME OF DRILLER: Karis Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3' SS split spoon; 3'x1"x0.006 sample Screen; Peristaltic Pump	8. HOLE LOCATION: SEE MAP	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 7.4'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 11'	17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

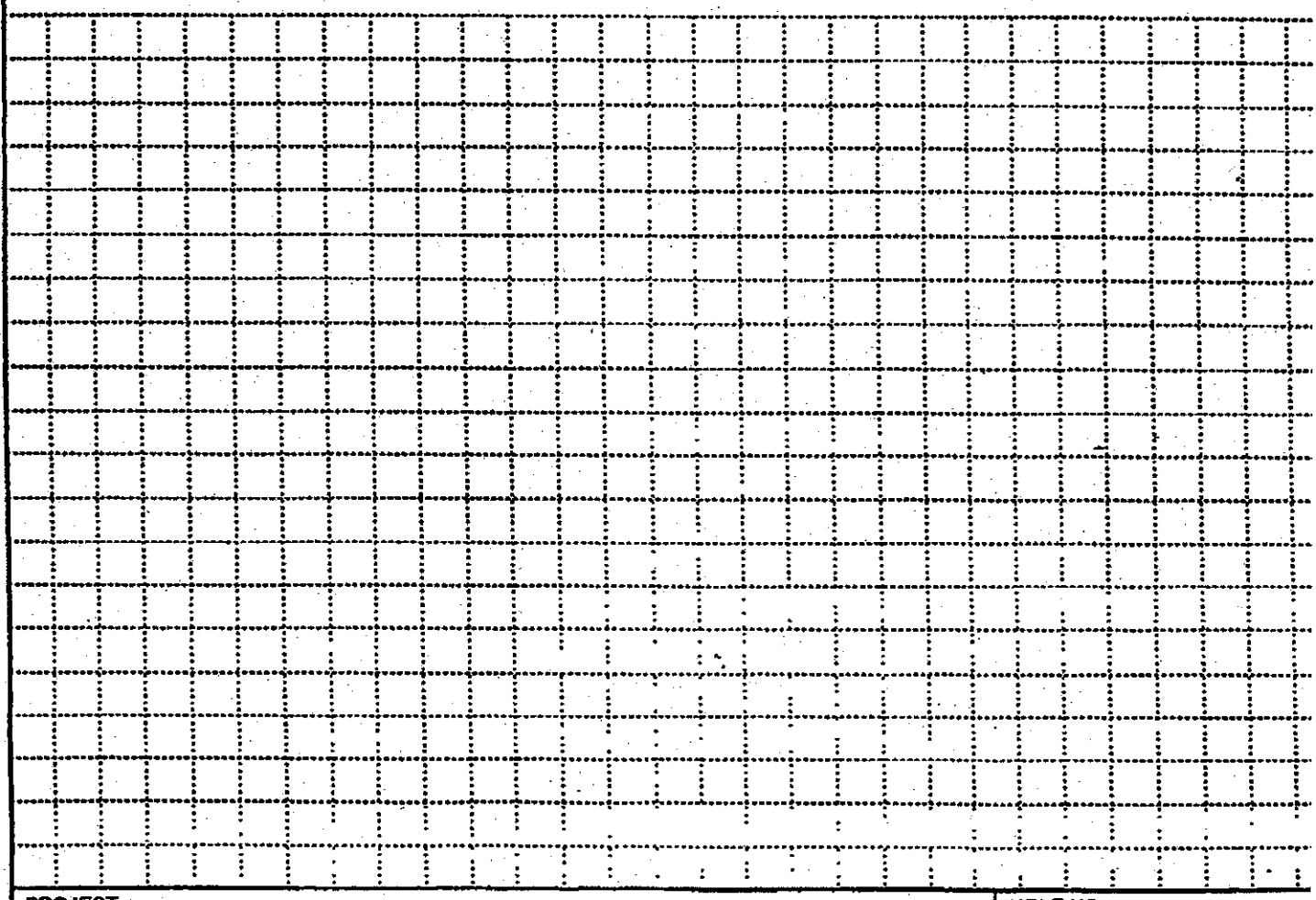
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	BENTONITE	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO.
5539	5539-08

ENG FORM 5056-R, AUG 94

(Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SS7

PROJECT: SS39

INSPECTOR: L. S. STEVENSON

SHEET: 2 OF

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1						Push to 2'
	2	Silty Fine SAND, brown (10YR 6/4), dry, soft, "loose". SM	--				
	3						
	4						
	5	SILT w/ sand, white (10YR 8/2), dry, firm SM					
	6	SILT, white (10YR 8/2), wet, soft, sl. cohesive ML					
	7						
	8	SAND, brown (10YR 5/6), wet, soft SM					▽ water @ 7.4'
	9						sample screen 8' to
	10	SAND, gray (5Y 7/1), moist, hard SP					
	11						

PROJECT: SS39

HOLE NO: SS39-08

ENG FORM 5056A-R, AUG 94

(Proponent: CECW

HTRW DRILLING LOG

1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	HOLE NUMBER: SS32-09
		SHEET 1 OF 2 SHEETS

3. PROJECT: SS39	4. LOCATION: Holloman AFB, NM
5. NAME OF DRILLER: Karis Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3'/SS split Spoon; 3'x1"x0.006 SS sample screen; Peristaltic Pump	8. HOLE LOCATION: SEE MAP
	9. SURFACE ELEVATION: —
	10. DATE STARTED: 19 MAY 1998 / 11. DATE COMPLETED: 19 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 18'
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —
14. TOTAL DEPTH OF HOLE: 20'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —

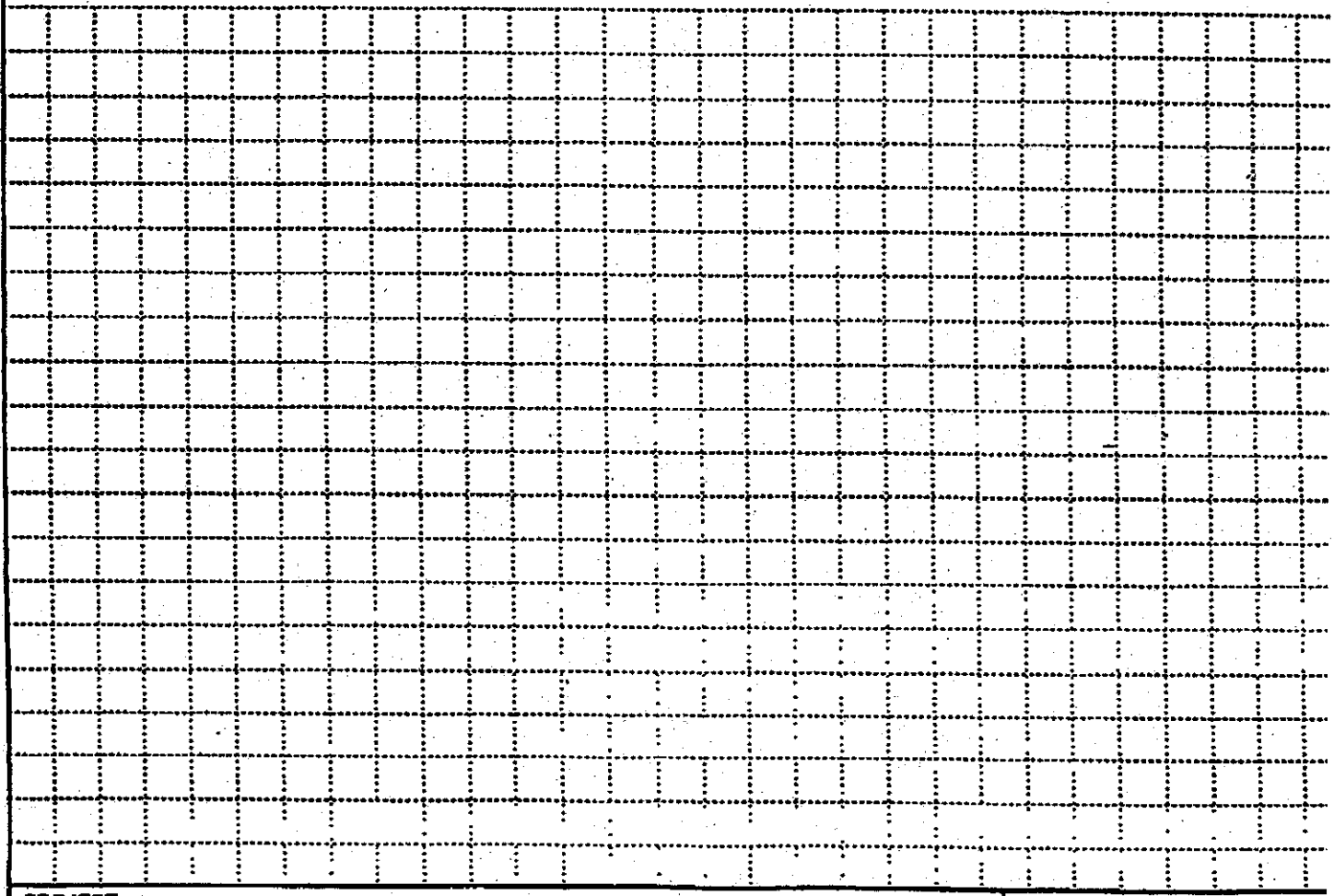
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	80%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	bentonite	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO.
SS39	SS39-09

ENG FORM 5056-R, AUG 94

(Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SS3 3'

PROJECT SS39

INSPECTOR L.S. STEVENSON

SHEET 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	gravel, "lime rock", concrete rubble "~~parking~~" fill					PUSH to 2'.
	2	fine SAND w/silt, tan (7.5 YR 7/4), dry, mod. firm. SM					
	3						
	4	silty SAND, white (7.5 YR 8/1), dry, mod. firm SM					
	5	SAND w/ tr. silt, tan (7.5 YR 8/2), tr. moisture, mod firm SM					
	6	SAND, brown (10 YR 5/6), dry SP					
	7	SAND w/ tr. clay, tan (7.5 YR 8/3), moist, sl. plastic. SC					
	8	SAND, orange (7.5 YR 8/6), dry, bands of firm/ soft, w/ occas. 3/4" cemented nodules SW					
	9						
	10	as above, firm					
	11	as above, loose					
	12	fine SAND, white (10 YR 8/1), dry, soft SW					
	13						
	14	SAND, orange (7.5 YR 7/6), moist, firm SP					
	15	silty SAND, brown (7.5 YR 6/3) (w/ 9 YR nodules & crystals). tr. moisture, hard SM					very difficult to penetrate w/ DPT
	16	SAND, tan (7.5 YR 7/4), tr. moisture, firm SP					
	17	SAND, brown (7.5 YR 6/3), tr. moisture, firm, SP					sample screen 17' to 20'
	18	silty SAND, pink (7.5 YR 8/3), tr. moisture, hard SM					▽ water @ 18"
	19	SAND, Brown (7.5 YR 7/4), wet, firm, SP					1" sand lens @ 18.8'
	20						

PROJECT SS39

HOLE NO. SS39-09

ENG FORM 5056A-R, AUG 94

(Proponent: CECW

HTRW DRILLING LOG

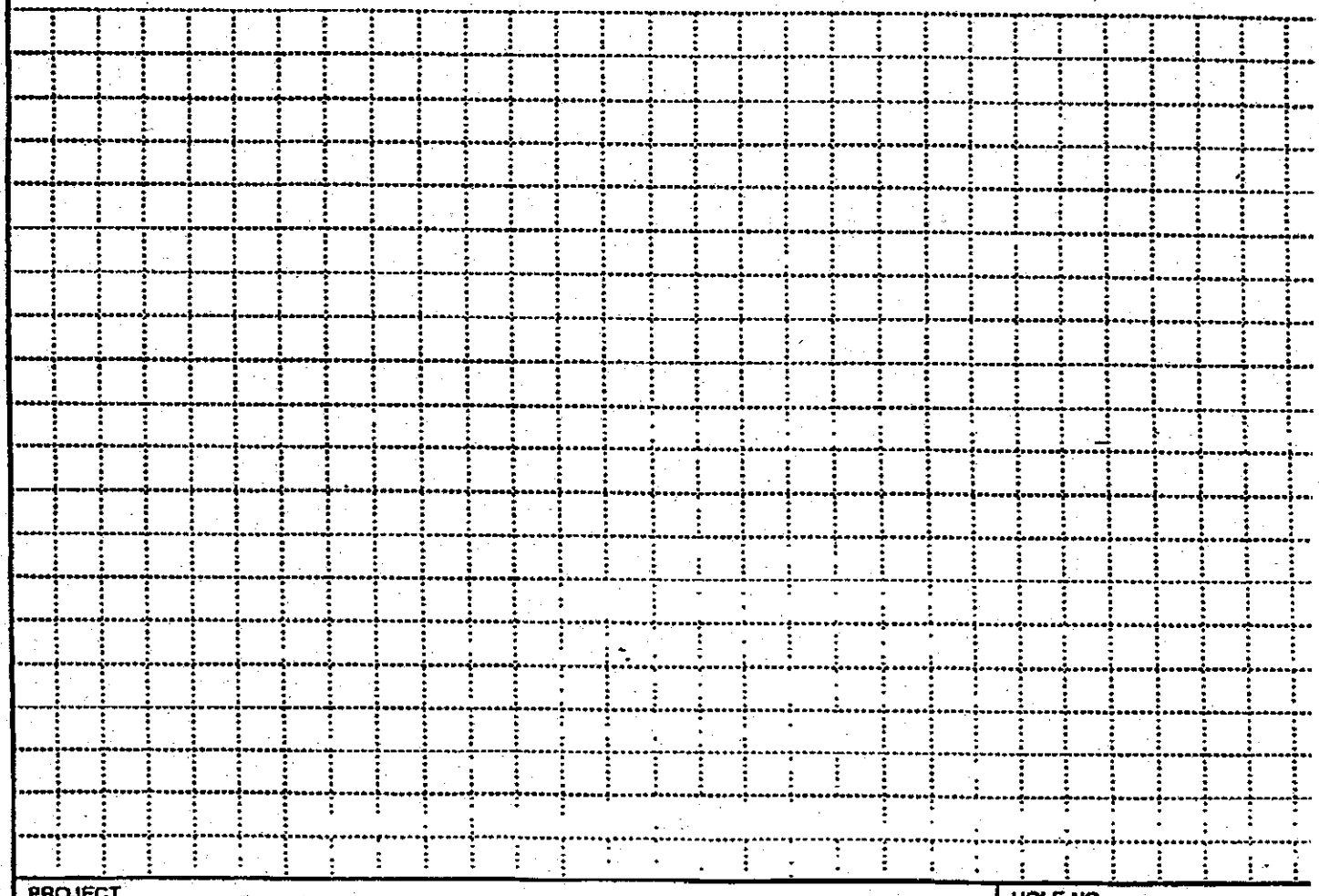
DISTRICT		HOLE NUMBER SS39-10
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET 1 OF 2
3. PROJECT: SS39	4. LOCATION: HOLLOMAN AFB, NM	
5. NAME OF DRILLER: Karis Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" x 3' SS split spoon; 3' x 1" x 0.006 sample screen; Peristaltic Pump	8. HOLE LOCATION: SEE MAP	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 18 MAY 1998	11. DATE COMPLETED: 18 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 17'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 20'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	100
22. DISPOSITION OF HOLE	**BACKFILLED**	**MONITORING WELL**	**OTHER (SPECIFY)**	**23. SIGNATURE OF INSPECTOR**		
ABANDONED	bentonite	—	—	Lee Scott Stineman		

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO.
SS39	SS39-10

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SS39 C

PROJECT: SS39

INSPECTOR: L. S. STEVENSON

SHEET: 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	surface sand & gravel fill					Push to 2'
	2	fine SAND, white (10 YR 8/3), sl. moist, firm					
	3	SP					
	4						
	5	2.5 SAND, red (2.5YR 6/6) tr. moisture, sl. cohesive					
	6	SM					
	7	fine SAND, white (2.5 YR 8/1), dry, loose, powdery.					
	8	SP					
	9	fine SAND, gray (10 YR 7/1), tr. moisture, sl. cohesive					
	10	SM					
	11	fine SAND, white (2.5 YR 8/1), dry, powdery SP					
	12	CLAY, gray, v. thin lens ~1" CL					
	13	CLAY, red (5YR 4/6), sl. moist, firm, mod. plastic, ~~cohesive~~ CL					1" gray sand lens @ 13.5'
	14	clayey SAND, gray (10 YR 6/1), moist, hard, w/ gyp. crystals, & red & yellow cemented					
	15	nodules SC					
	16	fine SAND, white (10YR 8/1) moist to wet, firm SP					
	17	clayey SAND, red (5YR 5/4), moist, sl. plastic.					▽ water @ 17'
	18	SC					
	19	CLAY, brown (10R 4/4), tr. moisture, stiff w/ brown nodules CL					sand lens @ 18', 1.5" th
	20	SAND, gray (10YR 7/1), w/ sm. red nodules SM					Sample s e 17' to 2

PROJECT: SS 39

HOLE NO.: SS39-10

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-

HTRW DRILLING LOG

1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	HOLE NUMBER: SS39-11
		SHEET 1 OF 2

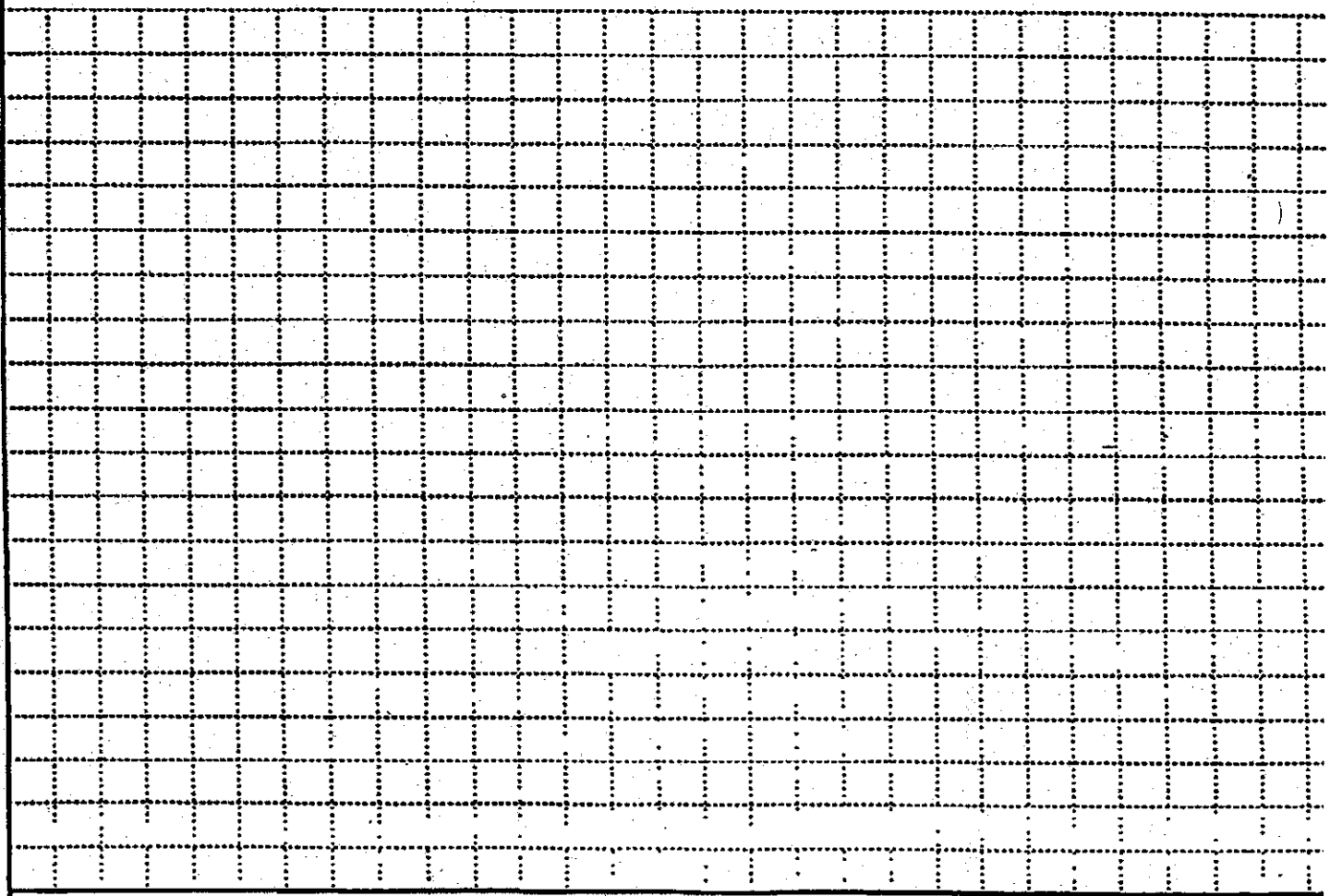
3. PROJECT: SS 39	4. LOCATION: HOLLOMAN AFB, NM
5. NAME OF DRILLER: Kanis Vandehey.	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATAPROBE
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3' SS Split Spoon; 3'x1"x0.006 Sample Screen; Peristaltic Pump	8. HOLE LOCATION: SEE MAP
	9. SURFACE ELEVATION:
	10. DATE STARTED: 19 MAY 1998 / 11. DATE COMPLETED: 19 MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 8'
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —
14. TOTAL DEPTH OF HOLE: 11'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Water	by 8260	—	—	—	—	100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	bentonite	—	—	Lee S. [illegible] Stevenson

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO.
SS39	SS39-11

ENG FORM 5056-R, AUG 94 (Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SS3 1
SHEET 2 OF

PROJECT SS39
INSPECTOR L. S. Stevenson

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1						Road Rubble large debri built up causeway over playa
	2		--				
	3						low recovery in 2'-5' SS
	4	SAND, gray (7.5YR 5/1), moist, firm SP					
	5	SAND, gray (7.5 YR 5/1), moist, firm SP					
	6	SAND w CLAY, gray (7.5 YR 5/1), moist, soft, plastic SC					
	7	SAND w/ silt, lt gray (10 YR 7/1), ~~mod firm~~, moist, sl. plastic SM					
	8	SAND w/ tr. silt, gray (10 YR 7/1), wet, loose SM					▽ water @ 8'
	9	SAND, gray & white banded (10 YR 7/1 - 10 YR 8/1), moist, firm SM					Sample 8'-11
	10						
	11						
	12						

PROJECT SS39 HOLE NO SS39-11

ENG FORM 5056A-R, AUG 94 (Proponent: CECW

HTRW DRILLING LOG

DISTRICT		HOLE NUMBER: SS39-12
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET 1 OF 2
3. PROJECT: SS39	4. LOCATION: HOLLOMAN AFB, NM	
5. NAME OF DRILLER: Kanis Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3' SS Split Spoons; 3'x1"x0.006 sample screen peristaltic pump	8. HOLE LOCATION: SEE MAP	
	9. SURFACE ELEVATION: —	
	10. DATE STARTED: 22MAY1998	11. DATE COMPLETED: 22MAY1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 2.7'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 6'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

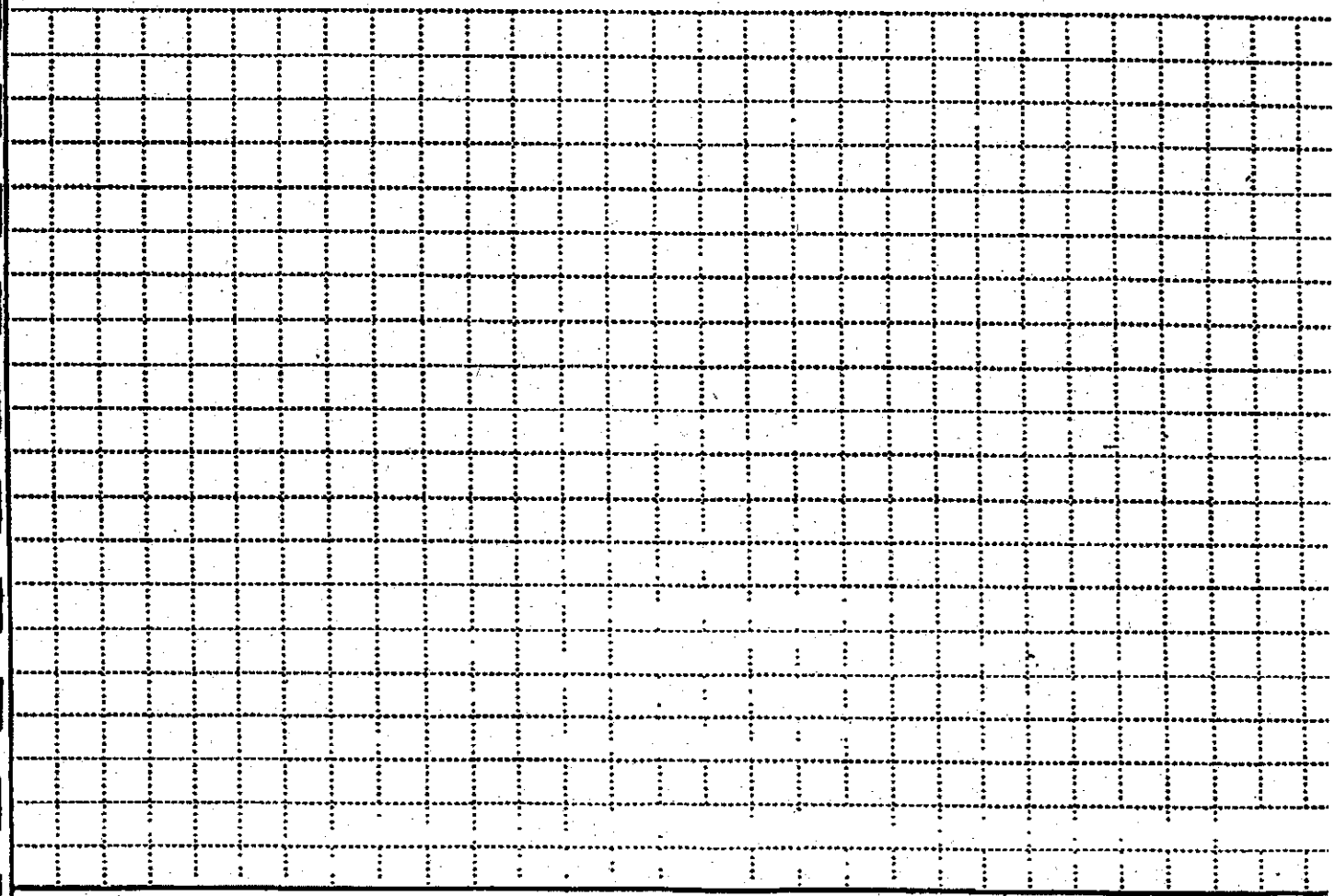
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY (%)
water	by 8260	—	—	—	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	bentonite	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO.
SS39	SS39-12

ENG FORM 5056-R, AUG 94

(Proponent: CECW-E)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: 5539-12
SHEET: 2 OF 2

PROJECT: 5539
INSPECTOR: L. S. STEVENSON

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	Silty SAND, ~~wet~~ brown (5 YR 6/4), wet, soft SM					
	2		--				▽ water @ 2.7'
	3						Sample screen 3'-6'
	4	SILT, lt brown (7.5 YR 7/4), moist, firm ML					
	5						
	6						

PROJECT: 5539
HOLE NO. 5539-12

ENG FORM 5056A-R, AUG 94 (Proponent: CECW

HTRW DRILLING LOG

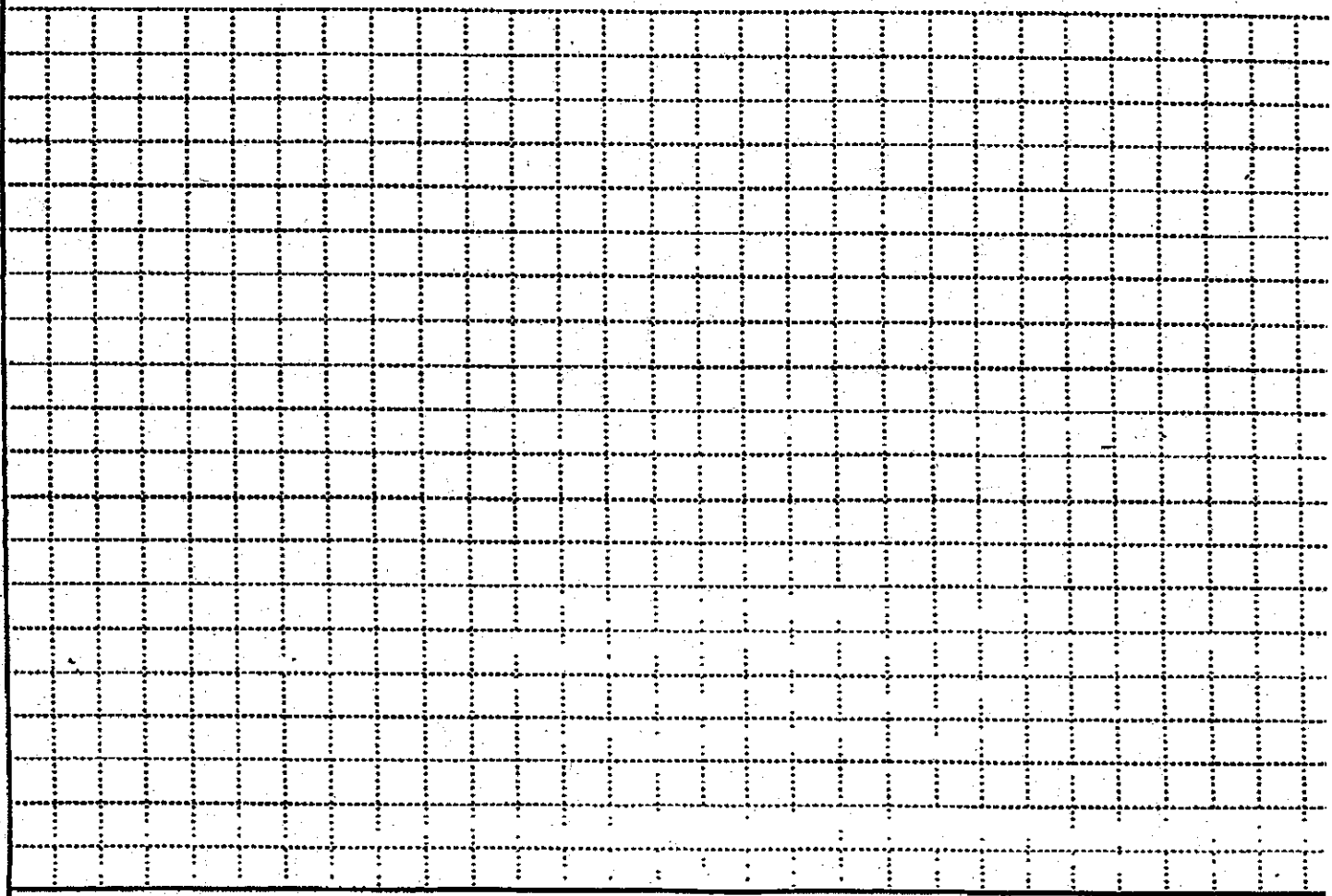
DISTRICT		HOLE NUMBER: SS39-13
1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	SHEET / SHEETS OF
3. PROJECT: SS 39	4. LOCATION: HOLLOMAN AFB	
5. NAME OF DRILLER: Kan.s Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3' SS Split Spoons; 3'x1"x0.006 sample screen; Peristaltic Pump	8. HOLE LOCATION: See MAP	
	9. SURFACE ELEVATION: —	
	10. DATE STARTED: 22MAY 1998	11. DATE COMPLETED: 22MAY 1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 10.1	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 14'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—	—	—	—	+90 %
22. DISPOSITION OF HOLE	**BACKFILLED**	**MONITORING WELL**	**OTHER (SPECIFY)**	**23. SIGNATURE OF INSPECTOR**		90
ABANDONED	bentonite	—	—	Lee Scott Stevenson		

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO.
SS39-13	SS39-13

ENG FORM 5056-R, AUG 94

(Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SS3[illegible]

PROJECT SS 39

INSPECTOR L. S. STEVENSON

SHEET 2 OF 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1						push to 2'
	2	SILT, tan (7.5 YR 8/3), moist, firm ML					
	3						
	4	SILT, brown (7.5 YR 5/8), moist, soft ML					
	5	SILT, white (7.5 YR 8/2), wet, soft ML					
	6	SILT, brown (7.5 YR 6/4), moist to wet, soft, w/ gypsum nodules. ML					
	7	SILT, brown (7.5 YR 6/4), moist, hard ML					
	8	no recovery					
	9						
	10	SAND, brown (5YR 5/6), tr. moist, w large (1") gyp nodules. SP					▽ water @ 10.1'
	11	SILT, white (5YR 8/2), dry, hard ML					Sample scre- 11'-14'
	12	SAND w/ silt, brown (5 YR 5/6), wet, soft SM					
	13	silty fine SAND, white (5YR 8/4), moist, hard SM					
	14						

PROJECT SS39

HOLE NO SS39-13

ENG FORM 5056A-R, AUG 94

(Proponent: CECW

HTRW DRILLING LOG

1. COMPANY NAME: FLUOR DANIEL GTI	2. DRILL SUBCONTRACTOR: TEG	HOLE NUMBER: SS39-14
		SHEET 1 OF 2 SHEETS

3. PROJECT: SS 39	4. LOCATION: HOLLOMAN AFB, NM
5. NAME OF DRILLER: Karie Vandehey	6. MANUFACTURER'S DESIGNATION OF DRILL: STRATA PROBE
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2"x3' SS Split Spoons; 3'x1"x0.006 sample screen; Peristaltic Pump	8. HOLE LOCATION: SEE MAP
	9. SURFACE ELEVATION:
	10. DATE STARTED: 22MAY1998 / 11. DATE COMPLETED: 22MAY1998
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 4.9'
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —
14. TOTAL DEPTH OF HOLE: 9'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —

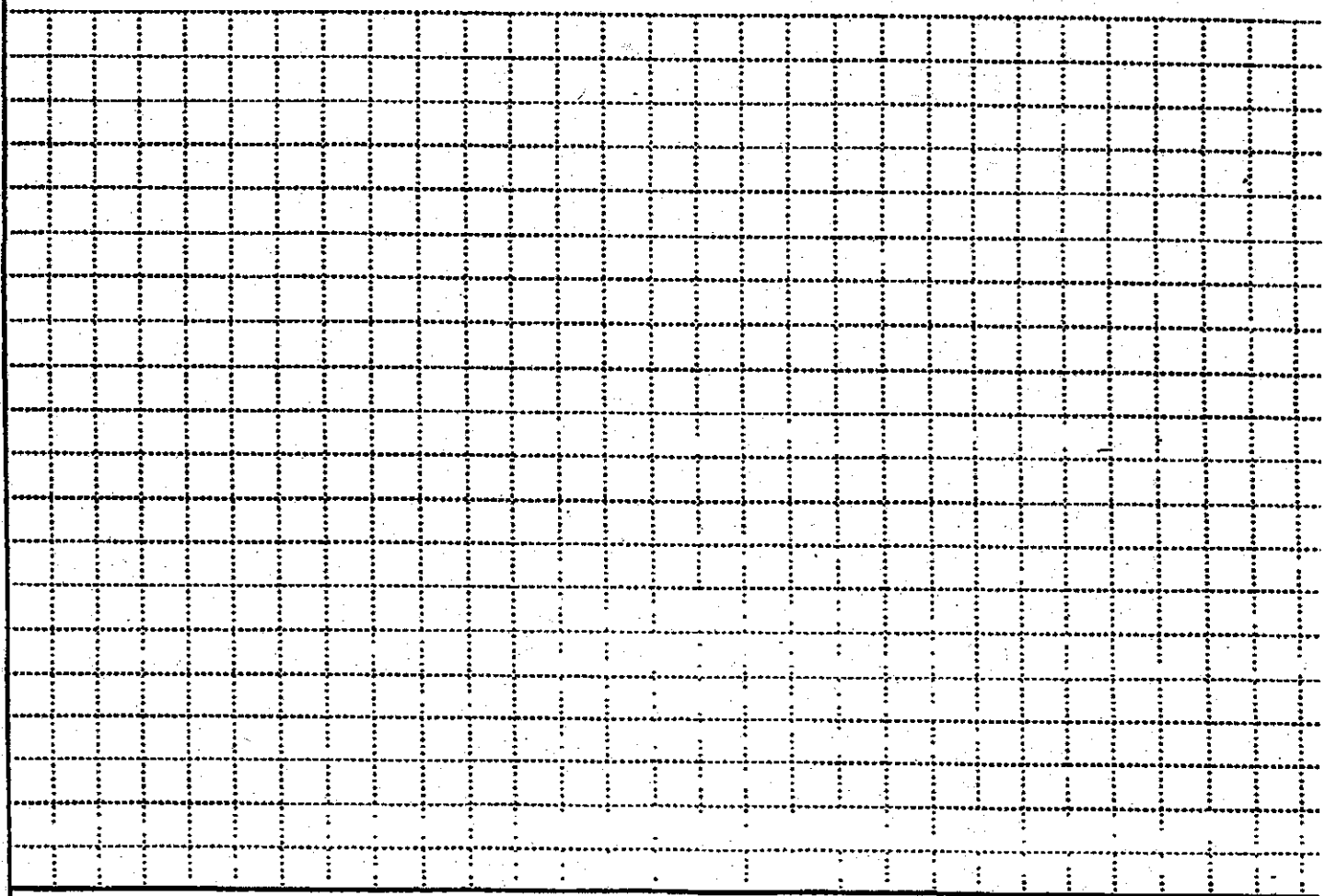
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
water	by 8260	—		—	—	100.

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
ABANDONED	bentonite	—	—	Lee Scott Stevenson

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT	HOLE NO.
SS39	SS39-14

ENG FORM 5056-R, AUG 94

(Proponent: CECW-E

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SS3C

PROJECT 5539

INSPECTOR L. S. STEVENSON

SHEET 2 of 2

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	fine SAND, tan (7.5YR 7/1), moist, loose SP					
	2						
	3	Sandy SILT, tan (7.5YR 7/4), wet, soft ML					
	4	SILT, tan (10YR 7/3), moist, firm ML					
	5						▽ water @ 4.9'
	6	Silty SAND, tan (7.5YR 7/4), wet, soft SM					Sample Screen 6' to 9'
	7						
	8						
	9	fine SAND, tan (7.5YR 8/4), moist, firm SP					

PROJECT 5539

HOLE NO SS39-B14

ENG FORM 5056A-R, AUG 94

(Proponent: CECW

HTRW DRILLING LOG

1. COMPANY NAME: HAFB/USACE	DISTRICT	HOLE NUMBER: SS39-1
	2 DRILL SUBCONTRACTOR: —	SHEET 1 OF

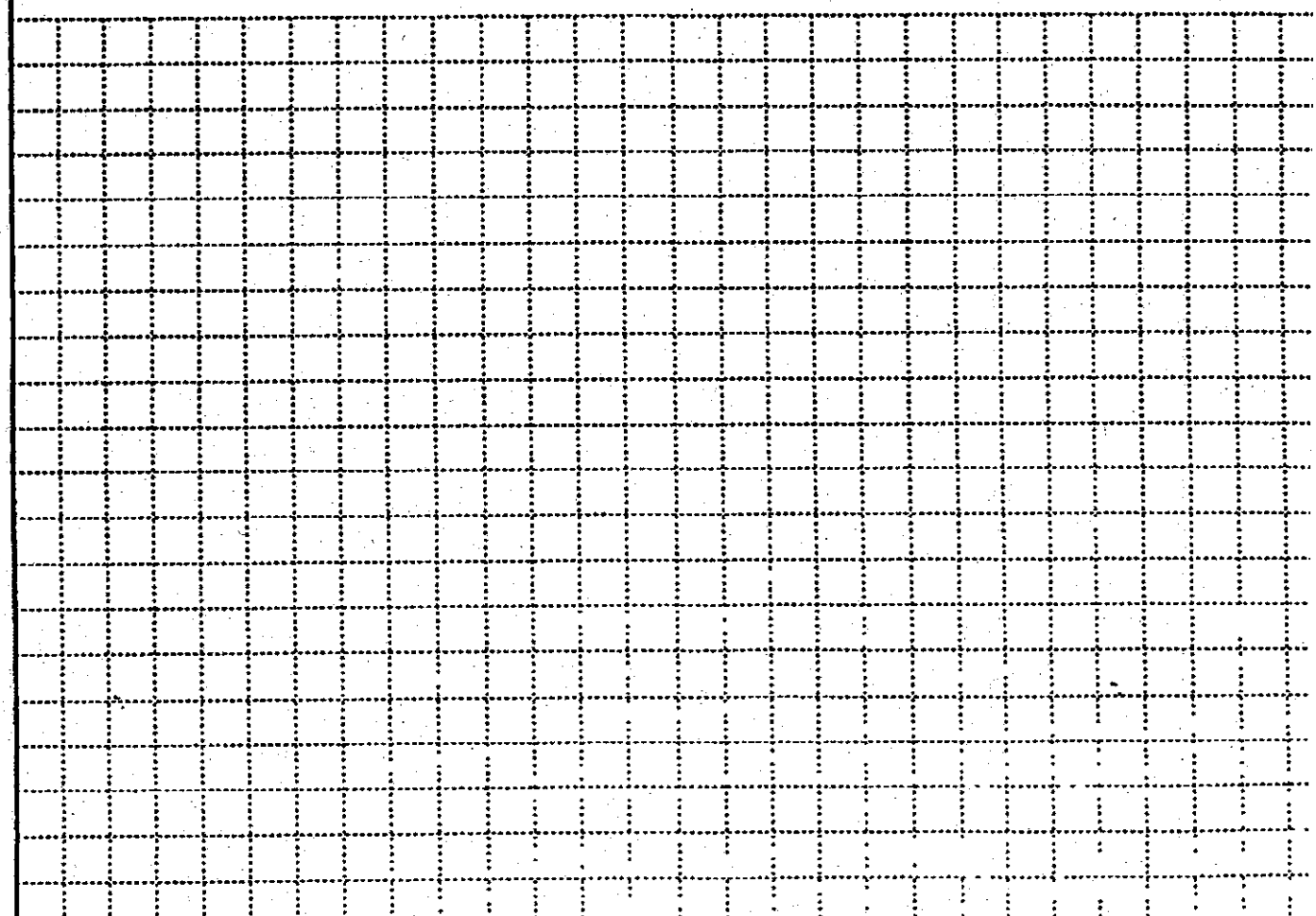
3 PROJECT: SS-39	4 LOCATION: Holloman AFB, NM
5 NAME OF DRILLER: —	6. MANUFACTURER'S DESIGNATION OF DRILL: —
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hand auger; SS screen/peristaltic pump	8 HOLE LOCATION: See map
	9 SURFACE ELEVATION: —
	10 DATE STARTED: 6/24/98 — 11 DATE COMPLETED: 6/24/98
12. OVERBURDEN THICKNESS: —	15 DEPTH GROUNDWATER ENCOUNTERED: 2.5'
13 DEPTH DRILLED INTO ROCK: —	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —
14 TOTAL DEPTH OF HOLE: 3'	17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19 TOTAL NUMBER OF CORE BOXES
None			

20 SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21 TOTAL RECOVERY
water	by 8260					

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23 SIGNATURE OF INSPECTOR
Abandoned	cuttings			Drew Lossard / Steve Pearson

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO.
SS-39	SS39-15

ENG FORM 5056-R, AUG 94 — (Proponent: CEC

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUM: SS39

PROJECT: SS-39

INSPECTOR: D. Lessard/S. Pearson

SHEET 2 OF 2

ELEV (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	Brownish red clayey SILT ML					
	2	Light brown silty SAND, wet @ 2.5' SM					▽ @ 2.5'
	3	TD					

PROJECT

HOLE NO

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-E

HTRW DRILLING LOG

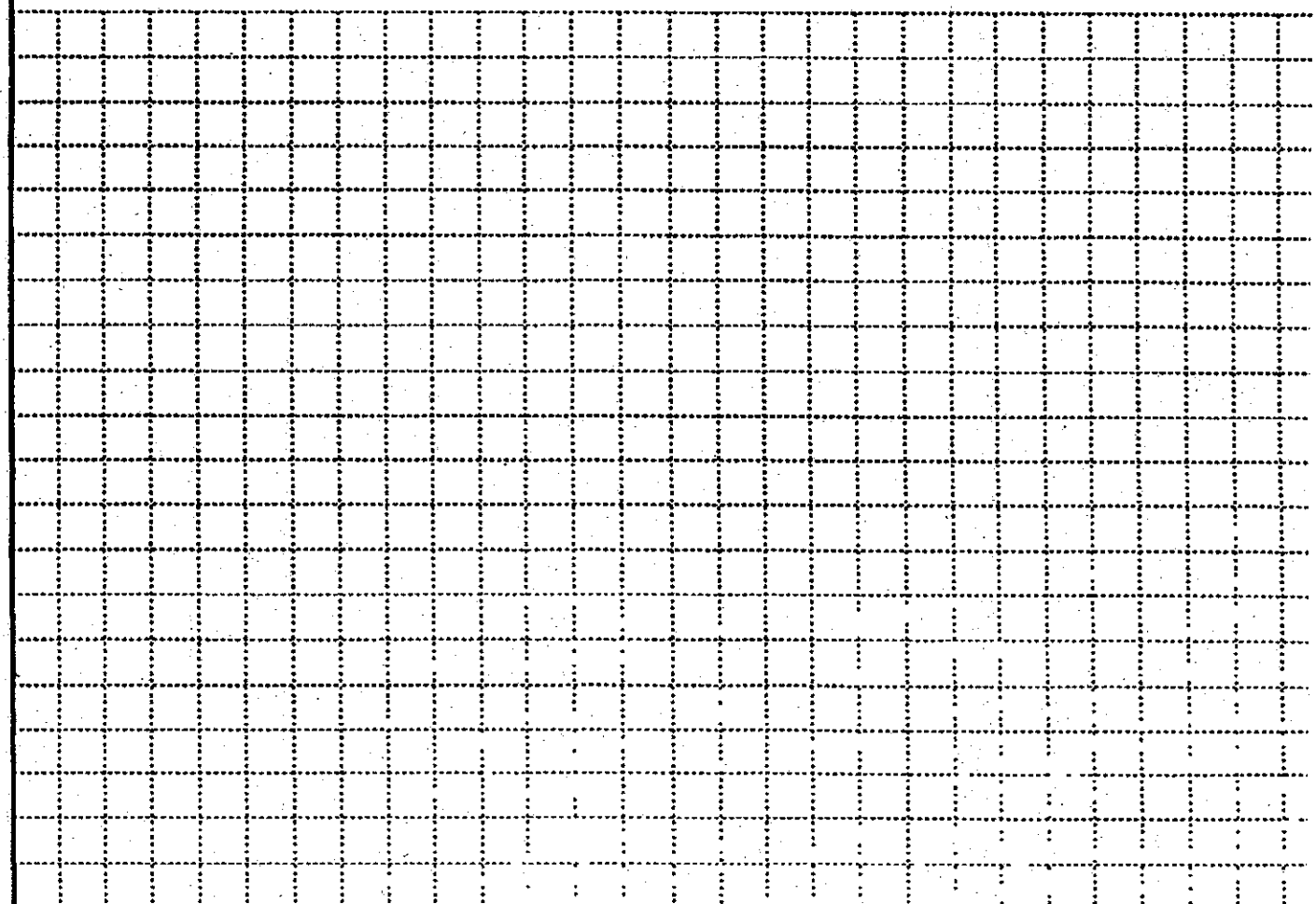
DISTRICT		HOLE NUMBER SS39-1
1. COMPANY NAME: HAFB/USACE	2. DRILL SUBCONTRACTOR: —	SHEET SHE OF
3. PROJECT: SS-39	4. LOCATION: Holloman AFB, NM	
5. NAME OF DRILLER: —	6. MANUFACTURER'S DESIGNATION OF DRILL: —	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hand auger; SS screen/peristaltic pump	8. HOLE LOCATION: See map	
	9. SURFACE ELEVATION: —	
	10. DATE STARTED: 6/24/98	11. DATE COMPLETED: 6/24/98
12. OVERBURDEN THICKNESS: —	15. DEPTH GROUNDWATER ENCOUNTERED: 2.5'	
13. DEPTH DRILLED INTO ROCK: —	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 3'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
None			

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL RECOVERY
Water	by 8260					

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	cuttings			Drew Lessard / Steve Pearson

LOCATION SKETCH/COMMENTS SCALE:



PROJECT	HOLE NO.
SS-39	SS39-16

ENG FORM 5056-R, AUG 94 (Proponent: CEC)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SS39 2

PROJECT SS-39

INSPECTOR D. Lessard / S. Pearson

SHEET 2 OF 2

ELEV (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO (e)	ANALYTICAL SAMPLE NO (f)	BLOW COUNT (g)	REMARKS (h)
	1	Brownish red clayey SILT ML					
	2	Light brown silty SAND, wet @ 2.5' SM					▽ @ 2.5'
	3	TD					

PROJECT

HOLE NO

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-I

DRILLING LOG

HOLE NO. 179-B01

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 1 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84) 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685215.84; Northing=530607.53	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 7.8 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 8.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES			
No			NA			
20. SAMPLES FOR CHEMICAL ANALYSIS	SW8270	SW6010				21. TOTAL CORE REC.
Yes	SW7421	SW9045				NA
22. DISPOSITION OF HOLE	**GROUTED**	**MONITORING WELL**	**OTHERS (SPECIFY)**	**23. SIGNATURE OF INSPECTOR**		
Vertical	Grout			David R. Robbins		

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0		SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, with root inclusions, moist, nonplastic, loose.	0.0	0.0	1/3/7/5	179-B01-01-01
	2		SILTY SAND (SM): pale brown (10YR 7/4), fine grained, moist, nonplastic, loose.	0.0	0.0	8/12/21/27	179-B01-02-01
	4			0.0	0.0	14/38/50+	179-B01-03-01
	6		SANDY SILT (ML): yellowish red (5YR 4/6), with fine grained sand, moist, nonplastic, hard. SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, moist to wet, nonplastic, loose.	0.0	0.0	9/20/23/24	179-B01-04-01
▼	8		Water table at 7.8 ft. Total Depth = 8.00 ft.				
	10						

PROJECT: Table 2 - RFI

HOLE NO.: 179-B01

DRILLING LOG

HOLE NO. 179-B02

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 1 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84) 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685162.60; Northing=530600.29	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 6 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 8.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No			NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421					

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
			SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, with root inclusions, moist, nonplastic, medium dense to dense.	0.0	0.5	2/5/7/10	179-B02-01-01
	2			0.0	1.2	17/34/38/50+	179-B02-02-01
	4			0.0	1.2	13/24/24/24	179-B02-03-01
▼	6		SILTY SAND (SM): yellowish brown (2.5Y 6/3), fine grained, wet to saturated, nonplastic, medium dense. Water table at 6 ft.	0.0	1.2	9/37/26/14	179-B02-04-01
	8		POORLY GRADED SAND (SP): yellowish brown (10YR 5/6), fine grained, with clay, saturated, low plasticity, medium dense. Total Depth = 8.00 ft.				

DRILLING LOG

HOLE NO. 179-B03

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 1 SHEETS
3. PROJECT: Table 2 – RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger; 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84); 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685107.74; Northing=530611.77	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 6 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 8.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No			NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421					

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0		SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, with root inclusions, moist, nonplastic, loose.	0.0	2.5	WH/1/2/3	179-B03-01-01
	2			0.0	1.8	3/3/10/26	179-B03-02-01
	4		SILTY SAND (SM): pale brown (10YR 7/4), fine grained, with caliche inclusions, moist to wet, nonplastic, dense.	0.0	1.5	50+	179-B03-03-01
▼	6		Water table at 6.0 ft. SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, saturated, nonplastic, loose.	0.0	2.2	6/7/7/4	179-B03-04-01
	8		Total Depth = 8.0 ft.				
	10						

PROJECT: Table 2 – RFI

HOLE NO.: 179-B03

DRILLING LOG

HOLE NO. 179-B04

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 1 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger; 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84); 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=684934.63; Northing=530613.03	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 3.6 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 4.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No			NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421					

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
			SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, with root inclusions, moist, nonplastic, loose.	0.0	0.0	1/2/6/5	179-B04-01-01
	2		SILTY SAND (SM): pale brown (10YR 8/4), fine grained, moist to wet, nonplastic, loose.	0.0	0.0	6/12/12/16	179-B04-02-01
▼			Water table at 3.6 ft.				
	4		Total Depth = 4.0 ft.				
	6						
	8						

DRILLING LOG

HOLE NO. 179-B05

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 2 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84) 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685276.17; Northing=530609.26	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 12.2 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 14.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No			NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421	SW9045				

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0						
			SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, with root inclusions, moist, nonplastic, loose.	0.0	0.0	2/4/5/3	179-B05-01-01
	2			0.0	0.0	3/3/5/12	179-B05-02-01
	4		SILTY SAND (SM): pale brown (10YR 7/4), fine grained, moist, nonplastic, dense.	0.0	0.0	21/27/33/50+	179-B05-03-01
	6		POORLY GRADED SAND (SP): yellowish brown (2.5Y 6/3), fine to medium grained, with fine gypsum crystals, moist, nonplastic, dense.	0.0	0.0	27/31/33/41	
	8		SILTY SAND (SM): yellowish brown (10YR 5/6), fine grained, moist, nonplastic, dense.	0.0	0.0	9/12/24/30	
	10						

DRILLING LOG

HOLE NO. 179-B05

1. COMPANY NAME	2. INSPECTOR	SHEET 2
Radian Corporation	David R. Robbins	OF 2 SHEETS

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
			SILTY SAND (SM) as above.	0.0	0.0	30/27/30/26	
	12		CLAYEY SAND (SC): yellowish red (5YR 4/6), fine grained, wet, low plasticity, medium dense. Water table at 12.2 ft.	0.0	0.0	12/11/29/28	179-B05-04-01
	14		Total Depth = 14.0 ft.				

16 18 20 22 24 26

PROJECT: Table 2 – RFI HOLE NO.: 179-B05

DRILLING LOG

HOLE NO. 179-B06

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 2 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84) 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685239.15; Northing=530883.32	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 13.2 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 14.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No			NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421	SW9045				

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0						
			SILTY SAND (SM): yellowish brown (10YR 6/4), fine grained, with fine gravel and root inclusions, dry, nonplastic, loose.	0.0	0.0	WH/1/2/2	179-B06-01-01
	2		SILTY SAND (SM): pale brown (10YR 7/4), fine grained, with root and caliche inclusions, dry, nonplastic, medium dense.	0.0	0.0	2/4/12/30	179-B06-02-01
	4			0.0	0.0	19/34/30/30	179-B06-03-01
	6		SILTY SNAD (SM): strong brown (7.5YR 4/6), fine grained, with fine gypsum crystals, dry, nonplastic, dense.				
			POORLY GRADED SAND (SP): pale yellow (2.5Y 8/2), fine grained, mottled with fine grained white sand, moist to wet, nonplastic, dense.	0.0	0.0	10/22/40/50+	
	8			0.0	0.0	17/18/26/50+	
	10						

DRILLING LOG

HOLE NO. 179-B06

1. COMPANY NAME	2. INSPECTOR	SHEET 2
Radian Corporation	David R. Robbins	OF 2 SHEETS

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	10		POORLY GRADED SAND (SP) as above.	0.0	0.0	18/22/30/50+	
	12			0.0	0.0	20/25/31/50+	179-B06-04-01
▼			Water table at 13.2 ft.				
	14		Total Depth = 14.0 ft.				
	16						
	18						
	20						
	22						
	24						
	26						
	28						

PROJECT: Table 2 - RFI

HOLE NO.: 179-B06

DRILLING LOG

HOLE NO. 179-B07

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.
SHEET 1 OF 2 SHEETS	
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger; 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84); 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685168.93; Northing=530819.26
	9. SURFACE ELEVATION:
	10. DATE STARTED: 11/18/93 — 11. DATE COMPLETED: 11/18/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 15 ft.
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
14. TOTAL DEPTH OF HOLE: 16.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA
18. GEOTECHNICAL SAMPLES: No — DISTURBED — UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES: NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421	SW9045				

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0		SILTY SAND (SM): yellowish brown (10YR 6/4), fine grained, with root inclusions, dry, nonplastic, loose.	0.0	0.0	WH/2/8/7	
	2		SILTY SAND (SM): pale brown (10YR 7/4), fine grained, dry, nonplastic, loose.	0.0	1.3	2/5/6/5	
	4			0.0	0.0	2/3/8/4	179-B07-01-01
	6		SILTY SAND (SM): strong brown (7.5YR 5/6), fine grained, dry, nonplastic, loose.	0.0	0.0	3/8/12/19	179-B07-02-01
	8		POORLY GRADED SAND (SP): pale yellow (2.5Y 7/2), fine grained, moist, nonplastic, medium dense.	0.0	0.0	22/35/50+	179-B07-03-01
	10						

DRILLING LOG

HOLE NO. 179-B07

1. COMPANY NAME	2. INSPECTOR	SHEET 2
Radian Corporation	David R. Robbins	OF 2 SHEETS

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	10		POORLY GRADED SAND (SP) as above.	0.0	0.0	18/23/27/50+	
	12			0.0	0.0	18/50+	
	14		CLAYEY SAND (SC): light gray (2.5Y 7/2), fine grained, moist, nonplastic, dense.				
▼			POORLY GRADED SAND (SP): fine grained, with slight iron staining, wet, nonplastic, dense. Water table at 15.0 ft.	0.0	0.0	19/22/50+	179-B07-04-01
	16		Total Depth = 16.0 ft.				
	18						
	20						
	22						
	24						
	26						
	28						

PROJECT: Table 2 – RFI

HOLE NO.: 179-B07

DRILLING LOG

HOLE NO. 179-B08

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 2 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger; 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84); 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685085.38; Northing=530726.74	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 11/18/93	11. DATE COMPLETED: 11/18/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 10.2 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 12.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
Yes	X		NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270	SW6010				NA
	SW7421					

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0						
			SILTY SAND (SM): yellowish brown (10YR 6/4), fine grained, with root inclusions, dry, medium dense.	0.0	0.0	2/6/13/11	179-B08-01-01
	2			0.0	0.0	5/11/5/5	179-B08-02-01
	4			0.0	2.3	3/5/8/9	179-B08-03-01
	6		SILTY SAND (SM): reddish brown (5YR 5/4), fine grained, moist, nonplastic, dense.	0.0	2.3	17/19/21/27	
	8			0.0	2.3	26/30/36/50+	
	10						

PROJECT: Table 2 - RFI

HOLE NO.: 179-B08

DRILLING LOG

HOLE NO. 179-B08

1. COMPANY NAME	2. INSPECTOR	SHEET 2
Radian Corporation	David R. Robbins	OF 2 SHEETS

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	10		Water table at 10.2 ft.				
			SILTY SAND (SM) as above.	0.0	1.3	26/30/30/36	179-B08-04-01
	12		Total Depth = 12.0 ft.				
	14						
	16						
	18						
	20						
	22						
	24						
	26						
	28						

PROJECT: Table 2 – RFI

HOLE NO.: 179-B08

DRILLING LOG

HOLE NO. 181-B01

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 2 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84) 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685062.69; Northing=530246.78	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11/16/93	11. DATE COMPLETED: 11/16/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: NONE	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 16.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No			NA

20. SAMPLES FOR CHEMICAL ANALYSIS						21. TOTAL CORE REC.
Yes	SW8270					NA

22. DISPOSITION OF HOLE	GROUTED	MONITORING WELL	OTHERS (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical	Grout			David R. Robbins

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
		Fill	FILL: silty sand, yellowish brown (10YR 5/6), medium grained, with root inclusions, moist, nonplastic, loose.	0.0	0.0	3/1/1/1	
	2	Fill		0.0	5.2	2/1/2/2	
	4	Fill		2.2	14.1	5/6/9/50+	
	6		Auger refusal at base of concrete sump. Offset boring 1.5 ft. east and continued drilling. SILTY SAND (SM): pale yellow (2.5Y 8/4), fine grained, with fine gypsum crystals, moist, nonplastic, loose.	0.0	0.0	3/3/6/7	181-B01-01-01
	8			0.0	0.0	18/25/38/50+	

PROJECT: Table 2 - RFI HOLE NO.: 181-B01

DRILLING LOG

HOLE NO. 181-B01

1. COMPANY NAME: Radian Corporation

2. INSPECTOR: David R. Robbins

SHEET 2 OF 2 SHEETS

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	10		SILTY SAND (SM) as above.	0.0	0.0	23/18/26/30	
	12		CLAYEY SAND (SC): brownish gray (2.5Y 6/2), fine grained, with caliche inclusions, wet, low plasticity, dense.	0.0	0.0	12/22/26/34	
	14			0.0	0.0	15/27/21/34	
	16		Total Depth = 16.00 ft.				
	18						
	20						
	22						
	24						
	26						
	28						

PROJECT: Table 2 – RFI

HOLE NO.: 181-B01

DRILLING LOG

HOLE NO. 181-B02

1. COMPANY NAME: Radian Corporation	2. DRILLING SUBCONTRACTOR: Southwest Engineering, Inc.	SHEET 1 OF 1 SHEETS
3. PROJECT: Table 2 - RFI	4. LOCATION: Holloman AFB	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURERS DESIGNATION OF DRILL: CME 55	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Hollow Stem Auger; 3.75" ID; 8.0" OD; Split spoon (ASTM D1586-84); 3" ID/2" ID; 140 lb. drop-hammer	8. HOLE LOCATION: Easting=685046.65; Northing=530389.74	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11/17/93	11. DATE COMPLETED: 11/17/93
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 3 ft.	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 10.00 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	
18. GEOTECHNICAL SAMPLES: No	DISTURBED:	UNDISTURBED:
19. TOTAL NUMBER OF CORE BOXES: NA		
20. SAMPLES FOR CHEMICAL ANALYSIS: Yes	SW8270	21. TOTAL CORE REC.: NA
22. DISPOSITION OF HOLE: Vertical	GROUTED: Grout	MONITORING WELL:
OTHERS (SPECIFY):	23. SIGNATURE OF INSPECTOR: David R. Robbins	

ELEV. a	DEPTH b	GRAPHIC LOG c	DESCRIPTION OF MATERIALS d	SPLIT SPOON (ppm) e	HEAD-SPACE (ppm) f	BLOW COUNTS g	ANALYTICAL SAMPLE NO. h
	0		SILTY SAND (SM): dark brown (7.5YR3/2), fine grained, contains organic matter, moist to wet, nonplastic, very loose.		0.0	WH	
	2		Water table at 3.0 ft.		1.8	WH	
	4					WH	
	6		LEAN CLAY (CL): brown yellow (10YR6/6), saturated with petroleum, with strong black staining, wet, high plasticity, very soft.			2/3/3/2	
	8				792.4	3/2/2/2	181-B02-01-01
	10		Total Depth = 10.00 ft.				

PROJECT: Table 2 - RFI HOLE NO.: 181-B02

SS-39

PREVIOUS INVESTIGATION MONITORING WELL LOGS AND WELL CONSTRUCTION INFORMATION

DRILLING LOG

HOLE NO. MW-39-01

F2387

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 39
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 685782.38(Y), 531057.13(X)
	9. SURFACE ELEVATION: 4058.04
	10. DATE STARTED: 25 SEP 91 — 11. DATE COMPLETED: 25 SEP 91
12. OVERBURDEN THICKNESS:	15. DEPTH GROUNDWATER ENCOUNTERED: ~19 ft bgl
13. DEPTH DRILLED INTO ROCK:	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 04 NOV 91 25.88 ft bmp
14. TOTAL DEPTH OF HOLE: 28 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
		X	

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		ACD

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILTY SAND, to sandy silt: tan (10YR 8/2), dry, loose, crumbly, very fine, poorly graded, homogeneous. (SM)					4.0/5.0 ft
	2	changes to a (10YR 7/4) color.					
	3						
	4	changes to brown (5YR 6/4), tough caliche at 4 ft.					
	5	minor caliche, tan (10YR 8/2).					4.0/5.0 ft
	6						
	7	brown color, firm					
	8	SAND: orange-pink (5YR 8/4), clean, very fine, loose, dry, crumbly, homogeneous, poorly graded, fine to very fine. (SP)					
	9						

DRILLING LOG

HOLE NO. MW-39-01

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR ACD

SHEET 2 OF 2 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	10						3.5/5.0 ft
	11						
	12						
	13	minor caliche at 13 ft, thin (1") silt zone (brown).					
	14						
	15	some tan zones, some light brown zones, some silty sand zones, caliche to ~17 ft.					4.5/5.0 ft
	16						
	17						
	18						
	19	wet at 19 ft.					
	20	some silty/clayey zones, some caliche, olive grey to tan to brown					▽ -water at 20.16 ft
	21						
	22						
	23			MW039-01-22.5-25.0			
	24	black staining at ~23.5 ft. (thin).					
	25						
	26						
	27						
							TD=28 ft

PROJECT HOLLOMAN AFB RI/FS FOR 29 SITES

HOLE NO. MW-39-01

DRILLING LOG

F2417

HOLE NO. MW-39-02

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 2 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 39
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 685059.60(Y), 530243.32(X)
	9. SURFACE ELEVATION: 4049.35
	10. DATE STARTED: 25 SEP 91 — 11. DATE COMPLETED: 25 SEP 91
12. OVERBURDEN THICKNESS:	15. DEPTH GROUNDWATER ENCOUNTERED: 15.14 ft bgl
13. DEPTH DRILLED INTO ROCK:	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 04 NOV 91 17.84 ft bmp
14. TOTAL DEPTH OF HOLE: 25.5 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		HTH

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SILT: very pale orange (10YR 8/20), non-plastic, dry, some caliche. (ML)	HS=0.0ppm			3,8,9,9	1.8/2.0 ft
	2						
	3	SILT: as above. (ML)	HS=0.0ppm			3,3,2,2	1.7/2.0 ft
	4						
	5	SILT: as above. (ML)	HS=0.0ppm			3,8,10,23	1.5/2.0 ft
	6						
	7						
	8	SAND: very pale orange (10YR 8/2), very fine grained, poorly graded, dry, rust staining. (SP)	HS=1.5ppm			16,24,28, 30	1.8/2.0 ft
	9						

DRILLING LOG

HOLE NO. MW-39-02

PROJECT: HOLLOMAN AFB RI/FS

INSPECTOR: HTH

SHEET 2 OF 2 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	10	SANDY SILT, as above: with more silt. (ML)				15,21,29, 28	
	11						
	12						
	13						
	14						
	15	SILT: very pale orange (5YR 8/2), medium plastic, moist, firm. (ML)				20,19,23, 26	water at 15.14 ft bgl
	16						
	17						
	18						
	19						
	20	SAND: very pale orange (5YR 8/2), fine to very fine grained, poorly graded, mottled brown, wet. (SP)				11,10,26, 30	
	21						
	22						
	23						
	24						
	25						TD= 25.5 ft
	26						
	27						

DRILLING LOG

F2398

HOLE NO. MW-39-03		
1. COMPANY NAME RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR SOUTHWEST ENG INC	SHEET 1 OF 2 SHEETS
3. PROJECT HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION 39	
5. NAME OF DRILLER ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL HOLLOW-STEM AUGER	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION 685072.76(Y), 530596.80(X)	
	9. SURFACE ELEVATION 4038.33	
	10. DATE STARTED 25 SEP 91	11. DATE COMPLETED 25 SEP 91
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED 2 ft bgl	
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED 04 NOV 91 7.50 ft bmp	
14. TOTAL DEPTH OF HOLE 14 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		ACD

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1	SAND: tan, some silty zones, clean, very fine, crumbly, moist, homogeneous, poorly graded. (SP)					4.0/5.0 ft ▽ water at ~1-2 ft
	2	changes to a duky yellow orange (10YR 6/6), wet.					
	3	changes to light brown (5YR 6/4), caliche present.					
	4						
	5						▽ -water at 5.0 ft
	6	fine to very fine sand, hard (caliche?) zones.					
	7	changes to a brown (5YR 5/6) color.					
	8						
	9						

DRILLING LOG

HOLE NO. MW-39-03

PROJECT HOLLOMAN AFB RI/FS

INSPECTOR ACD

SHEET 2 OF 2 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	changes to a fine to medium sand.					
	12	SAND: yellow-grey (5Y 7/2) to pale orange (10YR 8/2), caliche, very fine, hard, poorly graded, wet, clean.					
	13						
	14						TD= 14 ft
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						

DRILLING LOG

HOLE NO. MW-39-04

F2418

1. COMPANY NAME: RADIAN CORPORATION	2. DRILLING SUBCONTRACTOR: SOUTHWEST ENG INC
SHEET 1 OF 2 SHEETS	
3. PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES	4. LOCATION: 39
5. NAME OF DRILLER: ART VALTIERRA	6. MANUFACTURER'S DESIGNATION OF DRILL: HOLLOW-STEM AUGER
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: BOREHOLE DIA.: 7.5"	8. HOLE LOCATION: 685269.87(Y), 530918.81(X)
	9. SURFACE ELEVATION: 4051.73
	10. DATE STARTED: 25 SEP 91 — 11. DATE COMPLETED: 25 SEP 91
12. OVERBURDEN THICKNESS:	15. DEPTH GROUNDWATER ENCOUNTERED: 17.05 ft bgl
13. DEPTH DRILLED INTO ROCK:	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 04 NOV 91 19.25 ft bmp
14. TOTAL DEPTH OF HOLE: 24 ft.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DEPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		HTH

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	1						
	2						
	3						
	4						
	5	SILTY SAND: light brown (5YR 5/6), grading to a very pale orange (10YR 8/2), very fine grained, poorly graded, moist with caliche, some silty layers. (SP)				8,9,15,40	1.8/2.0 ft
	6						
	7						
	8						
	9						

DRILLING LOG

HOLE NO. MW-39-04

PROJECT: HOLLOMAN AFB RI/FS

INSPECTOR: HTH

SHEET 2 OF 2 SHEETS

a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS/RECOVERY h
	11	SAND: very pale orange (5YR 8/2), medium grained, poorly graded, dry to moist, bedding planes, iron staining on bedding planes. (SP)				11,32,48, 50	1.7/2.0 ft
	12						
	13						
	14						
	15	SAND: greyish-orange (10YR 7/4), medium medium grained, poorly graded, wet, clay and silt layers. (SP)	DH=0.0ppm			15,14,10, 29	1.5/2.0 ft
	16						
	17						water at 17.05 ft bgl
	18						
	19						
	20	SAND: very pale orange (5YR 8/2), fine to very fine grained, poorly graded, wet, clean. (SP)	DH=0.0ppm			11,18,9,8	possibly slough from 20-23.1 ft during well installation
	21						
	22						
	23						
	24						TD= 24.0 ft
	25						
	26						
	27						

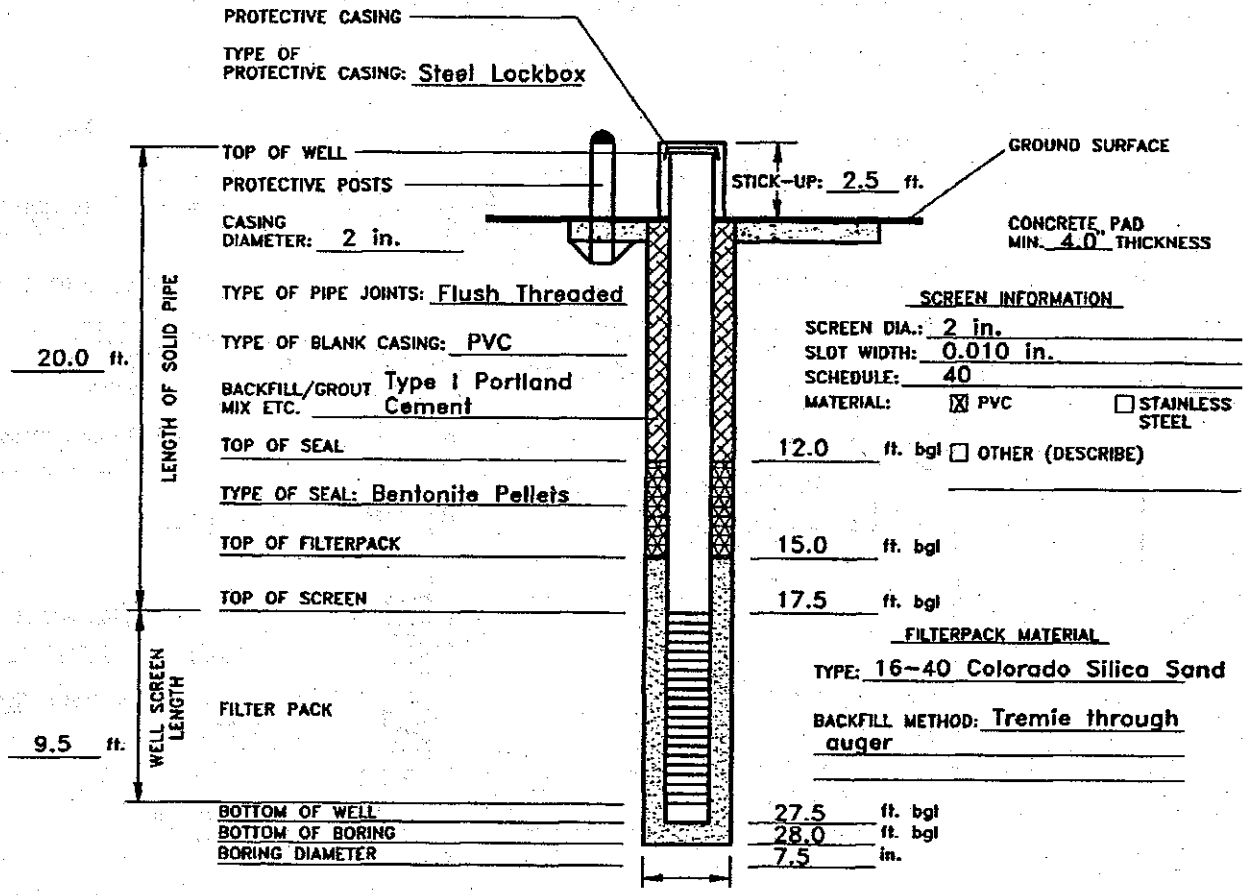
PROJECT: HOLLOMAN AFB RI/FS FOR 29 SITES

HOLE NO. MW-39-04

ELEVATION GROUND WATER			PROJECT: HOLLOMAN AFB RI/FS
DATE INSTALLED: 25 SEPT 91	STARTED	COMPLETED	LOCATION (Coordinates or Station): 39
ELEVATION TOP OF CASING: 4059.86			SIGNATURE OF INSPECTOR/INSTALLER: ACD
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-39-01

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



WELL DEVELOPMENT

METHOD: See Well Development Record

TIME SPENT DEVELOPING:

VOLUME OF WATER REMOVED:

VOLUME OF WATER ADDED:

DESCRIPTION OF PREDEVELOPMENT WATER:

DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS

DATE/TIME/LEVEL 4 NOV 91/1534/22.66 ft. bmp

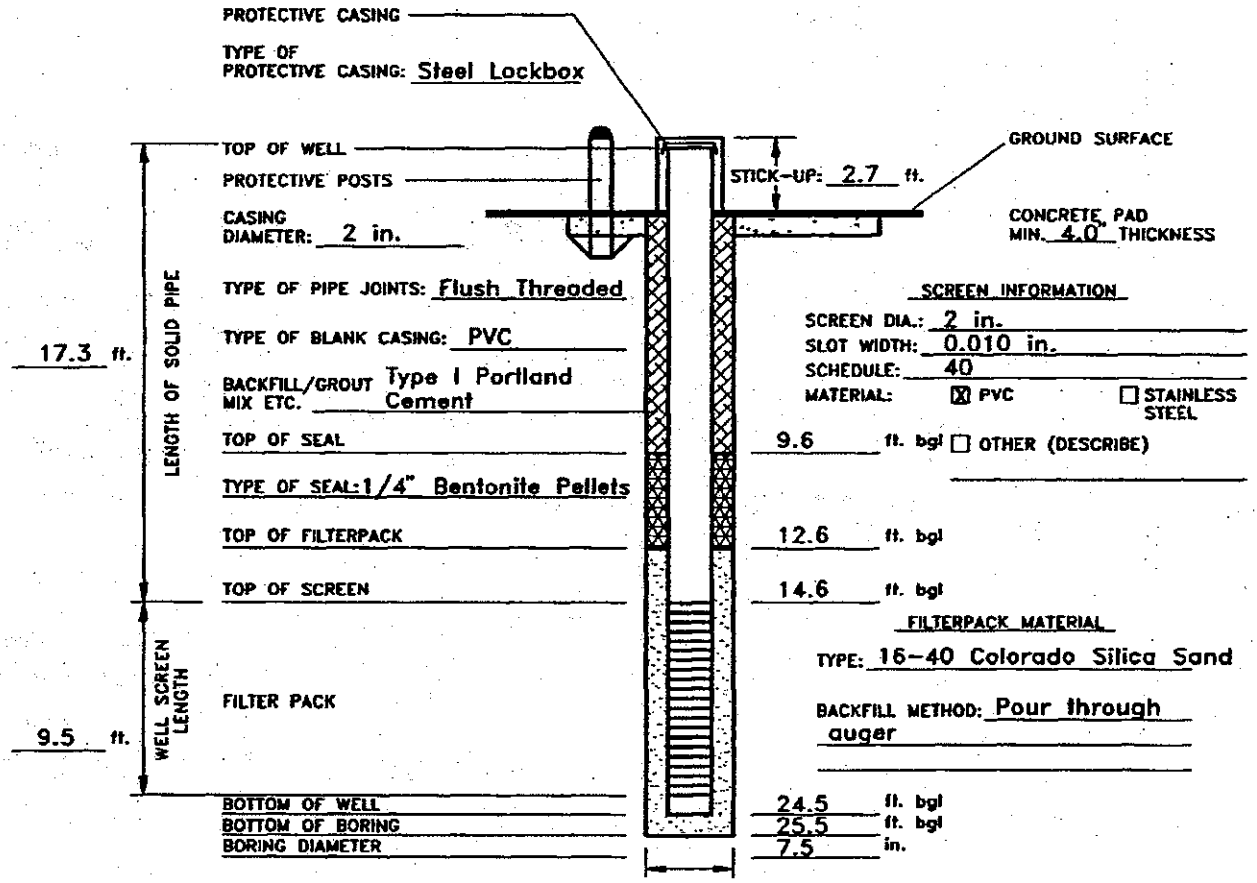
DEPTH FROM TOP CASING AFTER DEVELOPMENT:

D17381

ELEVATION GROUND WATER			PROJECT HOLLOMAN AFB RI/FS	
DATE INSTALLED 25 SEPT 91	STARTED 1600	COMPLETED 1800	LOCATION (Coordinates or Station) 39	
ELEVATION TOP OF CASING 4051.15			SIGNATURE OF INSPECTOR/INSTALLER HTH	
DRILLING METHOD HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number) MW-39-02	

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



WELL DEVELOPMENT

METHOD: See Well Development Record

TIME SPENT DEVELOPING:

VOLUME OF WATER REMOVED:

VOLUME OF WATER ADDED:

DESCRIPTION OF PREDEVELOPMENT WATER:

DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS

DATE/TIME/LEVEL 21 OCT 91/1030/18.00 ft. bmp

4 NOV 91/1548/17.84 ft. bmp

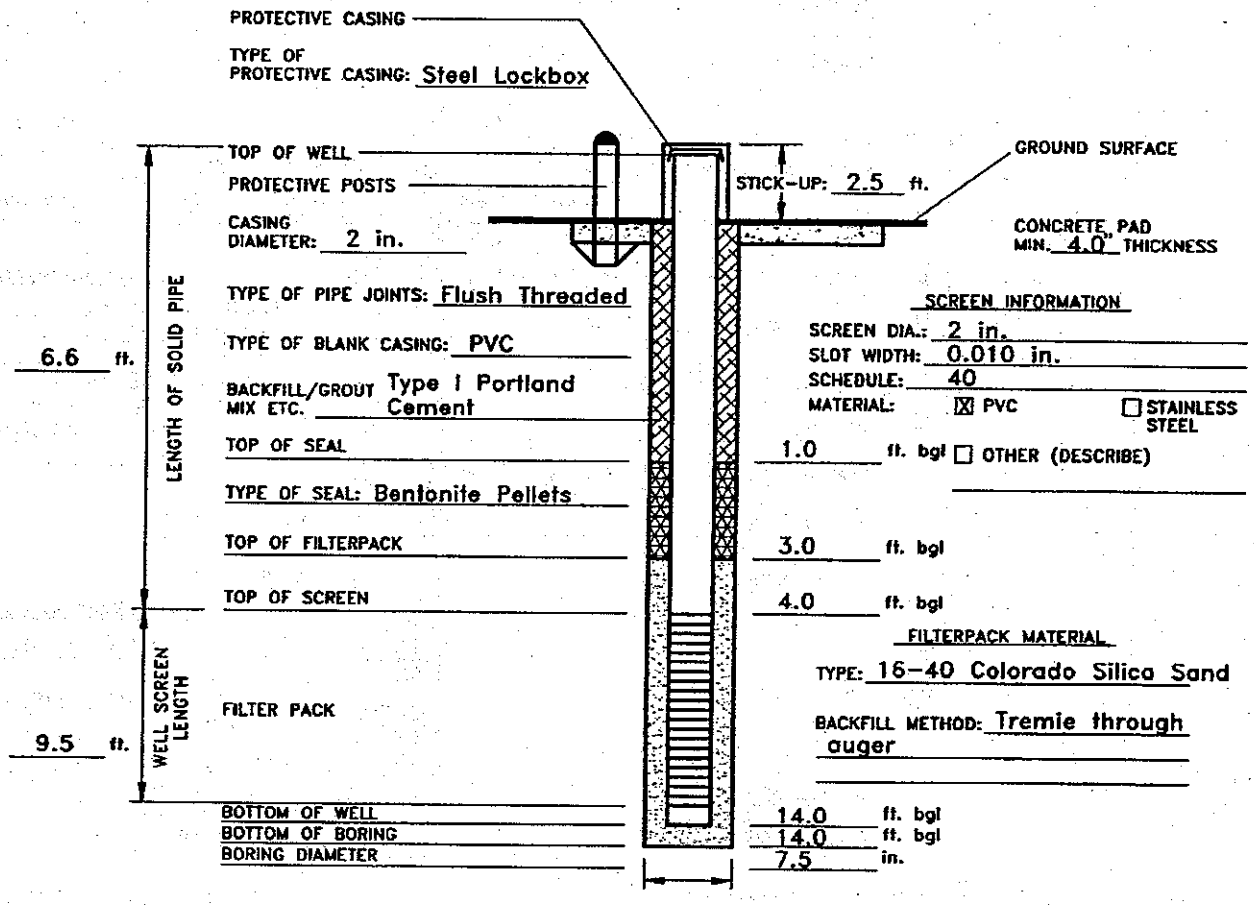
DEPTH FROM TOP CASING AFTER DEVELOPMENT:

117380

ELEVATION GROUND WATER			PROJECT: HOLLOMAN AFB RI/FS
DATE INSTALLED: 25 SEPT 91	STARTED	COMPLETED	LOCATION (Coordinates or Station): 39
ELEVATION TOP OF CASING: 4040.63			SIGNATURE OF INSPECTOR/INSTALLER: ACD
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-39-03

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



SCREEN INFORMATION

SCREEN DIA.: 2 in.
SLOT WIDTH: 0.010 in.
SCHEDULE: 40
MATERIAL: ☒ PVC ☐ STAINLESS STEEL
1.0 ft. bgl ☐ OTHER (DESCRIBE)
3.0 ft. bgl
4.0 ft. bgl

FILTERPACK MATERIAL

TYPE: 16-40 Colorado Silica Sand
BACKFILL METHOD: Tremie through auger
14.0 ft. bgl
14.0 ft. bgl
7.5 in.

WELL DEVELOPMENT

METHOD: See Well Development Record
TIME SPENT DEVELOPING:
VOLUME OF WATER REMOVED:
VOLUME OF WATER ADDED:
DESCRIPTION OF PREDEVELOPMENT WATER:
DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

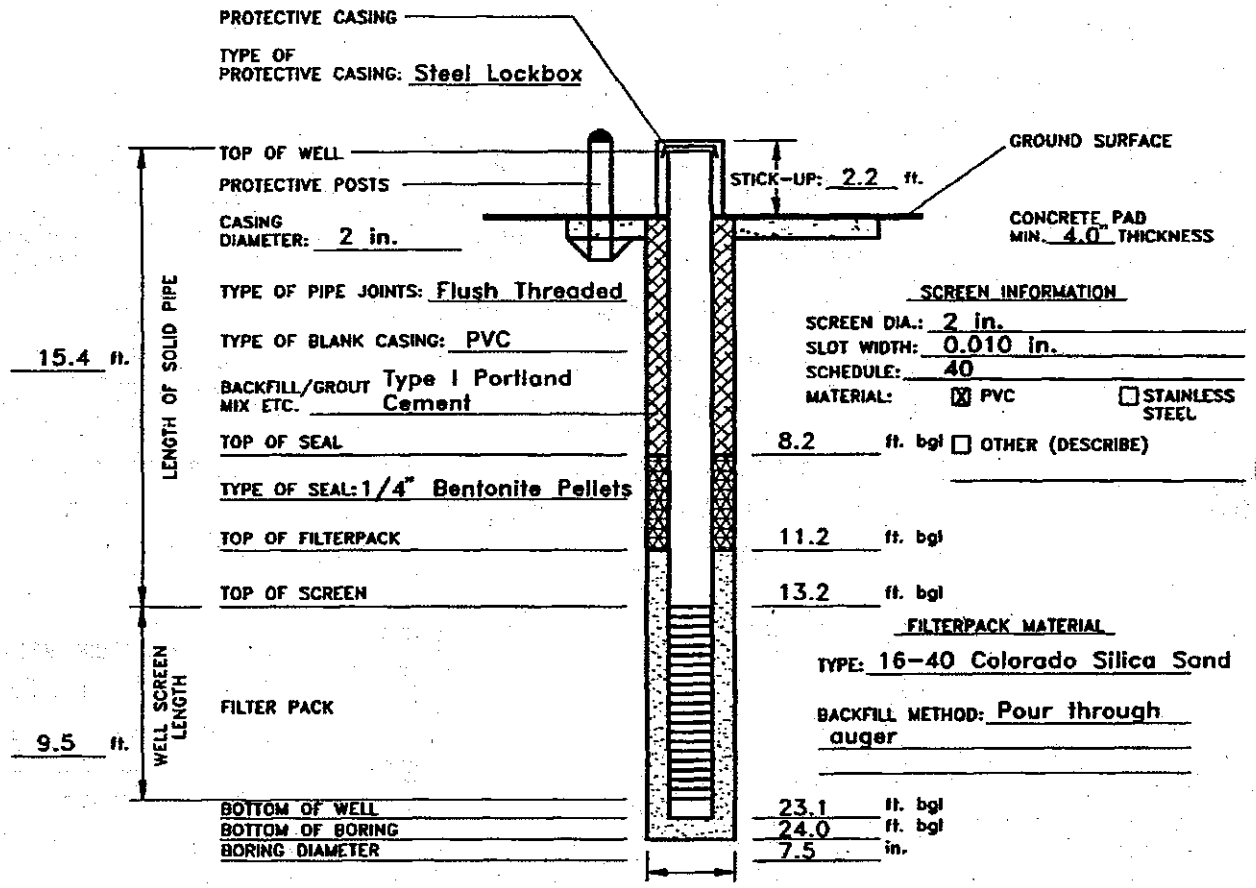
WATER LEVEL MEASUREMENTS
DATE/TIME/LEVEL 4 NOV 91/1544/7.50 ft. bmp
DEPTH FROM TOP CASING AFTER DEVELOPMENT:

D1738J

ELEVATION GROUND WATER			PROJECT: HOLLOMAN AFB RI/FS
DATE INSTALLED: 25 SEPT 91	STARTED: 1400	COMPLETED: 1600	LOCATION (Coordinates or Station): 39
ELEVATION TOP OF CASING: 4053.34			SIGNATURE OF INSPECTOR/INSTALLER: HTH
DRILLING METHOD: HOLLOW STEM AUGER			WELL NO. (as shown on drawing: title and file number): MW-39-04

MONITORING WELL CONSTRUCTION DIAGRAM

(ALL MEASUREMENTS FROM GROUND SURFACE)



WELL DEVELOPMENT

METHOD: See Well Development Record

TIME SPENT DEVELOPING:

VOLUME OF WATER REMOVED:

VOLUME OF WATER ADDED:

DESCRIPTION OF PREDEVELOPMENT WATER:

DESCRIPTION OF POST DEVELOPMENT WATER:

WATER LEVEL SUMMARY

WATER LEVEL MEASUREMENTS

DATE/TIME/LEVEL: 21 OCT 91/1015/19.20 ft. bmp

4 NOV 91/1540/19.25 ft. bmp

DEPTH FROM TOP CASING AFTER DEVELOPMENT:

1738P

SD-27

SUPPLEMENTAL RFI BORING LOGS

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BORING NUMBER HGLSB27-01

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 5/16/06 **COMPLETED** 5/16/06
GROUND ELEVATION _____ **HOLE SIZE** 2"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY B.T. Brodersen **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No temp. well installed- dry
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					0.3 Drainage - Pit Grate (1/4 ft.)	
					0.5 VOID Space	
1	HGLSB27-01-0002		SM		Sediment in former sump	
		Victoreen (V): 142 µR/h			1.6	
2					1.8 Sump concrete base	
		V: 153 µR/h	GW		Pea gravel	
					2.4	
					2.6 Concrete	
3		V: 75 µR/h			No recovery due to concrete	
		V: 89 µR/h				
4					3.8	
			SM		Whitish brown, silty SAND, (SM), fine to medium grained, damp	
5		V: 9.4 µR/h			Becomes blueish in color	
6						
7	HGLSB27-01-0608	V: 35 µR/h				
8					8.5 Equipment Refusal	1440
					Bottom of hole at 8.5 feet.	

HGL_BOREHOLE_1_SD-27.GPJ_GINT US.GDT 5/21/07

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BORING NUMBER HGLSB27-02

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 5/16/06 **COMPLETED** 5/16/06
GROUND ELEVATION ___ **HOLE SIZE** 2"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
▽ **AT TIME OF DRILLING** 7.0 ft
LOGGED BY B.T. Brodersen **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Temp. well installed; no PIDs taken
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			SM		Light brown, silty SAND (SM), fine to medium grained, damp	
1		V: 80 µR/h				0.0
		V: 105 µR/h				
2						0.0
3		V: 67.5 µR/h			Moist	0.0
4		V: 105 µR/h				0.0
		V: 100 µR/h				
5		V: 62 µR/h				
6					Roots and soil staining	
7	HGLSB-27-02-0809	V: 138 µR/h			▽ Wet	34.5
		V: 87 µR/h				0.0
8		V: 80 µR/h			Gray staining, petroleum odor	82
9		V: 94 µR/h				
10						5.6
						10.6
11						

HGL_BOREHOLE_1 SD-27.GPJ GINT US.GDT 5/21/07

(Continued Next Page)

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BORING NUMBER HGLSB27-02

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-10-05 **PROJECT LOCATION** Holloman AFB SD-27

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					Light brown, silty SAND (SM), fine to medium grained, damp *(continued)*	
12	HGLSB27-03-	No more V readings taken	SM			
13						
14					14.0	
					Bottom of hole at 14.0 feet.	

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BORING NUMBER HGLSB27-03

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 5/15/06 **COMPLETED** 5/15/06
GROUND ELEVATION ___ **HOLE SIZE** 2"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
▽ **AT TIME OF DRILLING** 8.5 ft
LOGGED BY B.T. Brodersen **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Temp. well installed (12'-17')
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					Light brown, silty SAND (SM), medium to fine grain	0.0
1						0.0
2		V: 8.5 µR/h			Moist	0.0
3		V: 14.7 µR/h				0.0
4		V: 5.3 µR/h				0.0
5		V: 10.7 µR/h				0.0
6		V: 98 µR/h	SM			0.0
7		V: 85 µR/h			Wet, reddish brown	0.0
8		V: 109 µR/h			▽	0.0
9		V: 80 µR/h				0.0
10		V: 2.9 µR/h			Green-gray Saturated	10.6
11						

HGL_BOREHOLE_1_SD-27.GPJ GINT US.GDT 5/21/07

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BORING NUMBER HGLSB27-03

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-10-05 **PROJECT LOCATION** Holloman AFB SD-27

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					Blue-gray, SAND (SW), slightly silty, moderately hard, moist	
12	HGLSB27-02-1113	V: 63 µR/h V: 100 µR/h	SW		damp	280 673
13						
14		V: 123 µR/h V: 18.3 µR/h				1556 882
15		V: 125 µR/h				205
16					16.0	
17	HGLSB27-03-1618	V: 153 µR/h V: 102 µR/h V: 73 µR/h	SP		Brown, silty SAND (SP), fine to medium grained, moist to wet	304 9.6 21.5
18					18.0	
					Bottom of hole at 18.0 feet.	

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BORING NUMBER HGLSB27-04

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 5/16/06 **COMPLETED** 5/16/06
GROUND ELEVATION _____ **HOLE SIZE** 2"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY B.T. Brodersen **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No well installed- dry
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0				0.3	Concrete pad	0.0
					Light brown, silty SAND (SP) fine to medium grained, damp	
1		V: 105 µR/h				0.0
		V: 147 µR/h				
2						0.0
3		V: 135 µR/h	SP		Moist	0.0
4		V: 205 µR/h				0.0
					Becomes reddish brown	
5		V: 118 µR/h				0.0
6		V: 127 µR/h		6.0		0.0
					Light brown, silty SAND (SP) fine to medium grained, moderately hard	
7		V: 156 µR/h				0.0
8		V: 234 µR/h	SP		Moist	
9	HGLSB27-04-0810	V: 118 µR/h				0.0
						0.0
10		V: 105 µR/h				0.0
				10.5	Equipment Refusal	
					Bottom of hole at 10.5 feet.	

HGL_BOREHOLE_1_SD-27.GPJ GINT US.GDT 5/21/07

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BORING NUMBER HGLSB27-05

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 5/18/06 **COMPLETED** 5/18/06
GROUND ELEVATION _____ **HOLE SIZE** 2.5"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY B.T. Brodersen **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Well installed (3'-13'), but came up dry
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0				Concrete pad	0.0
0.5		SM		Medium brown, silty SAND (SM), hard	0.0
1					0.0
2					0.0
3					0.0
4					0.0
4.0		SM		Light brown, silty SAND (SM), hard, very dry	0.0
5					0.0
6					0.0
6.0		SM		Medium reddish brown, silty SAND (SM), fine to medium grained, very moist	0.0
7					
8	HGLSB27-05-0708				0.0
8.0		SM		Light brown, silty SAND (SM), very fine, saturated	0.0
9					0.0
10					0.0
10.0		SM		Medium brown, silty SAND (SM), hard, moist	
11					
11.0					

HGL_BOREHOLE_1 SD-27.GPJ GINT US.GDT 5/21/07

(Continued Next Page)

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BORING NUMBER HGLSB27-05

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-10-05 **PROJECT LOCATION** Holloman AFB SD-27

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11					
12		SM		Light gray, silty SAND (SM), hard, dry	0.0
				12.0	
13		SM		Medium brown, silty SAND (SM), with white, brown, and red precipitate	0.0
				13.0	
				Equipment Refusal	0.0
				Bottom of hole at 13.0 feet.	

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BORING NUMBER HGLSB27-06

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 6/15/06 **COMPLETED** 6/15/06
GROUND ELEVATION _____ **HOLE SIZE** 2 1/8"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY Gillette/Gerike **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES No well installed- dry
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0					Concrete Pad	
					0.5	
1		V: 0.04 µR/h	CL		Grayish orange pink, sandy CLAY (CL), some silt, poorly graded, dry, moderately stiff	0.0
		V: 0.05 µR/h			1.7	
2		V: 0.06 µR/h	SC-SM		Grayish red, very fine SAND (SC-SM) with silt and clay, damp	0.0
			SC		1.8 Grayish pink, silty clayey very fine SAND (SC), very moist, moderately stiff	
3		V: 0.05 µR/h			3.0	0.0
4		V: 0.04 µR/h	SM		Grayish orangish pink, silty SAND (SM), very fine grained, damp, stiff	0.0
5						0.0
6		V: 0.01 µR/h	SM		Grayish orangish pink, very fine SAND (SM), trace silt, 10% dark minerals and feldspar, subangular to subrounded, dry, loose	0.0
7		V: 0.02 µR/h				0.0
					7.6	
8		V: 0.03 µR/h	ML		White, SILT (ML), trace dark minerals and feldspar, very moist, hard, dry at 9', initial refusal	0.0
9		V: 0.03 µR/h				0.0
10		V: 0.04 µR/h			10.0	0.0
11		V: 0.05 µR/h	SM		Pale red, silty very fine SAND (SM), damp, dense, gypsum crystals (?)	

HGL_BOREHOLE_1 SD-27.GPJ GINT US.GDT 5/21/07

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BORING NUMBER HGLSB27-06

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-10-05 **PROJECT LOCATION** Holloman AFB SD-27

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11		V: 0.06 µR/h	SM		Pale red, silty very fine SAND (SM), damp, dense, gypsum crystals (?) *(continued)*	0.0
		Refusal - TD			11.6 Equipment Refusal	
					Bottom of hole at 11.6 feet.	

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BORING NUMBER HGLSB27-07

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 6/15/06 **COMPLETED** 6/15/06
GROUND ELEVATION _____ **HOLE SIZE** 2 1/8"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY Gillette/Gerike **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Temp. well installed
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
1		V: 0.04 µR/h	SM		Grayish pink, silty SAND (SM), very fine grained, subangular to subrounded, dry, stiff	0.0
2		V: 0.05 µR/h				0.0
3		V: 0.06 µR/h	SC-SM		2.5 Pale red, silty clayey very fine SAND (SC-SM), damp, moderately stiff 2.8	0.0
4		V: 0.07 µR/h	SM		Grayish pink, silty very fine SAND (SM), damp, moderately stiff	0.0
5		V: 0.06 µR/h			5.0	0.0
6		V: 0.07 µR/h	SP		Grayish orangish pink, very fine SAND (SP), dry, 10% dark minerals and feldspar, loose, poorly graded	0.0
7		V: 0.08 µR/h			6.5 Pale red, same as above	0.0
8		V: 0.09 µR/h			Becomes dry and hard	0.0
9		V: 0.09 µR/h	SP			0.0
10		V: 0.09 µR/h				0.0
11						

HGL_BOREHOLE_1 SD-27.GPJ GINT US.GDT 5/21/07

(Continued Next Page)

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BORING NUMBER HGLSB27-07

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-10-05 **PROJECT LOCATION** Holloman AFB SD-27

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11		V: 0.06 µR/h	SP		Pale red, same as above *(continued)*	0.0
					11.3	
			SM		Very pale orange, silt and very fine grained SAND (SM), gypsum, very moist, moderately stiff	
12		V: 0.08 µR/h				0.0
13		V: 0.07 µR/h			13.0	
			CL		Pale red, CLAY (CL), gypsum, trace to moderately plastic, damp, very stiff	0.0
14		V: 0.07 µR/h				0.0
15		V: 0.07 µR/h				0.0
16		V: 0.07 µR/h			16.2	0.0
			CL		Pale red, CLAY (CL), less gypsum, some fine sand, trace plastic, damp, very stiff	
					16.8	
17		V: 0.07 µR/h	SM		Pale red, silty fine grained SAND (SM), some clay, damp, very stiff, some gypsum and iron oxide staining	0.0
18		V: 0.07 µR/h			18.3	0.0
			SM		Light brown, silty fine grained SAND (SM), same as above	
19		V: 0.07 µR/h			19.5	0.0
			SP		Moderate yellow brown, SAND (SP), 20% dark minerals and feldspar, very moist, moderately stiff	
20		V: 0.04 µR/h			Moderate yellowish brown, SAND (SP), fine to medium grained, wet, subangular to subrounded, trace clay, 20% dark minerals and feldspar	0.0
21		V: 0.03 µR/h			21.0	0.0
			CL		Grayish red, CLAY (CL), coarsely crystalline gypsum, very stiff, damp, moderately plastic, some sand	
22		V: 0.05 µR/h				0.0
					22.4	
			SM		Yellowish gray, silt and very fine grained SAND (SM), dry, hard, < 5% dark minerals and feldspar	
					22.5	
					Bottom of hole at 22.5 feet.	

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1155 Herndon Parkway Suite 900
Herndon VA 20170
Telephone: 703-478-5186
Fax: 703-471-4180

BORING NUMBER HGLSB27-08

CLIENT AFCEE
PROJECT NAME Supplemental RFI
PROJECT NUMBER AFC002-037-04-10-05
PROJECT LOCATION Holloman AFB SD-27
DATE STARTED 6/15/06 **COMPLETED** 6/15/06
GROUND ELEVATION _____ **HOLE SIZE** 2 1/8"
DRILLING CONTRACTOR Bhate/ESN
GROUND WATER LEVELS:
DRILLING METHOD DPT
AT TIME OF DRILLING ---
LOGGED BY Gillette/Gerike **CHECKED BY** B.T. Brodersen
AT END OF DRILLING ---
NOTES Temp. well installed
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			ML		Grayish red, SILT (ML) and gypsum, dry, moderately stiff	
					0.4	
1		V: 0.10 µR/h			Pale red, SILT (ML), damp, moderately stiff	0.0
2		V: 0.11 µR/h	ML ML		Pale red	0.0
					2.3	
3		V: 0.12 µR/h V: 0.11 µR/h	SM		Pale red, silty SAND (SM), very fine grained, damp, moderately stiff, gypsum at bottom of interval	0.0
4						
5		V: 0.10 µR/h				0.0
6		V: 0.08 µR/h				0.0
					6.1	
7			SP		Grayish pink, SAND (SP), very fine grained, trace dark minerals and feldspar, damp, moderately stiff, poorly graded	0.0
					7.3	
8		V: 0.10 µR/h V: 0.09 µR/h	ML		Grayish orangish pink, SILT (ML), dry, very stiff	0.0
					8.7	
9		V: 0.09 µR/h	SM		Light brown, silty SAND (SM), wet, <10% dark minerals and feldspar	0.0
10		V: 0.08 µR/h				
					10.7	
11		V: 0.11 µR/h, Disturbed sample -	ML			

(Continued Next Page)

HGL_BOREHOLE_1 SD-27.GPJ GINT US.GDT 5/21/07

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Fax: 703-471-4180

BORING NUMBER HGLSB27-08

CLIENT AFCEE **PROJECT NAME** Supplemental RFI

PROJECT NUMBER AFC002-037-04-10-05 **PROJECT LOCATION** Holloman AFB SD-27

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
11		liner blewout and jammed in tube V: 0.08 µR/h	ML		Grayish orangish pink, clayey SILT (ML), with gypsum, damp, very stiff, gypsum becomes coarsely crystalline (5-7mm) with depth *(continued)*	
12						
13						
14						
15					15.0	
16					Sampling discontinued due to refusal, drilled to 20' below ground surface to install a temp. well	
17						
18						
19						
20						
21					21.0	
					Bottom of hole at 21.0 feet.	

HGL_BOREHOLE_1 SD-27.GPJ GINT US.GDT 5/21/07

SD-27

PREVIOUS INVESTIGATION BORING LOGS

DRILLING LOG

[redacted] FOUR SITES (HOLL_4S) | [redacted] BH-27-01 | Inspector LEM | [redacted] RADIAN (RAD) | [redacted] 20 FEB 93 | Sheet 1 of 1

Depth	Graphic Log	Lithologic Description: Main Modifier	Predominant Lithology	Color	Munsell	Grain Size	Grading	Moisture	Plasticity	USCS Class (ASTM)	[redacted] (VVL)	Blow Counts	Sample Interval	Recovery	Observations and Comments
0		SILTY	SAND	DK. GREY BRN	10YR 4.2	F	P	D		SM	SDSL	3.8.8.29	0–2	1.8	WINDY, DUSTY
		SILTY	CLAY	YELLOWISH BRN	10YR 5/4			D	LOW	CL	STCL				
1		CLAYEY	SILT	LT. YELLOW BRN	10YR 6/4			D	LOW	ML	STCL				
2															
3		SANDY	SILT	PALE YELLOW	2.5Y 8/4	VF	P	M	LOW	ML	SDSL	9.8.9.9	2–4	1.8	
4															CALICHE LAYERS
5		SANDY	CLAY	PALE YELLOW	2.5Y 8/4	VF	P	S	LOW	CL	SDCL	4.7.7.8	4–6	2.0	
6															TD 6.0 FT.
7															
8															
9															

[redacted] 62779

DRILLING LOG

[redacted] FOUR SITES (HOLL_4S) | [redacted] BH-27-02 | Inspector LEM | [redacted] RADIAN (RAD) | [redacted] 20 FEB 93 | Sheet 1 of 1

Depth	Graphic Log	Lithologic Description: Main Modifier	Predominant Lithology	Color	Munsell	Grain Size	Grading	Moisture	Plasticity	USCS Class (ASTM)	[redacted] (VVL)	Blow Counts	Sample Interval	Recovery	Observations and Comments
0–7		CLAYEY	SILT	LT. YELLOW BRN	2.5Y 6/3			D	LOW	ML	FILL	0,2,1,1	0–2	1.8	ROOTS AND TWIGS FROM 0.0–0.5 FT. SOME SAND
												1,2,1,2	2–4	1.8	
												2,2,4,2	4–6	2.0	
												2,2,10,12	6–8	2.0	
7–9		CLAYEY	SAND	DARK GREY	2.5Y 4/1	VF	P	S		SC	SOCL				PIT (NATIVE SOIL) AT 7 FT. FUEL ODOR STAINED BLACK
												12,50+	8–9	1.0	

TD = 10.0 FT.

F3718

1208 41

DRILLING LOG

FOUR SITES (HOLL_4S) | BH-27-03 | Inspector: LEM | RADIAN (RAD) | 21 FEB 93 | Sheet 1 of 2

Depth	Graphic Log	Lithologic Description: Main Modifier	Predominant Lithology	Color	Munsell	Grain Size	Grading	Moisture	Plasticity	USCS Class (ASTM)	[redacted] (VVL)	Blow Counts	Sample Interval	Recovery	Observations and Comments
1		CLAYEY	SILT	LT. YELLOW BRN	2.5Y 6/3			M	LOW	ML	FILL	1,2,3,2	0–2	1.9	
2															
3															
4												1,1,1,1	4–6	1.0	
5															
6															
7															
8		CLAYEY	SAND	DK. GREY	2.5Y 4/1	VF	P	S		SC	SDCL	0,0,1,2	6–8	0	
9		SANDY	SILT	GREENISH GREY	5GY 6/1	VF	P	S	LOW	ML	SDSL	25,50+	8–9	1.0	CALICHE FUEL ORDER

F3719

1208 42

DRILLING LOG

[redacted] FOUR SITES (HOLL_4S) | [redacted] BH-27-03 | Inspector LEM | [redacted] RADIAN (RAD) | [redacted] 21 FEB 93 | Sheet 2 of 2

Depth	Graphic Log	Lithologic Description: Main Modifier	Predominant Lithology	Color	Munsell	Grain Size	Grading	Moisture	Plasticity	USCS Class (ASTM) [redacted]	(VVL)	Blow Counts	Sample Interval	Recovery	Observations and Comments
11												18,21,19,26	10–12	2	FUEL ODOR STAINED GREY
12												8,10,12,14	12–14	2	FUEL ODOR STAINED GREY
13															
14												5,9,17,22	14–16	2	FUEL ODOR STAINED GREY
															CLAY FROM 14–14.5 FT.
15		SILTY	CLAY	LT YELLOW BRN	10YR 6/4			S	HIGH	CH	STCL				
		SANDY	SILT	GREENISH GREY	5GY 6/1	VF	P	S	LOW	ML	SDSL				UNSTAINED
16															TD = 16 FT.
17															
18															
19															

[redacted] 3719

1208 43

DRILLING LOG

[redacted]: FOUR SITES (HOLL_4S) | [redacted]: BH-27-05 | Inspector: LEM | [redacted]: RADIAN (RAD) | [redacted]: 21 FEB 93 | Sheet 1 of 1

Depth	Graphic Log	Lithologic Description: Main Modifier	Predominant Lithology	Color	Munsell	Grain Size	Grading	Moisture	Plasticity	USCS Class (ASTM) [redacted]	[redacted] (YYL)	Blow Counts	Sample Interval	Recovery	Observations and Comments
1		CLAYEY	SILT	LT. YELLOW BRN	10YR 6/4			M	LOW	ML	STCL	3,7,6,7	0–2	1.9	COLOR LIGHTER AT BASE OF UNIT
2												7,5,2,2	2–4	2	
3		SANDY	SILT	LT. YELLOW BRN	10YR 6/4	VF	P	M	LOW	ML	SDSL	2,2,3,4	4–6	2	
4															CALICHE
5		SILTY	SAND	LT. YELLOW BRN	10YR 6/4	VF	P	S		SM	SDSL	4,4,8,10	6–8	2	
6															
7															
8															TD = 8 FT.
9															

F3720

APPENDIX C

GEOPHYSICAL SURVEY

Holloman Air Force Base Geophysical Surveys

Alamogordo, New Mexico

Prepared by:

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Project Number: 05ECA22

Attention: Mr. Kenneth J. Cottrell, CPG, PG

December 21, 2005

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Appendix B – LF-10 Maps
Appendix C – LF-19 Maps
Appendix D – LF-21 Maps
Appendix E – LF-22 Maps
Appendix F – LF-23 Maps
Appendix G – LF-29 Maps

1.0 Introduction

During September and October of 2005 ECA performed electromagnetic and magnetic geophysical surveys at the Holloman Air Force Base located approximately 10 miles southwest of Alamogordo, New Mexico. This work was performed at the request of **HydroGeologic, Inc. (HGL)**, to enable **HGL** to ultimately determine the lateral extent of solid waste management units or landfills located on the air force base property. Seven sites were investigated by ECA, namely DP-30 / SD-33 (4 acres), LF-10 (24 acres), LF-19 (6 acres), LF-21 (5 acres), LF-22 (3.5 acres), LF-23 (5.5 acres) and LF-29 (5 acres) comprising an approximate total area of 53 acres.

The March 2005 Bid Request specified the electromagnetic method for all sites, as well an additional survey of DP-30 / SD-33 utilizing the ground penetrating radar method. Due to the highly conductive soils encountered onsite, the metal-detection (in-phase) component of the electromagnetic method was adversely and significantly compromised. As a result, the surveying strategy was modified to utilize only the quadrature (conductivity) component of the electromagnetic method in conjunction with magnetometry, which served to detect buried metallic debris.

1.1 Purpose of Surveys

As stated above, **HGL** requested the geophysical surveys to determine landfill boundaries and to locate buried metal-bearing objects. Additionally, all data points were required to have corresponding longitude and latitude coordinates, to enable later acquisition of locations having anomalous readings.

1.2 Survey Equipment

ECA utilized the Geometrics, Inc. Model G-858 and Model G-856 total-field magnetometers for the magnetic surveying portion of the project. The G-858 magnetometer is an electron-based system that utilizes the precessing behavior of Cesium vapor electrons subjected to light energy at specified wavelengths. The G-856 magnetometer is a proton or hydrogen-based system that utilizes the precessing behavior of protons subjected to an induced magnetic field. The G-858 unit was utilized as the actual surveying instrument, whereas the G-856 was employed strictly as a fixed base station, in order to record changes in the earth's daily (diurnal) magnetic field.

The Geonics Limited Model EM-31 Mark2 terrain conductivity instrument was utilized to measure lateral soil conductivity changes at each site. The EM-31 Mark2 system operates on the simple, yet reliable, concept of magnetic induction and Maxwell's Law, whereby an electromagnetic field is transmitted through the soil and the associated electrical field current is ultimately picked up by the receiver and correlated directly to soil conductivity. This instrument is capable of measuring to a depth of 20 feet in low-conductivity terrain, but in the highly conductive soils encountered onsite, the effective depth of signal penetration, which is inversely related to soil conductivity, was probably lessened to approximately 10 feet.

The Trimble AgGPS 132 is a high-performance GPS receiver that utilizes a subscription-based differential correction service to calculate sub-meter positions in real-time. ECA utilized Trimble's AgGPS Parallel Swathing Option that incorporated a light bar guidance system that enabled precision guidance information for navigating reasonably straight and parallel lines.

2.0 Survey Parameters and Data Quality

Geophysical surveys must be designed to prevent aliasing or under-sampling the survey area with respect to the locations of causative bodies or features. The following discussion reveals how the parameters for each of the survey methods were determined.

deviation represented a repeatability accuracy of 99.167 percent, within an approximate conductivity environment of 60 mS/m.

2.3 Global Positioning System

Utilizing the Trimble AgGPS 132 global positioning system (GPS), ECA was able to perform magnetometer and EM-31 surveys along straight-line traverses spaced set distances apart. All traverses were referenced against a baseline, through the utilization of the Trimble Swathing Option – an established field surveying technique that has been accurately employed by farmers throughout the world. A light bar attached to the GPS backpack enabled ECA to maintain sufficiently straight and evenly spaced survey lines, ultimately creating well-controlled grids over all seven landfill sites.

The GPS-based surveys proved to be considerably more cost and time efficient than pre-survey gridding, in light of the fact that most sites were characterized by high brush, dense foliage, trees and/or less-than-level survey conditions. Because the GPS system acquired locational (XY) data simultaneously with the geophysical (Z) data, the resultant databases consisted of virtually continuous XYZ data that were readily plotted in Lon-Lat coordinates. GPS-based surveys typically have an accuracy of ± ½-meter.

Latency errors occur when the incoming data streams do not align perfectly. Latency corrections were not necessary during the magnetometer surveys, due to the insignificant magnitude of the maximum potential error possible with once-per-second GPS readings. No latency errors occurred during the EM-31 surveys, because the instrument is designed to only record a reading upon receipt of the GPS signal, thus ensuring perfect alignment. In the case of the magnetometer surveys, readings occurred every 0.1 seconds. The maximum latency time error would equal the entire sampling interval time of 0.1 seconds. At a maximum surveying speed of 3 feet per second, the latency distance error is 0.3 feet or 3.6 inches. Such an error can be dismissed without explanation, given the tolerances of a metal detection survey.

3.0 Surveys Performed

The following table lists the sites that were surveyed and the methods employed therein:

SITE	SURVEY DATES (EM-31)	SURVEY DATES (MAG)	EM-31	MAG
DP-30 / SD-33	9/27, 9/29, 9/30		✓	
LF-10	9/30, 10/02, 10/04, 10/05	10/02, 10/05, 10/06, 10/09-10/11	✓	✓
LF-19	10/01	10/07, 10/08	✓	✓
LF-21	10/03	10/13, 10/14	✓	✓
LF-22	9/30, 10/01	10/08, 10/12	✓	✓
LF-23	9/30, 10/01	10/12, 10/13	✓	✓
LF-29		10/14, 10/15	✓	✓

4.0 Data Processing

4.1 EM-31

No post-survey data processing was performed on the EM-31 data, other than simply disregarding the in-phase data that were "pegged" at –20.47 ppt, in response to the highly conductive soils encountered onsite. In-phase readings are often severely compromised when soil conductivities exceed 100 mS/m.

4.2 Magnetometer

Contrary to the relatively simple conductivity surveys, the G-856 base station data and especially the G-858 magnetometer data required considerable post-survey processing. Utilizing the MagMap2000 proprietary software (version 4.65b) provided by Geometrics, Inc. of San Jose, California, ECA performed the following processing steps upon all G-858 data sets, in the order presented below:

1. Global dropout removal – A dropout is a reading that drops to zero and is clearly out of context. Dropouts result from the sensor being near or within a dead-zone or within a high magnetic gradient. A dead-zone is that volume of space wherein the sensor cannot produce a reading, due to misalignment with the earth's magnetic field. The software effectively and exclusively removed all dropouts from each dataset in one step.
2. Global duplicate time removal – All readings having duplicate time stamps were effectively and exclusively removed in one step.
3. Global spike removal – A spike is a single reading or set of readings that jump to unrealistically high levels at vertical or near-vertical slopes. Textbook spikes comprise 1-3 readings that differ significantly from the adjacent readings. Spikes, like dropouts, result from the sensor being near or within a dead-zone or within a high magnetic gradient. After hours of conservative trial processing runs, ECA designed a despiking filter measuring 8 readings wide and 250 nT (and greater) in amplitude. All reading sets matching these parameters were effectively and exclusively removed in one step.
4. Custom range despiking – ECA performed a detailed inspection of each and every line within each survey dataset, whereby all suspicious reading sets, having near-vertical or vertical slopes and thus not typical of monopole and dipole signatures, were removed in non-global surgical fashion.
5. GPS offset – A careful analysis of each and every site's dataset revealed, with the exception of LF-10, that all magnetometer surveys did not appear to be compensated by the 1.22-m (4-ft) GPS antenna to sensor offset that ECA input into the Trimble AgGPS system before every surveying event. This locational error was discovered when interim maps readily revealed a "herringbone" pattern, whereby misaligned GPS and sensor readings create a locational shift in one direction and a shift of similar magnitude in the returning or opposite direction. Such a magnified error is easily revealed in the form of chevron-shaped point-source anomalies or as a herringbone pattern along edges of elongate anomalies.

   ECA performed GPS-offsets at values ranging from –2.44 meters through +2.44 meters and empirically determined +1.22 meters to most effectively minimize the herringbone effect and convert chevron-shapes into tight circular anomalies.

   The 1.22-m GPS-offset correction (which happens to equal the actual GPS-to-sensor offset) was effectively inserted into each dataset in one step.
6. Removal of diurnal magnetic field – With the exception of the LF-10 gradiometer datasets, all other datasets consisted of total-field data that required the removal of the diurnal field, in order to achieve complete anomaly separation within a variable magnetic environment. As stated earlier, the diurnal field was recorded by a dedicated stationary G-856 magnetometer that was located nearby each landfill site being surveyed. Field readings were recorded every 2 to 5 minutes, in order to adequately sample the earth field.

   As stated earlier, the LF-10 gradiometer data did not require the removal of the diurnal field, since gradiometer data already eliminate extraneous fields, including the earth's magnetic field, and thus represent the *difference* between two total-field readings that are measured 1 meter apart.
7. Heading error removal - An analysis of each and every site's dataset revealed line-by-line "striping", whereby each traverse appeared as a series of elongate anomalies, creating an overall map with obvious data "stripes". Heading errors result when the measurement of the earth's magnetic field is somewhat different when surveying one direction versus another. This is attributable to the fact

that the magnetic field is not perpendicular to the ground and is therefore at a different angle to the sensor when going north versus south or east versus west and so on.

ECA performed heading error corrections at values ranging from 5 nT to 20 nT and found the 10 nT operator to effectively destripe all datasets without compromising data integrity.

5.0 Creation of Contour Maps

All datasets were gridded and computer-contoured, utilizing proprietary software (version 7.04) provided by Golden Software, Inc. of Golden, Colorado. To preserve the integrity of the data while also displaying high-resolution contour maps, ECA utilized grid spacing approximately 1/3 actual size and applied the Minimum Curvature gridding operator to each dataset. Among the myriad gridding operators in use, Minimum Curvature is considered to be an excellent gridding operator, because it minimizes (via a biharmonic Laplacian differential equation) the tendency for data to extrapolate beyond grid nodes, as can be the case with other operators. This feature of Minimum Curvature thus creates contour maps that closely resemble actual control points (data).

The maps presented in the attached appendices, are displayed as black contour lines at low contour intervals and as color-spectral maps at higher intervals. The line-contoured maps enable a detailed analysis of anomalies, whereas the color-contoured maps enable the reviewer to gain a broader perspective of features such as metal debris fields (ie, Mag data) or landfill boundaries (ie, EM-31 data).

Embedded within each map are layers depicting 1) the GPS-directed survey traverses and 2) cross-hatched grid lines that enable the map interpreter to better locate a particular location on the map.

6.0 Discussion of Survey Results

Appendices A through G include line-contour as well as color-contour maps of the seven sites surveyed during this geophysical investigation. The following discussion represents ECA's interpretation of the color contour maps only, as the line-contour maps are being provided strictly as a non-scope convenience, in the event **HGL** chooses to perform a more detailed analysis of the survey sites.

We are not providing interpretations for *each and every* discrete anomaly or set of coalesced anomalies. However, it is our opinion that circular anomalies probably indicate shallow buried metallic trash piles or spherical bodies, whereas the dipolar anomalies probably indicate buried cylinders such as drums. The determination of the depth of each causative source requires depth-estimation calculations that are beyond the scope of this project.

6.1 DP-30 / SD-33

This site was surveyed exclusively with the EM-31 terrain conductivity meter, as metallic debris was not anticipated here, since the anticipated waste stream consists primarily of low-conductivity oil and grease. Inspection of the map reveals two areas of lower conductivity (shown in blue) that appear to be waste disposal areas.

6.2 LF-10

The EM-31 map does not show anything conclusive, in ECA's opinion. The map is labeled to identify such features as fences, the gatehouse, concrete rebar (parking lot) and the nearby power substation fence. The only readily apparent anomalous features revealed in the EM-31 color map are the two high-conductivity areas along the eastern boundary. These conductivity highs may be attributable to the water-saturated gypsum soils located in this topographically lower area, or they may be attributable to buried non-magnetic and primarily non-metallic wastes such as glass, porcelain, wood, and gravel that were observed in this area.

The full-color G-858 map is labeled to also identify such cultural noise sources as monitoring wells and fences. The eastern boundary is relatively magnetically quiet (not anomalous), whereas the EM-31 map reveals two large conductivity highs. What readily appears of significance in this map is the presence of

numerous northwest-southeast trending linear features, which ECA interprets to be burial trenches. An additional "Trench Enhancement" map is included to better define the numerous trench locations. The anomalies that define these linear trench-like features are not robust, but they nonetheless reveal sufficient buried metal to be detected by a gradiometer magnetic survey.

6.3 LF-19

The EM-31 map reveals three distinct areas, as indicated by the diffusely bordered areas of high conductivity shown in red, that may represent water-saturated gypsum soils or disposal areas of non-metallic waste. Based upon the magnetometer surveys, these areas did not contain metallic objects. The most distinct anomalies are attributable to a barbwire fence.

The full-color G-858 map is labeled to identify surface noise sources. All unlabeled anomalies are probably buried metal debris and other magnetically susceptible causative bodies.

6.4 LF-21

The EM-31 map reveals what might be water-saturated gypsum soils or disposal areas of non-metallic waste, as indicated by the diffusely bordered areas of high conductivity shown in red. Based upon the magnetometer surveys, these areas did not contain metallic objects. The more distinct anomaly is attributable to a green metal shed.

The full-color G-858 map is labeled to identify the green metal shed and the three monitoring wells along the western boundary. All unlabeled anomalies are probably buried metal debris and other magnetically susceptible causative bodies.

6.5 LF-22

The EM-31 map reveals what appears to be a well-defined disposal area of low-conductivity (shown in blue).

The full-color G-858 map is labeled to identify surface noise sources and the three monitoring wells along the southern boundary. All unlabeled anomalies are probably buried metal debris and other magnetically susceptible causative bodies. Field observations indicated that the concrete rubble lacked metal such as rebar, so the anomalies in these areas might be attributable to sources located adjacent to or beneath the rubble. A field check with a high-quality metal detector over and around isolated pieces of rubble could possibly clarify this cursory observation.

6.6 LF-23

The EM-31 map does not show anything conclusive, in ECA's opinion. The map is labeled to identify the fence along the northern boundary. The only readily apparent anomalous feature revealed in the EM-31 color map is the high-conductivity area along the western boundary. This conductivity high may be attributable to the water-saturated gypsum soils located in this topographically lower area or may be attributable to buried non-magnetic high-conductivity waste.

The full-color G-858 map is labeled to identify surface noise sources and the two monitoring wells within the southwestern corner. The western boundary is magnetically quiet, whereas the EM-31 map reveals a large conductivity high. All unlabeled anomalies are probably buried metal debris and other magnetically susceptible causative bodies. As with LF-22, field observations indicated that the concrete rubble lacked metal such as rebar, so the anomalies in these areas might also be attributable to sources located adjacent to or beneath the rubble. As with LF-22, a field check with a high-quality metal detector over and around isolated pieces of rubble could possibly clarify this cursory observation.

6.7 LF-29

This site was surveyed exclusively with the G-858 magnetometer, as it comprises a classic metal debris field. The full-color G-858 map is labeled to identify surface noise sources, as well as the two monitoring wells located along the western boundary and the monitoring well along the northern boundary. All unlabeled anomalies are probably buried metal debris and other magnetically susceptible causative bodies.

7.0 Closing Comments

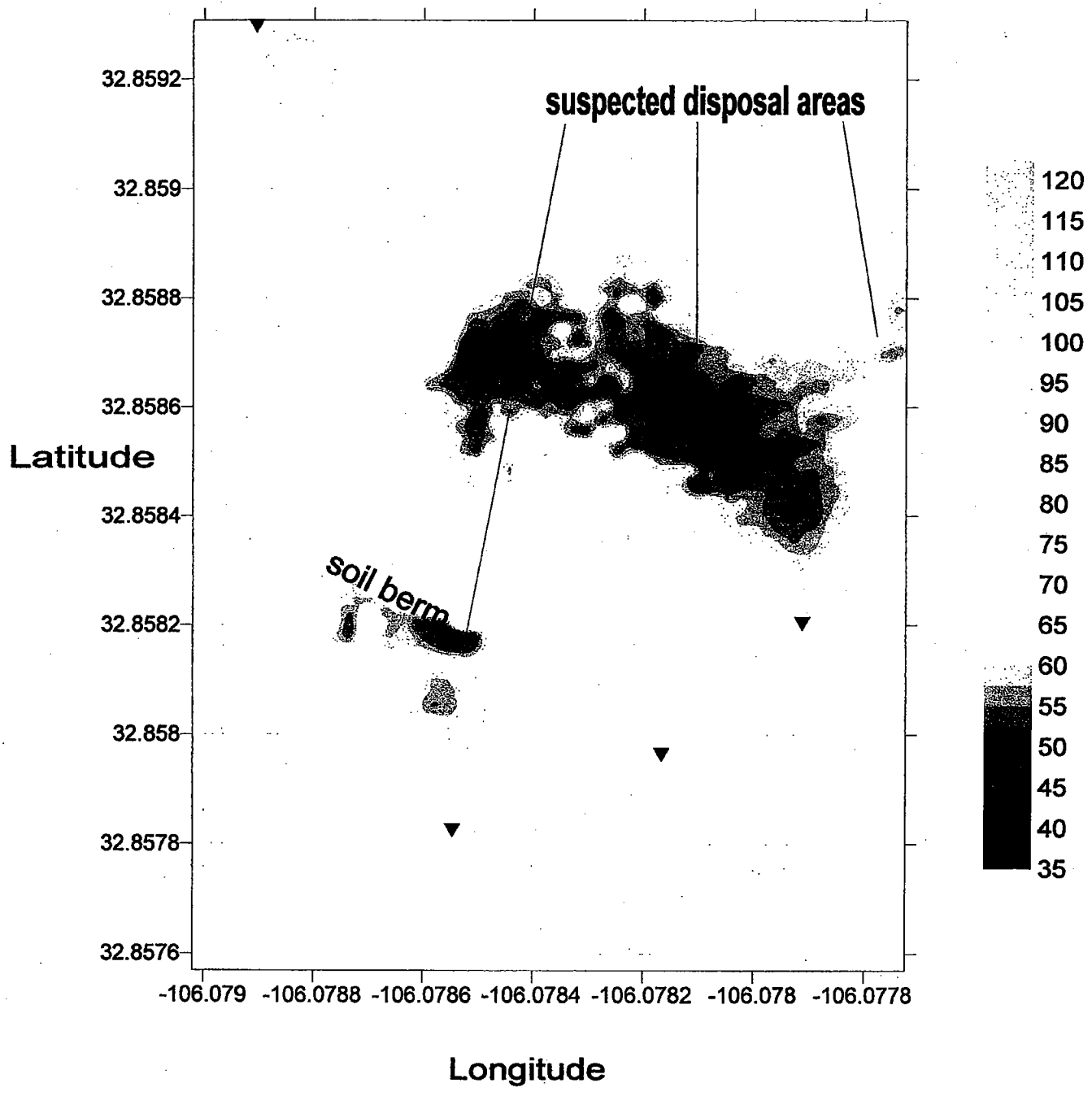
ECA performed this geophysical surveying project, utilizing best available methods and practices. However, all interpretations and opinions presented herein should in no way be considered as unequivocal facts. Geophysical data are simply displays of anomalous signatures that deviate from the normal field.

Appendix A

DP-30 / SD-33 Maps

DP-30 / SD-33

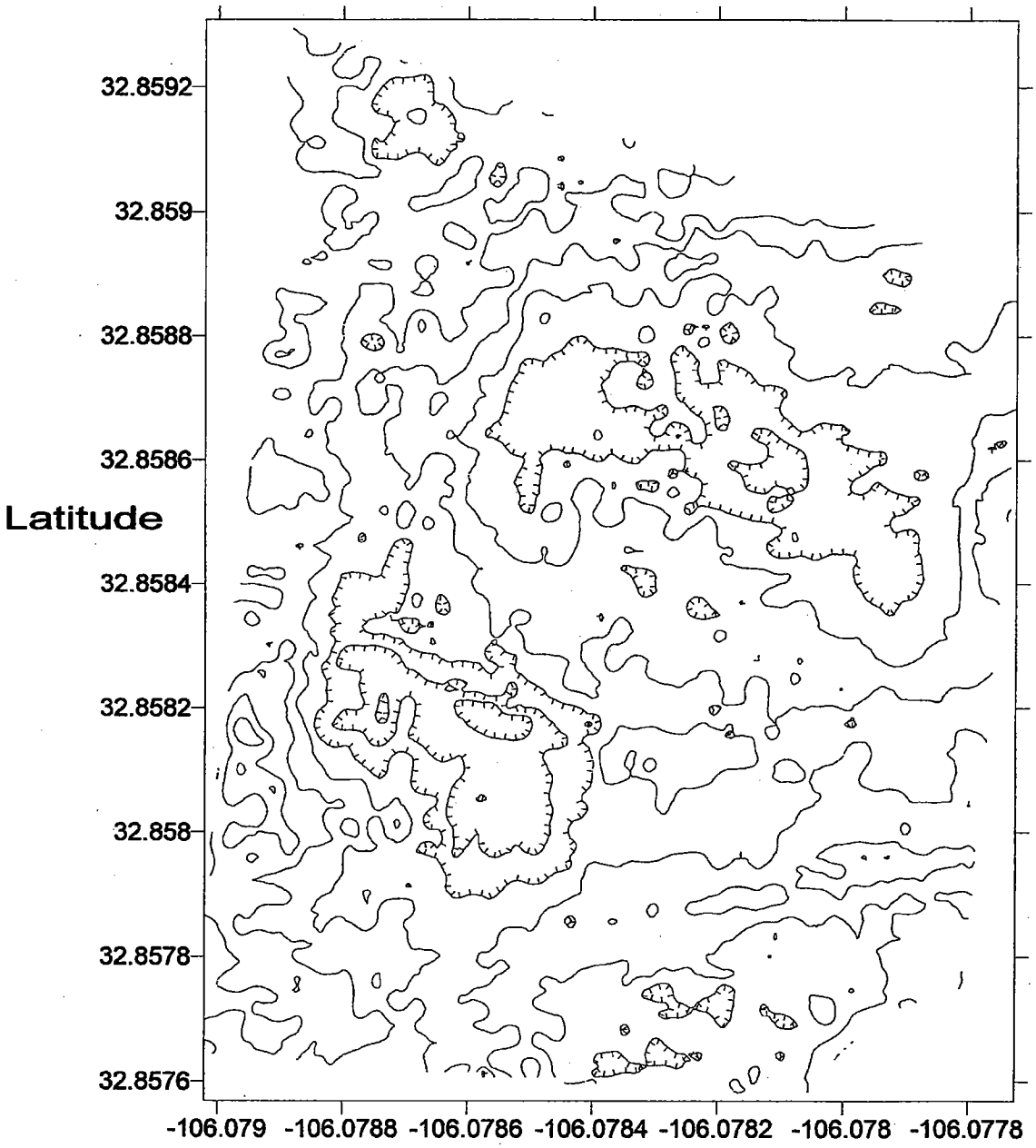
Terrain Conductivity Data



▼ - approximate location of monitoring well

DP-30 / SD-33

Terrain Conductivity Data



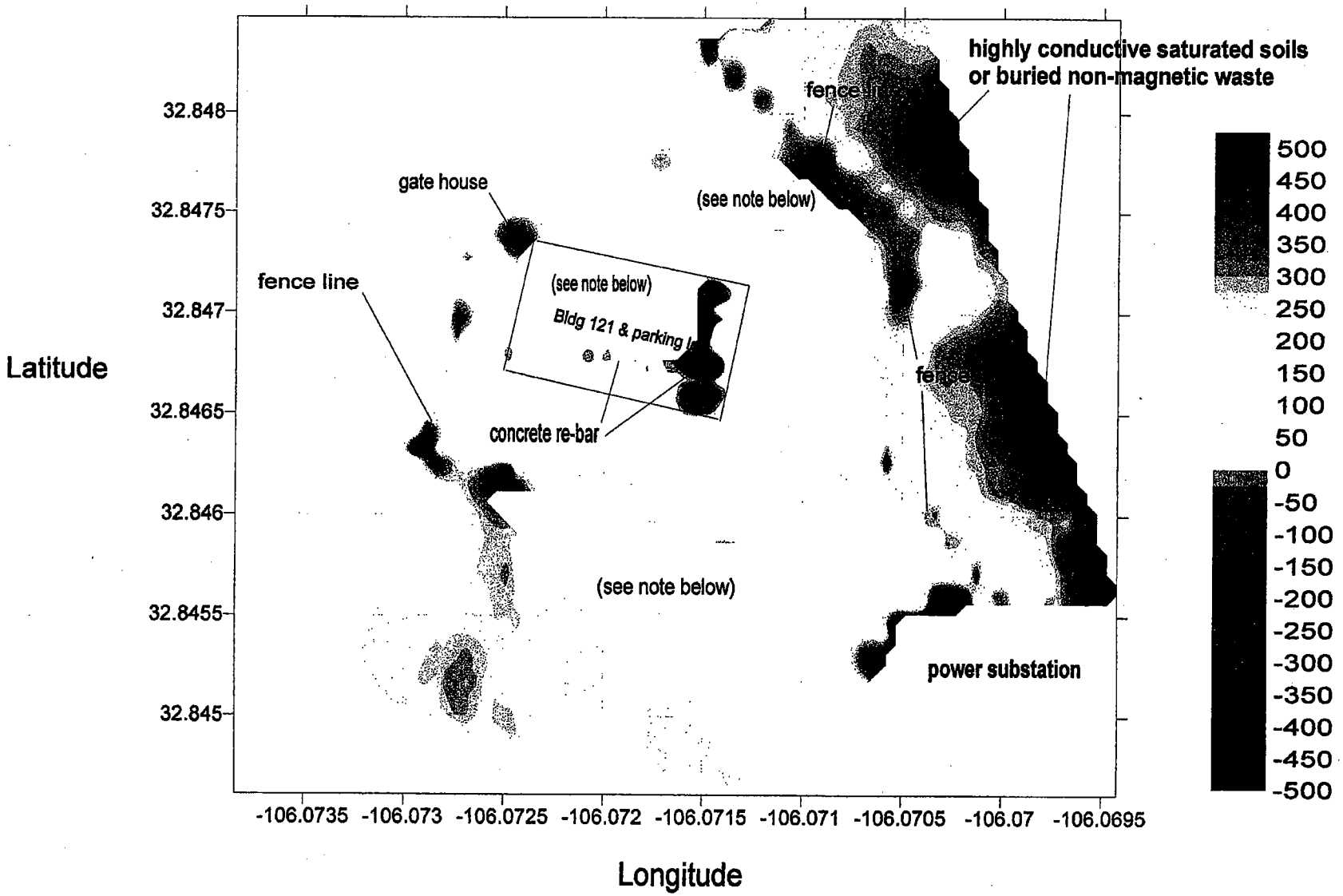
Contour Interval = 10 mS/m

Appendix B

LF-10 Maps

Landfill 10

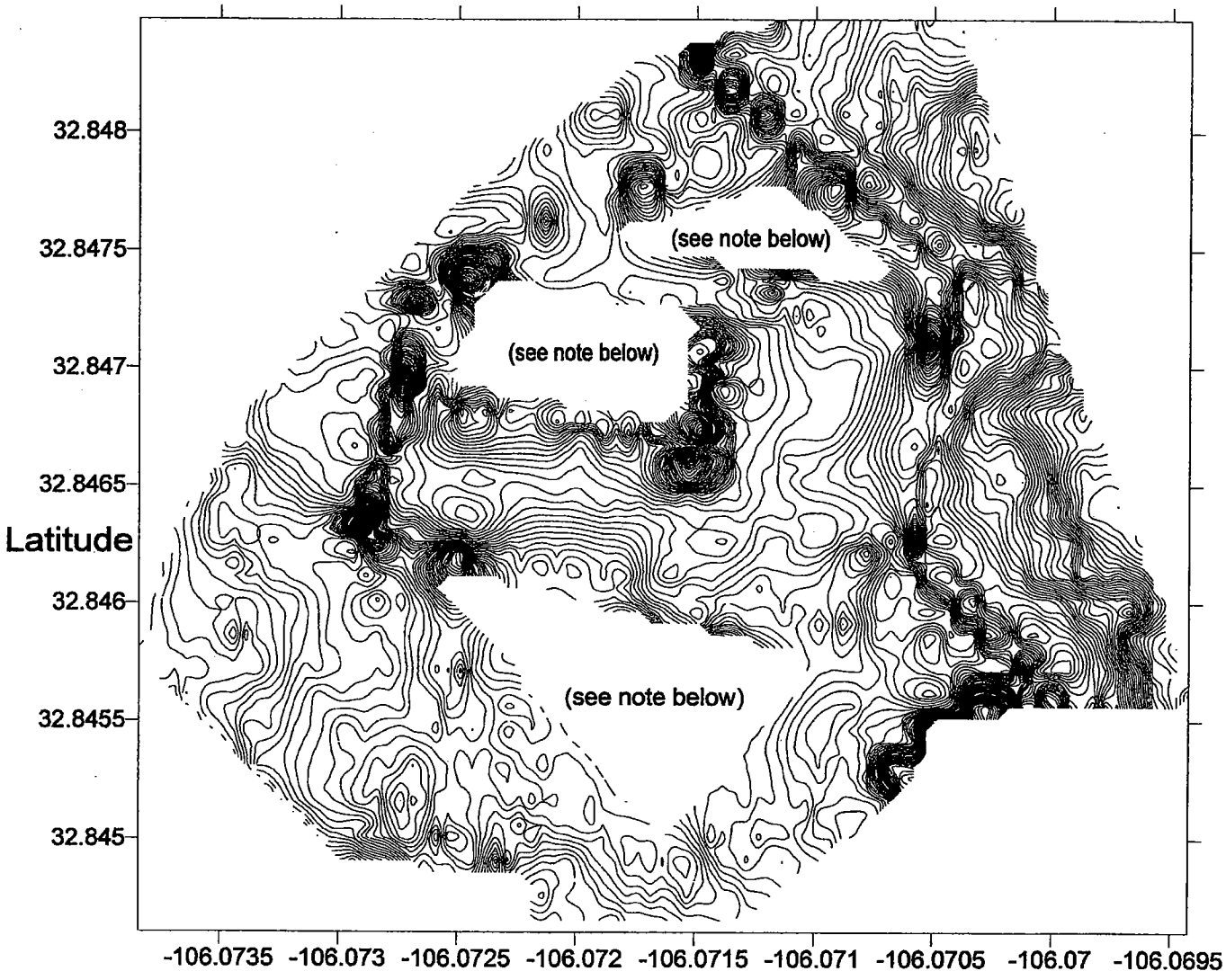
Terrain Conductivity Data



NOTE - blank areas on map are where no survey traverses were made

Landfill 10

Terrain Conductivity Data

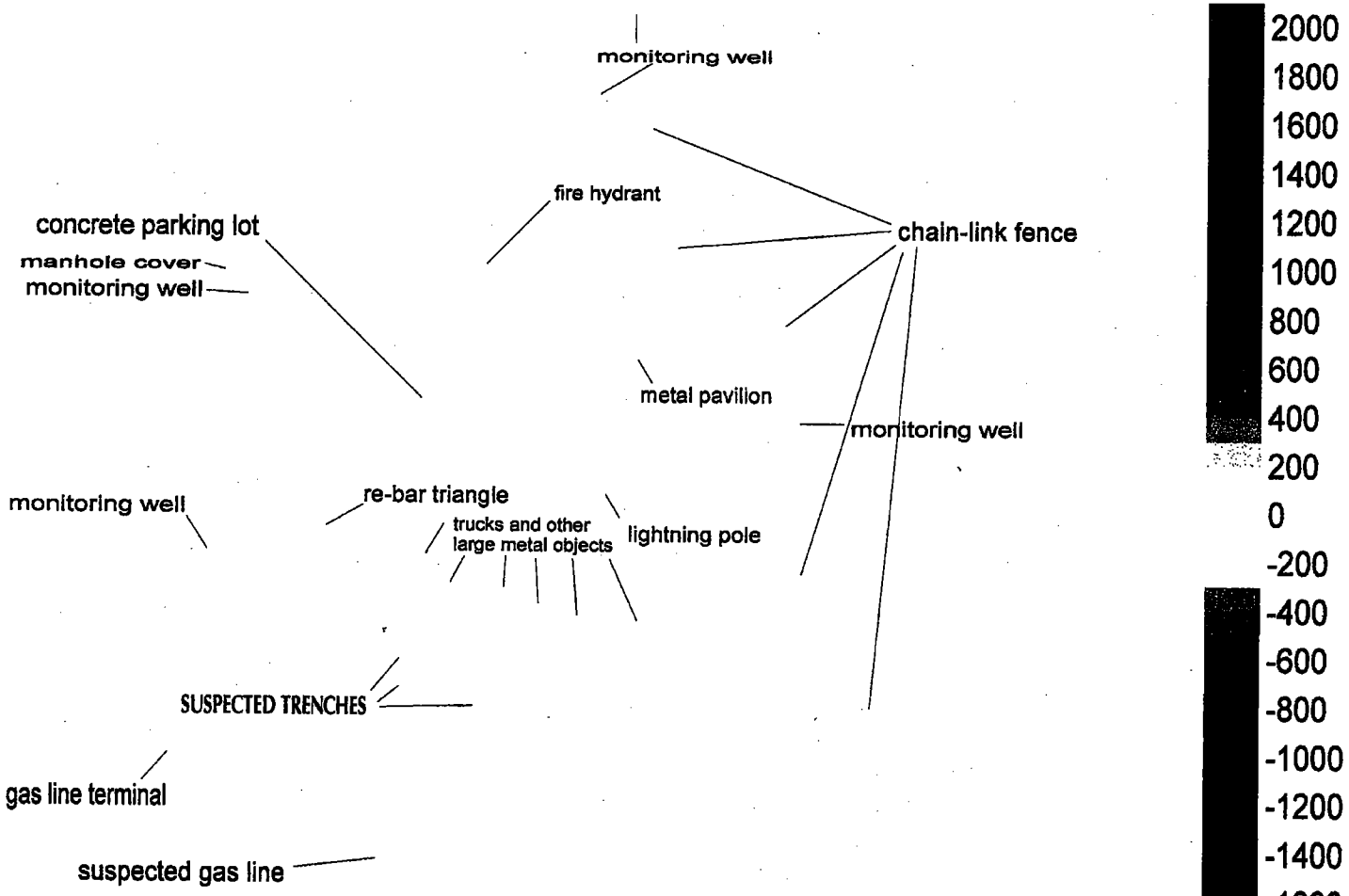


Contour Interval = 10 mS/m

NOTE - blank areas on map are where no survey traverses were made

Landfill 10

Vertical Gradient Data

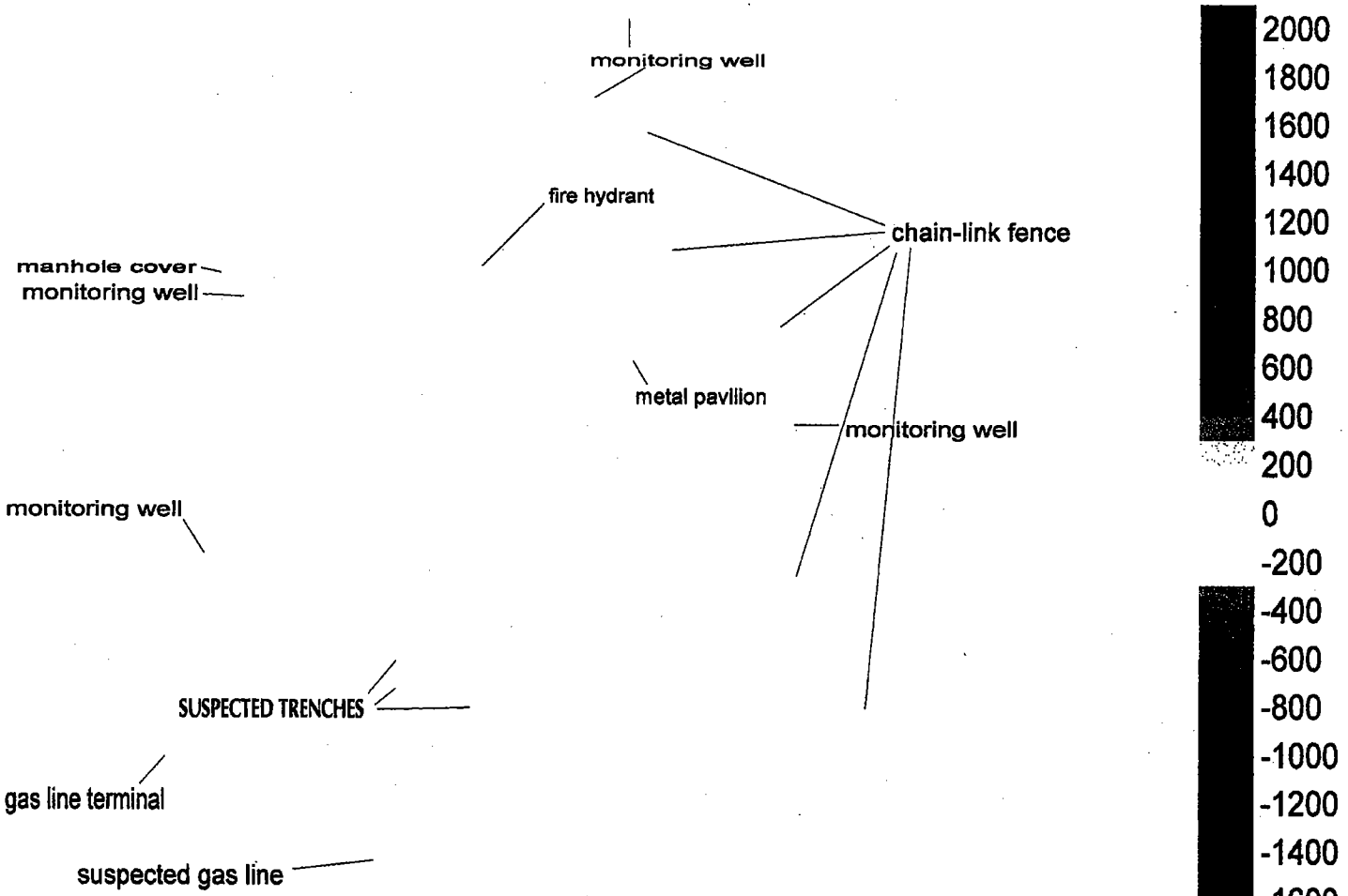


PLEASE INSERT HGL COPY HERE

(ECA's plotter memory unable to handle this large file!)

Landfill 10

Trenches Enhancement

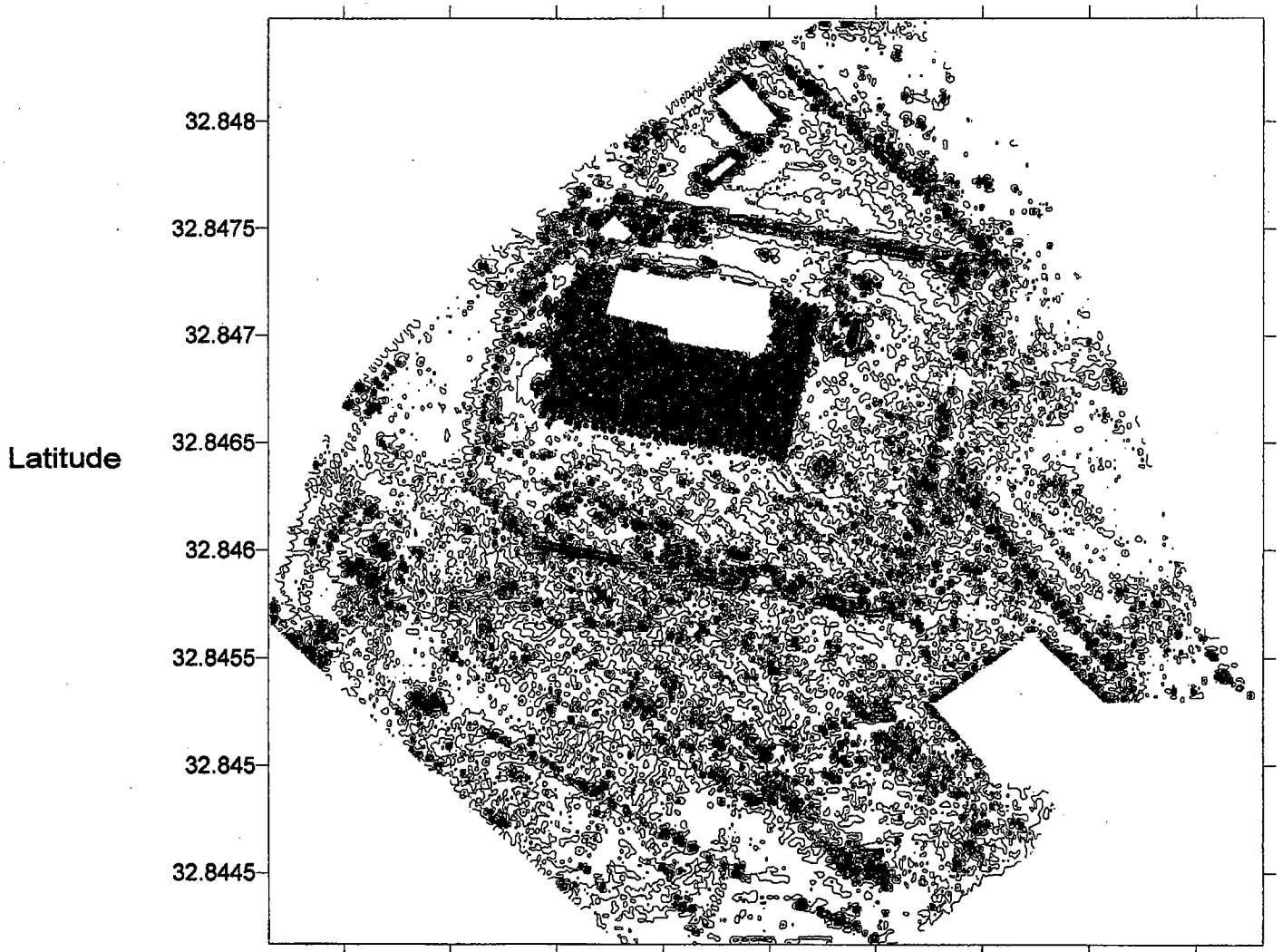


PLEASE INSERT HGL COPY HERE

(ECA's plotter memory unable to handle this large file!)

Landfill 10

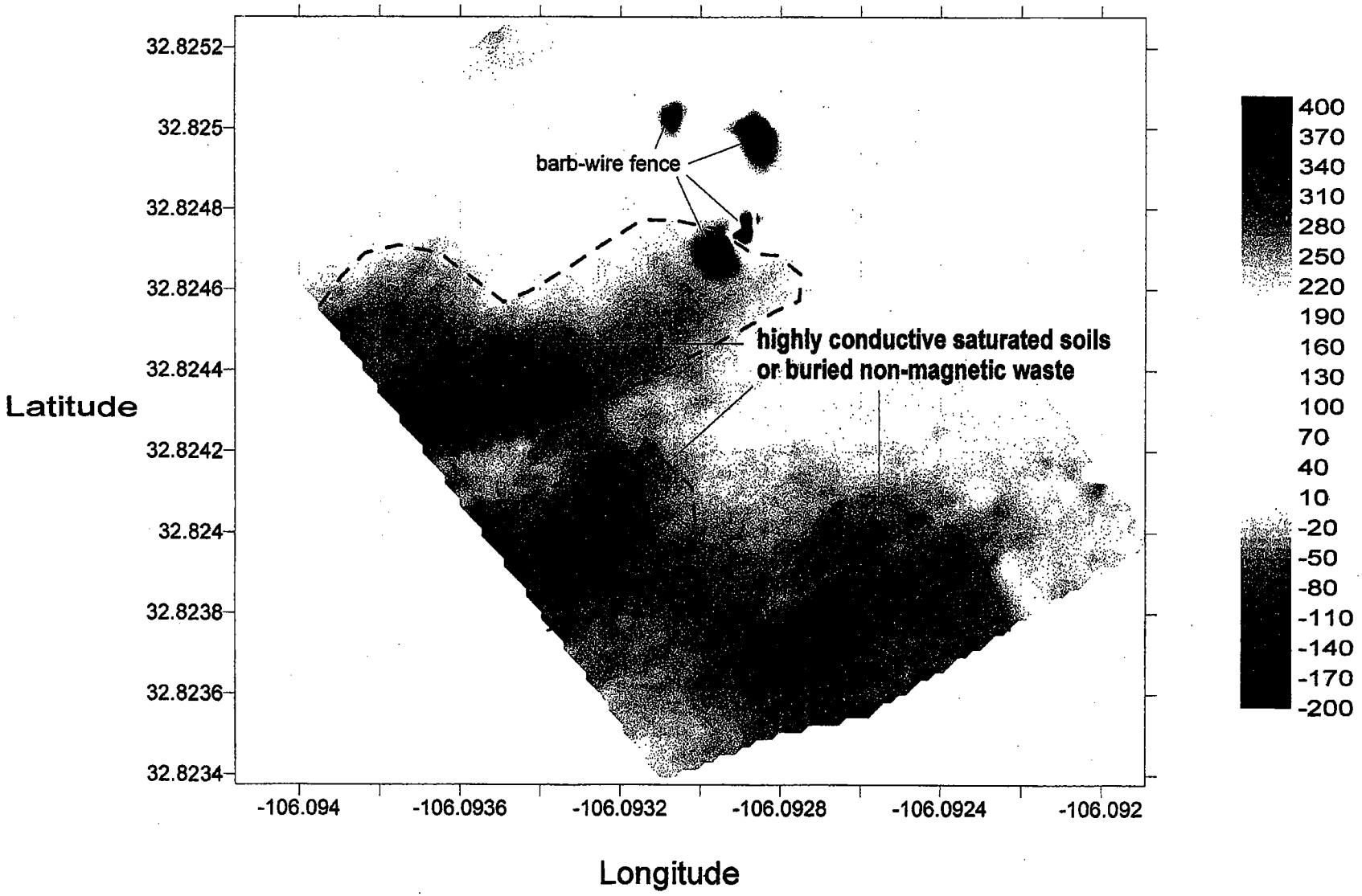
Vertical Gradient Data



Contour Interval = 100 nT

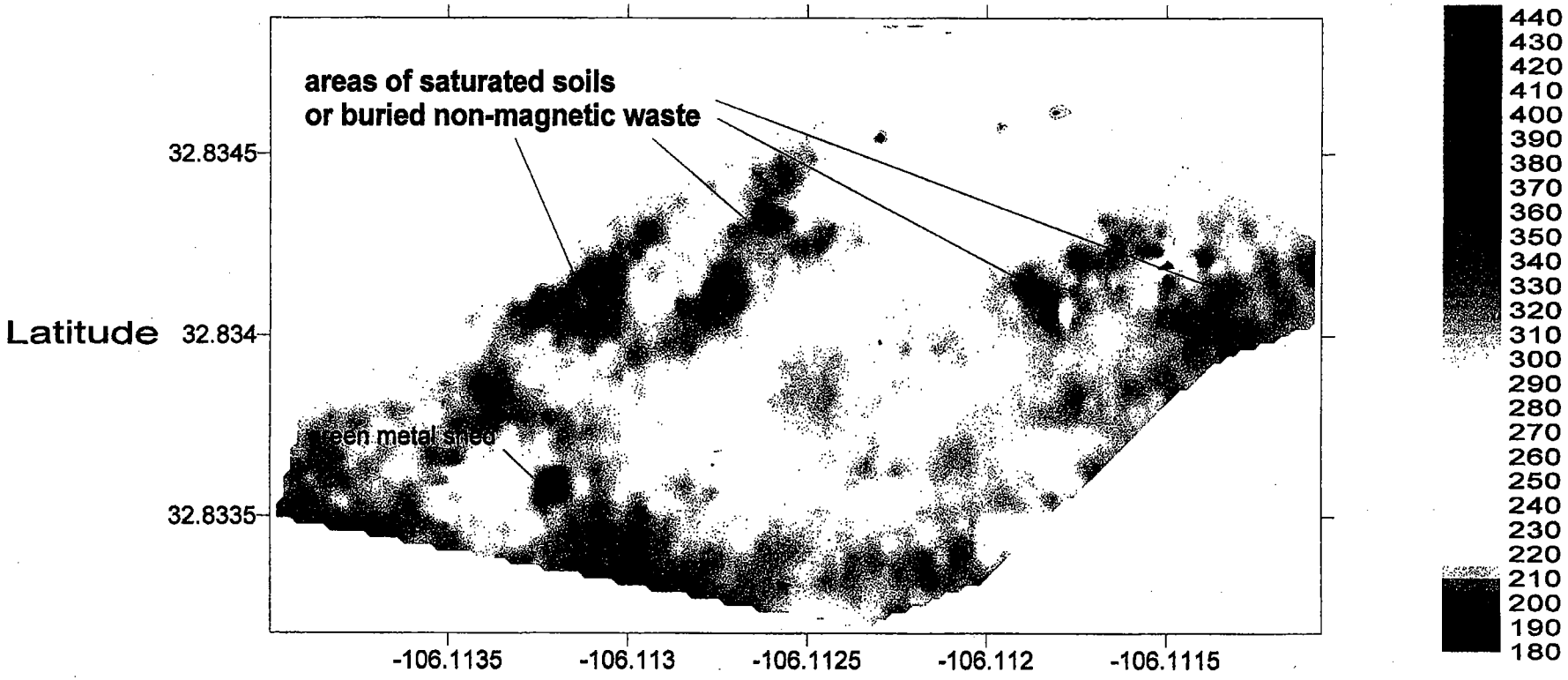
Landfill 19

Terrain Conductivity Data



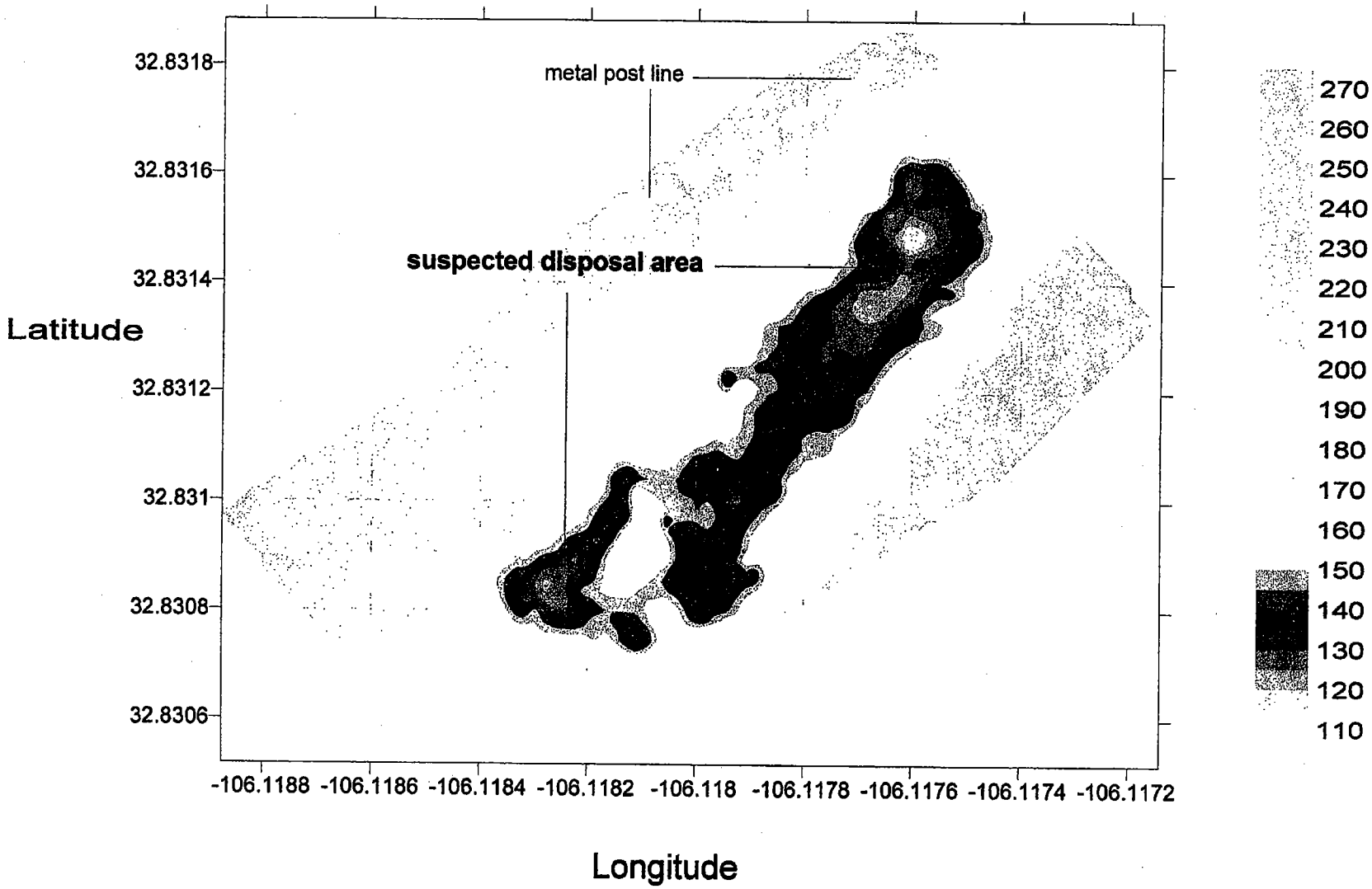
Landfill 21

Terrain Conductivity Data



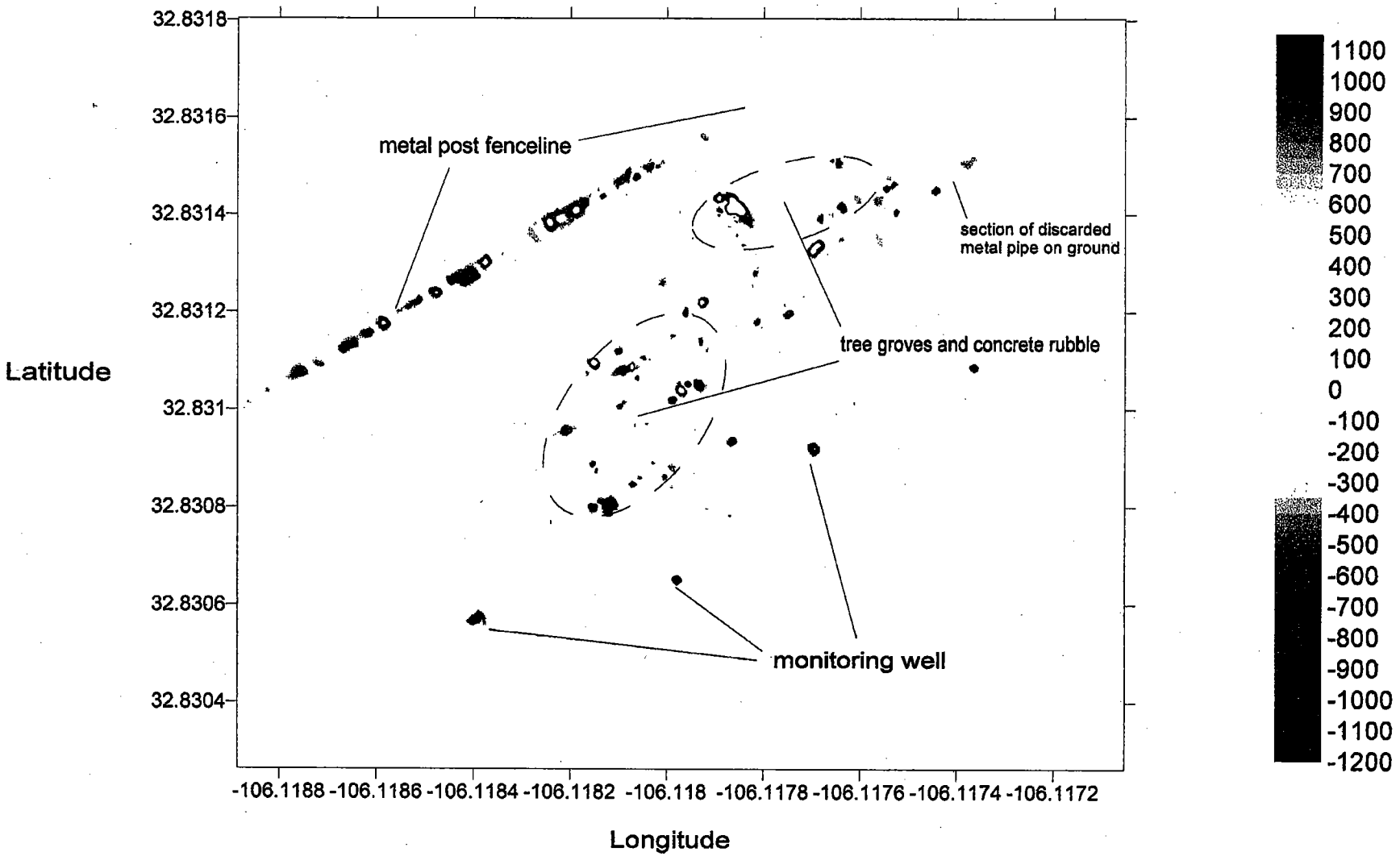
Landfill 22

Terrain Conductivity Data



Landfill 22

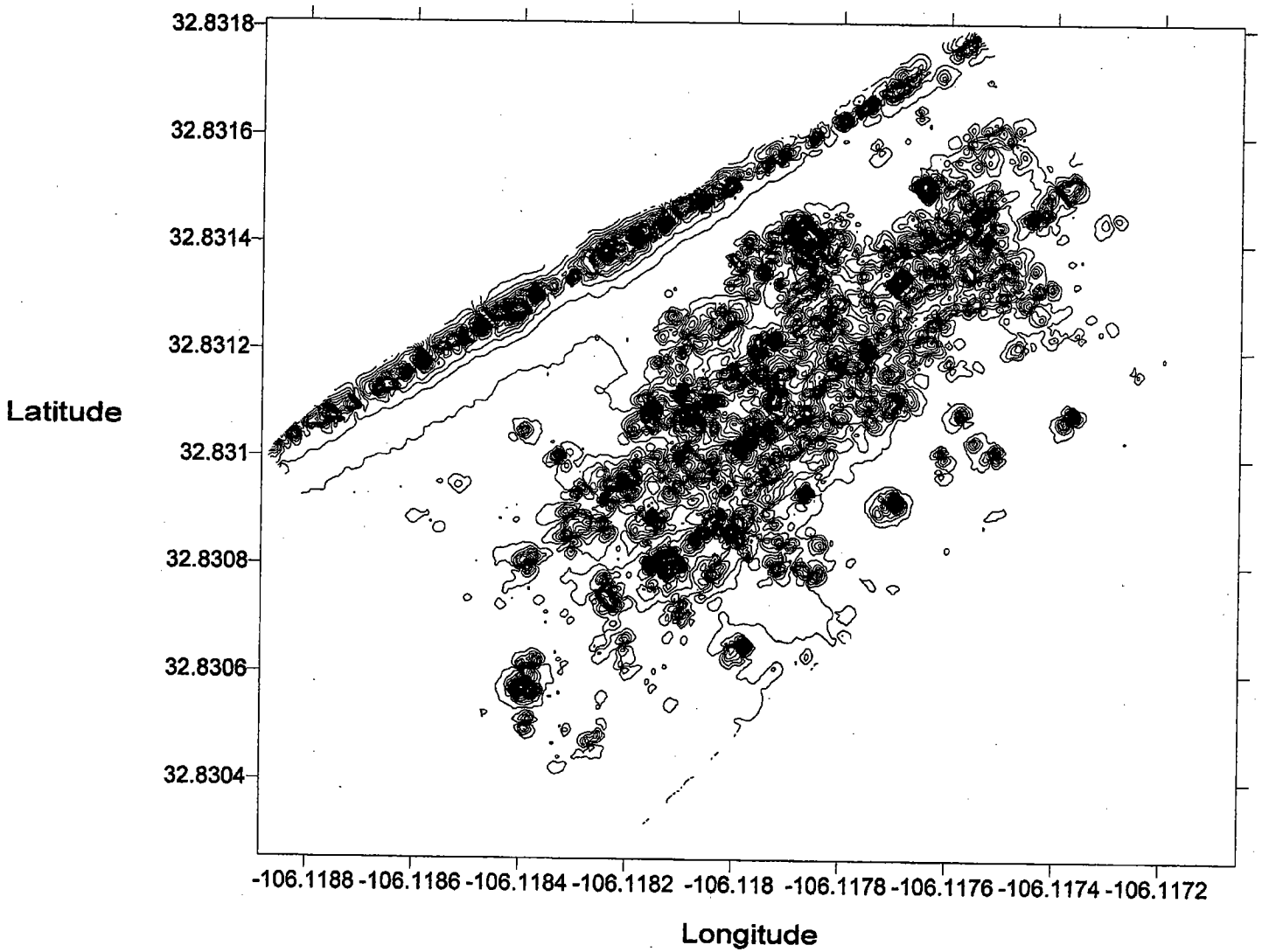
Magnetometer Residual Data



NOTE - unlabeled aomalies are probably buried metal debris

Landfill 22

Magnetometer Residual Data



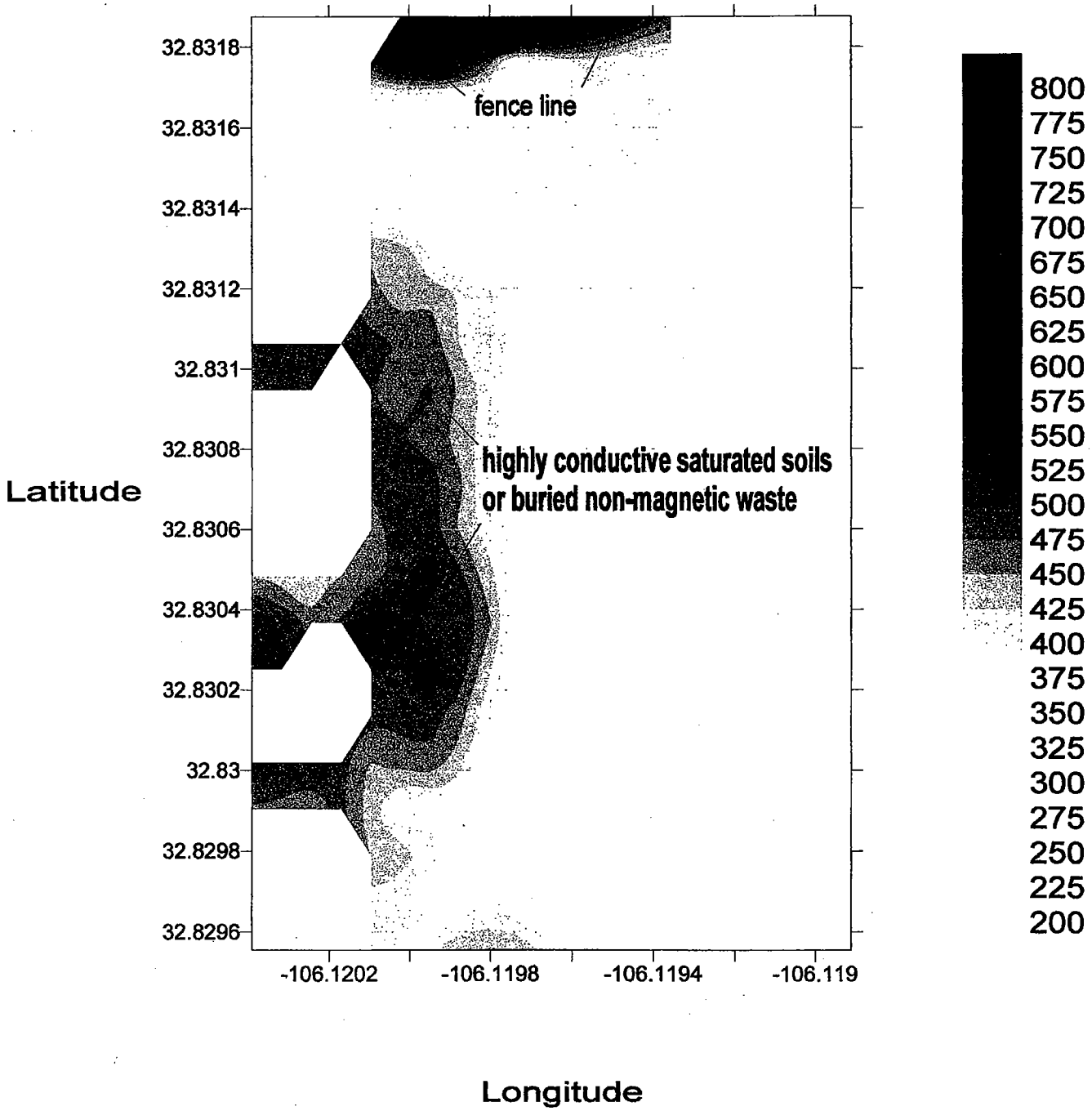
Contour Interval = 50 nT

Appendix F

LF-23 Maps

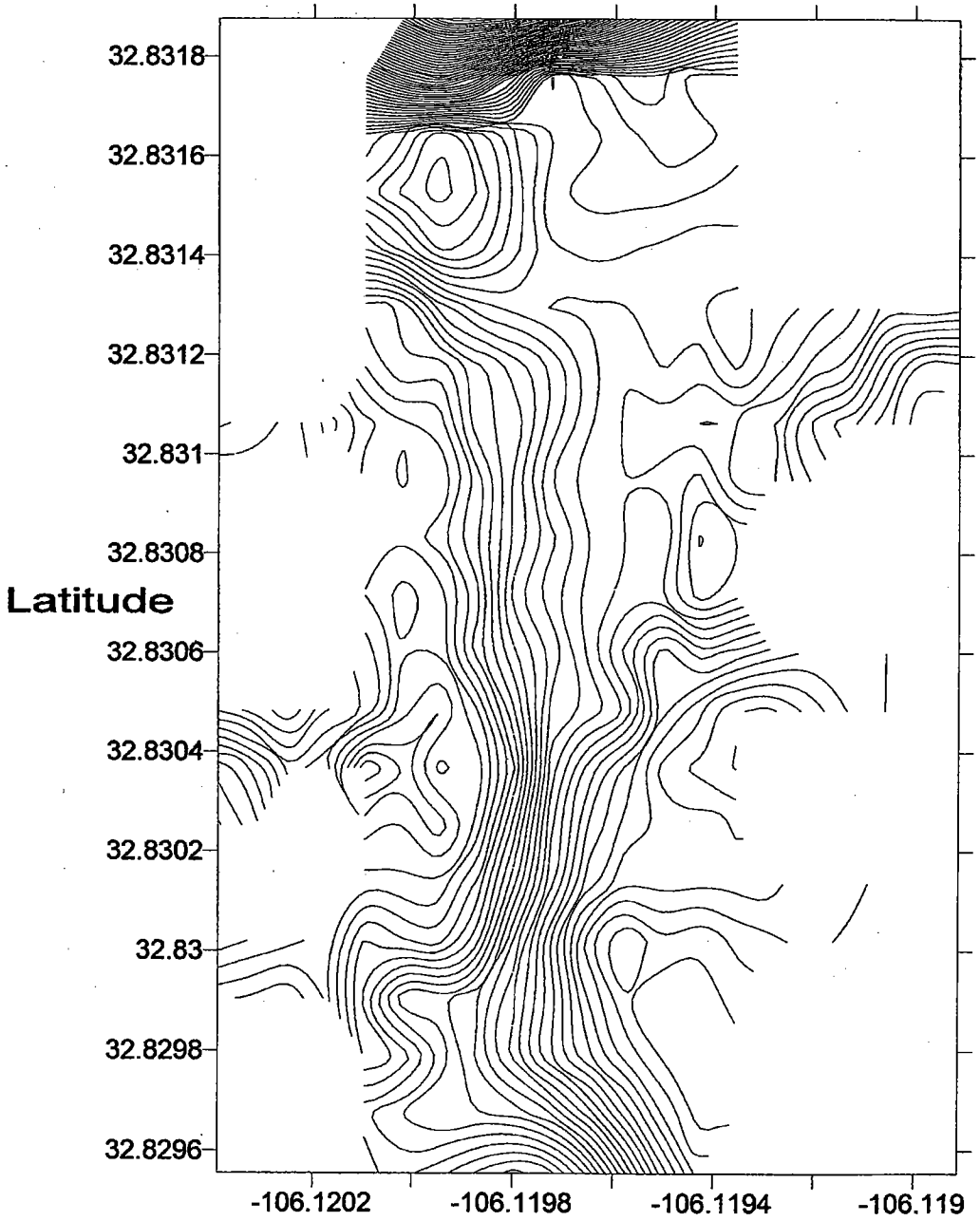
Landfill 23

Terrain Conductivity Data



Landfill 23

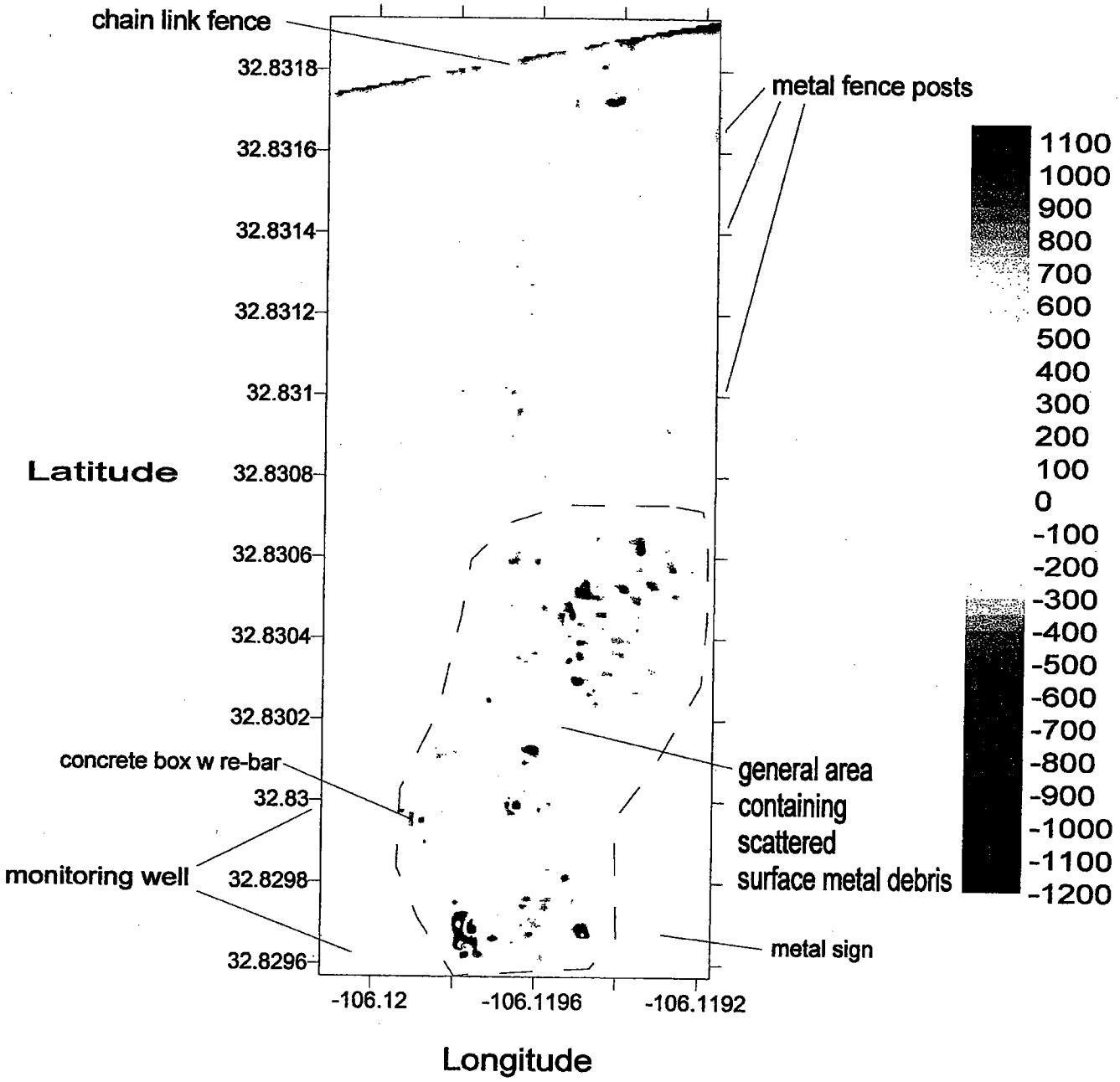
Terrain Conductivity Data



Contour Interval = 10 mS/m

Landfill 23

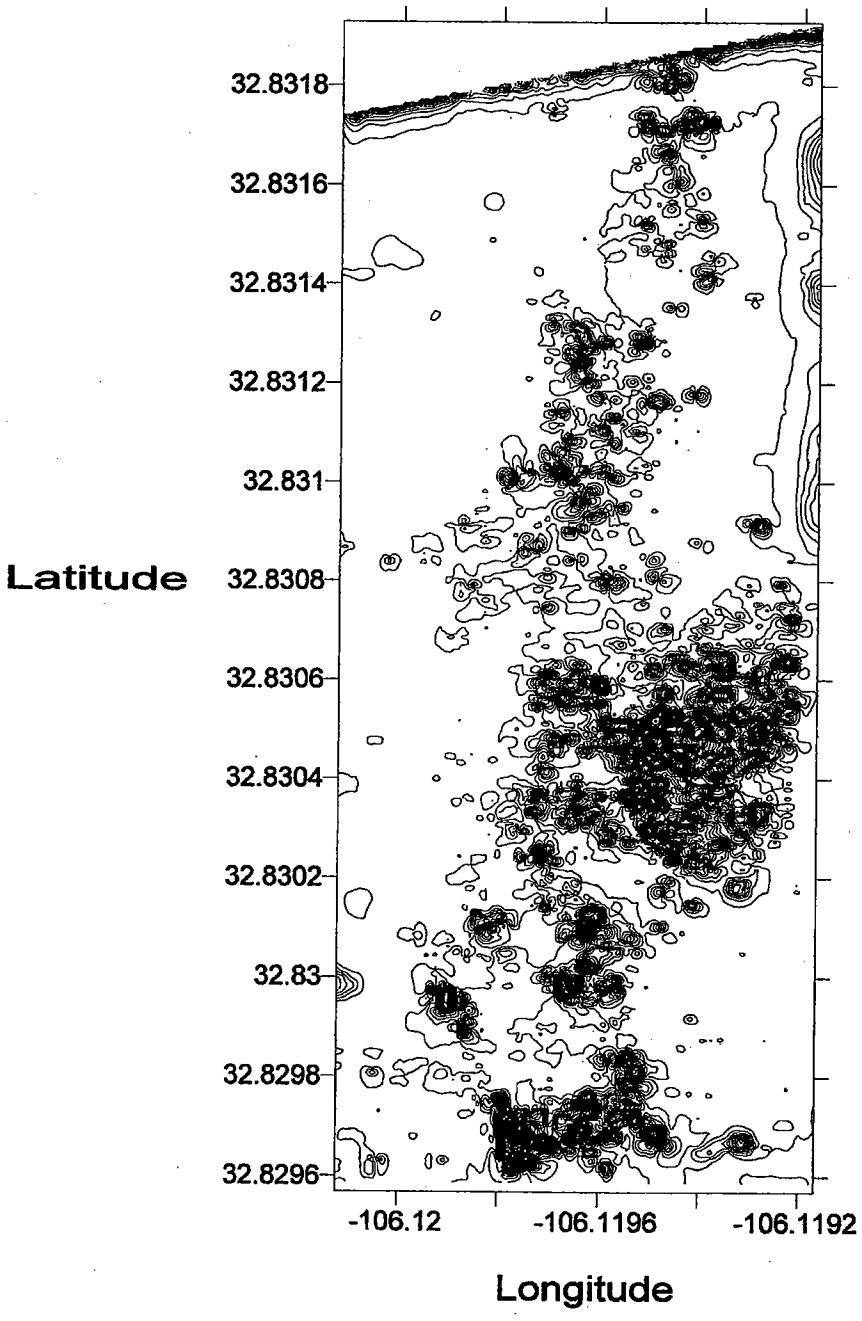
Magnetometer Residual Data



NOTE - unlabeled aomalies are probably buried metal debris

Landfill 23

Magnetometer Residual Data



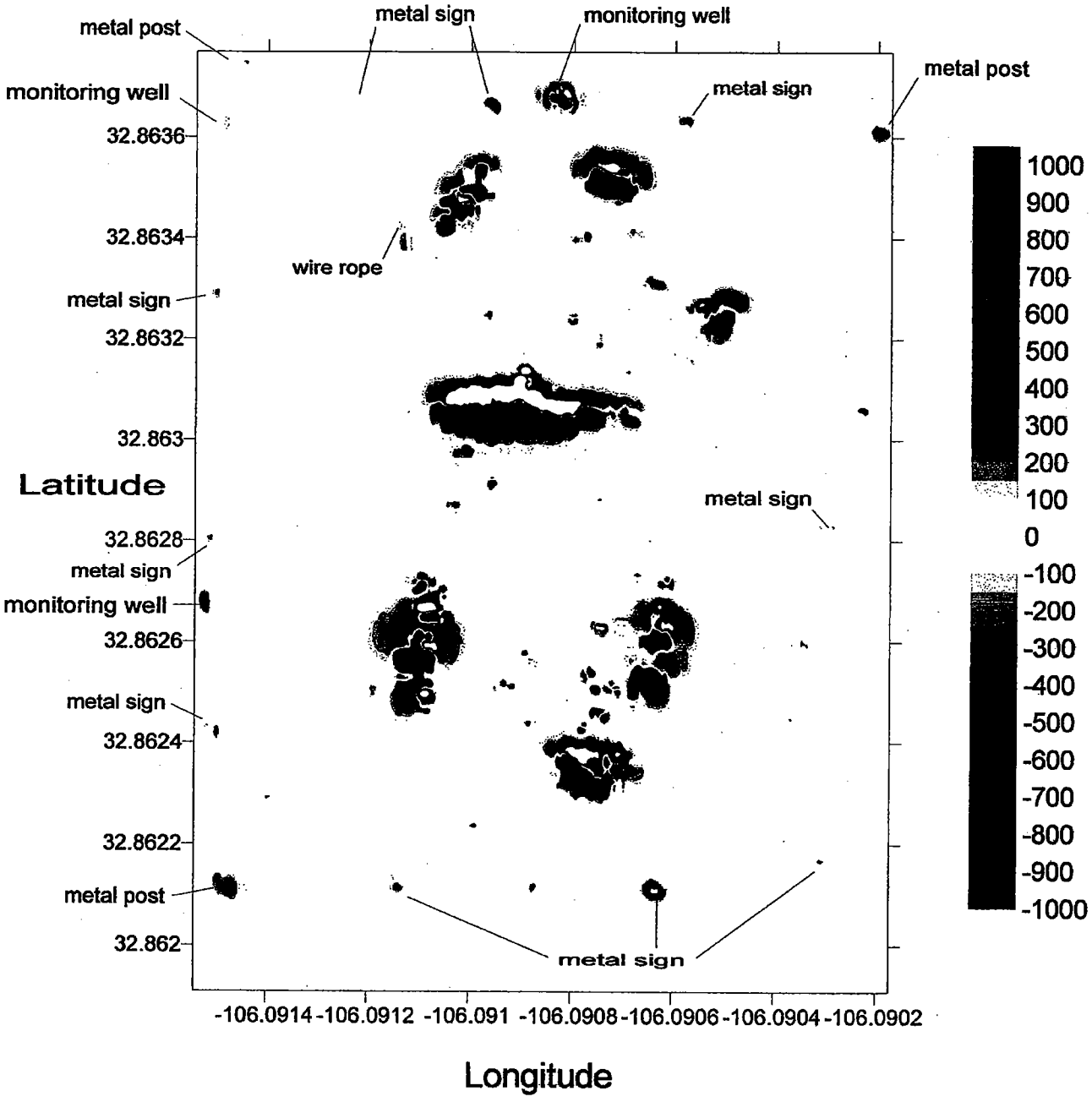
Contour Interval = 50 nT

Appendix G

LF-29 Maps

Landfill 29

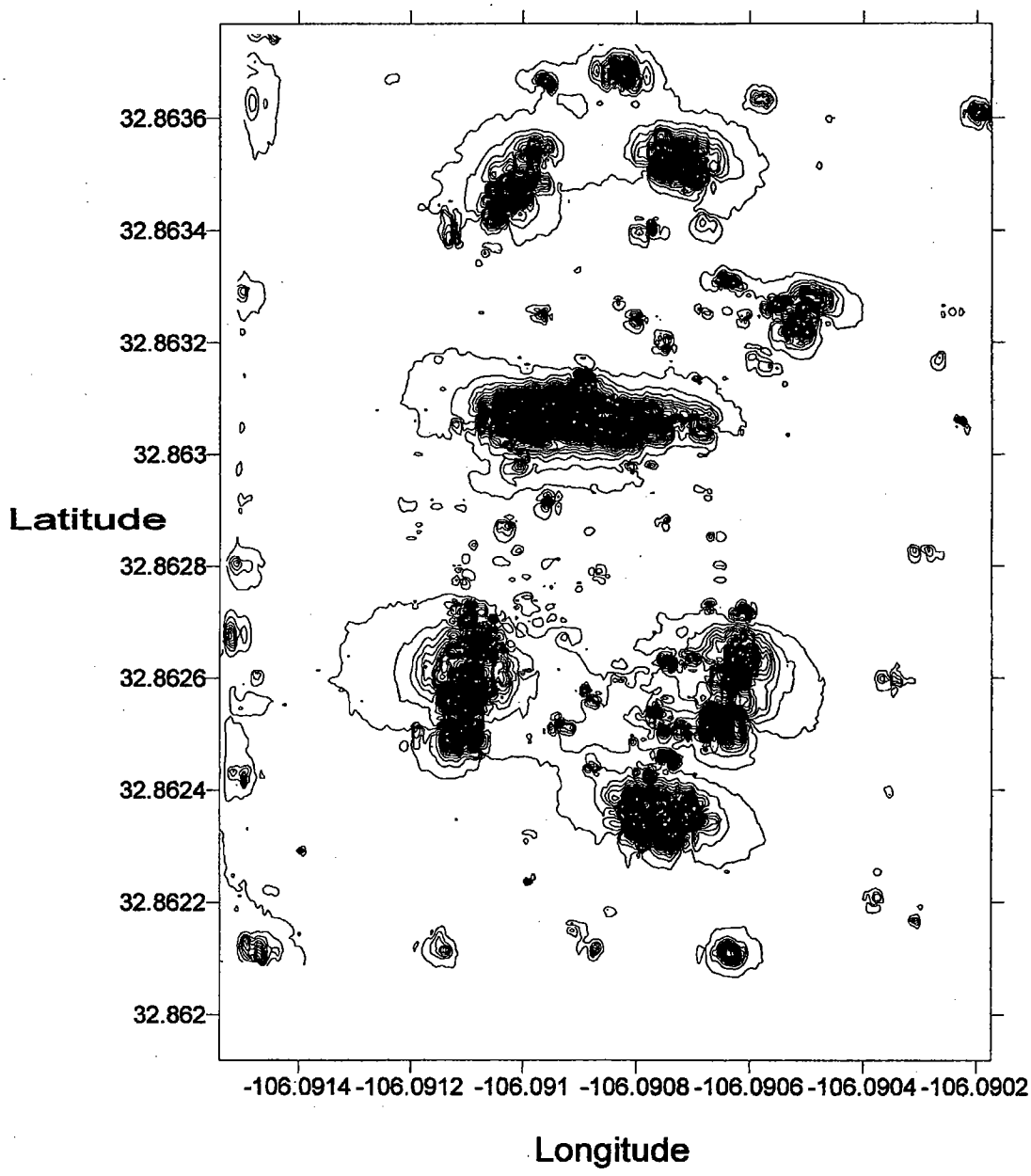
Magnetometer Residual Data



NOTE - LARGE unlabeled aomalies are probably buried metal debris

Landfill 29

Magnetometer Residual Data



Contour Interval = 50 nT

APPENDIX D

FIELD DATA SHEETS

DP-30/SD-33

DP-30/SD-33

SUPPLEMENTAL RFI SOIL SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB30-01-0809

SAMPLING METHOD DT DUP./REP. OF :

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1125

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: H6CSB30-02-0305

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 3 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 5

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1150

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz. jars	4	ice		8015	TPH 8015 GRO/DRO
				8260B	GC/MS VOCs
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals/Herbicides/Pesticides 8141

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX: So SAMPLE ID: HGLSB30-03-0203

SAMPLING METHOD: DT DUP./REP. OF:

BEGINNING DEPTH: 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH: 3

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1345

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jars	4	ice		8015	MPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals Herbicides Pesticides (8141

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB30-04-0204

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 4

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1400

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz. jars	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB30-05-0709

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1420

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz. jars	4	Ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB30-06-0809

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1440

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jars	4	Ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGL SB30-07-0304

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 3 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 4

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 1500

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz. jars	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX Soil SAMPLE ID: HGLSB30-08-0809

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 0800

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jars	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Hollomon AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB3011-0309 (0905) (0910)

SAMPLING METHOD DT DUP./REP. OF: HGLSB3011-0309 MS/MSD

BEGINNING DEPTH 03 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES (✓) NO ( )

END DEPTH 09

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 0900

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz. jars	4	ice			TCLP Metals Ag, As, Ba, Cd, Cr, Pb, Se, Hg
					TCLP Volatiles
					TCLP Semivolatiles
					pH
					RCRA Toxicity/Ignitability Corrosivity/Reactivity (S+CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: ____ OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3012-0306

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 3 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 6

GRAB (✓) COMPOSITE ( ) DATE: 5/19/02 TIME: 1010

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jars	4	ice			TCLP metals Ag, As, Ba, Cd, Cr, Pb, Se, Hg
					TCLP Volatiles
					TCLP Semivolatiles
					pH
					RCRA Toxicity/Ignitability Corrosivity/Reactivity (S+CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX SO. SAMPLE ID: HGLSB3012-0709

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 9

GRAB (X) COMPOSITE ( ) DATE: 5/19/06 TIME: 1015

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz. jars	4	Ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCB's
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3013-0507

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 5 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 7

GRAB (✓) COMPOSITE ( ) DATE: 5/19/01 TIME: 0940

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz. jar	4	Ice			TCLP Metals Ag, As, Ba, Cd, Cr, Pb, Se, Hg
					TCLP Volatiles
					TCLP Semivolatiles
					pH
					RCRA Toxicity/Ignitability Corrosivity/Reactivity (S+Sp)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3013-1012

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 10 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 12

GRAB (✓) COMPOSITE ( ) DATE: 5/19/06 TIME: 0955

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Hollomon AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3016-0910

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 9 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 10

GRAB (✓) COMPOSITE ( ) DATE: 5/9/06 TIME: 0920

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					Herbicides, TAL Metals, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Hollomon AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3017-0607

SAMPLING METHOD DT DUP./REP. OF :

BEGINNING DEPTH 6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 7

GRAB (X) COMPOSITE ( ) DATE: 5/20/06 TIME: 0900

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice			TCLP metals Ag, As, Ba, Cd, Cr, Pb, Se, Hg
					TCLP volatiles
					TCLP semivolatiles
					pH
					RCRA Toxicity / Ignitability Corrosivity / Reactivity (S+CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3017-0809

SAMPLING METHOD DT DUP/REP. OF: HGLSBDUP07

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/20/06 TIME: 0905

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCB's
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: ____ OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3018-0506

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 5 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 6

GRAB (✓) COMPOSITE ( ) DATE: 5/20/06 TIME: 0930

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz. jar	4	Ice			TCLP Metals Ag, As, Ba, Cd, Cr, Pb, Se, Hg
					TCLP Volatiles
					TCLP Semivolatiles
					PH
					RCRA Toxicity / Ignitability, Corrosivity / Reactivity (S+CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB 3018-0709

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/20/06 TIME: 0935

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	Ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides, Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX Soil SAMPLE ID: HGLSB30-20-0708

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE
YES ( ) NO (X)

END DEPTH 8

GRAB (X) COMPOSITE ( ) DATE: 5/20/06 TIME: 0825

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz. jar	4	ice			TCLP Metals Ag, As, Ba, Cd, Cr, Pb, Se, Hg
					TCLP Volatiles
					TCLP Semivolatiles
					pH
					RCRA Toxicity/Ignitability Corrosivity/Reactivity (S+CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: DP-30

SAMPLE INFORMATION

MATRIX So SAMPLE ID: HGLSB3020-0809

SAMPLING METHOD DT DUP./REP. OF:

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (✓)

END DEPTH 9

GRAB (✓) COMPOSITE ( ) DATE: 5/20/06 TIME: 0830

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz. jar	4	Ice		8015	TPH GRO/DRO
				8260B	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A	Pesticides
					TAL Metals, Herbicides Pesticides (8141)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB33-01-0809

SAMPLING METHOD DT DUP./REP. OF: —

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 9

GRAB (X) COMPOSITE ( ) DATE: 5/18/00 TIME: 16:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	4	ice		8015	TPH DRO and GRO
				8260B	Volatiles
				8270C	Semivolatiles
				6010B	TAL RCRA Metals
				8082	PCBs
				8081A/8141	Pesticides

NOTABLE OBSERVATIONS

Herbicides

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: medium brown	
2nd	ODOR: —	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Hollomon AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: HGLSB33-03-0809

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 9

GRAB (X) COMPOSITE ( ) DATE: TIME:

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice		8015	TPH DRO+GRO
				8260	Volatiles
				8270C	Semivolatiles
				8082	PCBs
				8081A/8141	Pesticides
				6010B	TAL Metals
					Herbicides

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: light brown	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION X AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX: SOIL SAMPLE ID: HGLSB33-07-0203

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 2" MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 3"

GRAB (X) COMPOSITE ( ) DATE: 5/17/06 TIME: 14:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice			~~TPH 8260 & GRO~~ TCLP Metals
					TCLP VOCs
					TCLP SVOCs
					pH
					RCRA Toxicity / Ignitability
					Corrosivity / Reactivity (S²CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: blackish-brown	
2nd	ODOR: sweet	
	OTHER: pieces of plastic	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 90°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX: SOIL SAMPLE ID: HGLSB33-07-0405

SAMPLING METHOD: DT DUP./REP. OF: -

BEGINNING DEPTH: 4 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 5

GRAB (X) COMPOSITE ( ) DATE: 5/17/06 TIME: 14:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	4	ice		8015	TPH DRO + GRO
				8260	VOCs
				8270C	SVOCs
				8082	PCBs
				8081A/8141	Pesticides
					Herbicides

NOTABLE OBSERVATIONS

TAL Metals

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: medium brown	
2nd	ODOR: -	
	OTHER: -	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION X AMBIENT TEMP 90°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX SOIL SAMPLE ID: HGLSB33-08-0405

SAMPLING METHOD DT DUP./REP. OF: —

BEGINNING DEPTH 4 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH 5 YES ( ) NO (X)

GRAB (X) COMPOSITE ( ) DATE: 5/17/06 TIME: 16:00

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	4	ice			TCLP Metals
					TCLP VOCs
					TCLP SVOCs
					pH
					RCRA Toxicity/Ignitability Corrosivity/Reactivity (SF CN)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: dark brown	
2nd	ODOR: sweet	
	OTHER: —	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 90°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX SOIL SAMPLE ID: HGLSB33-08-1012

SAMPLING METHOD DT DUP./REP. OF: HGLSBDUP04 time 0000

BEGINNING DEPTH 10 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12

GRAB (X) COMPOSITE ( ) DATE: 5/17/06 TIME: 16:00

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	4	ICE		8015	TPH DRO & GRO
				8260	VOCs
				8270C	SVOCs
				8082	PCBs
				8081A/	Pesticides
					Herbicides

NOTABLE OBSERVATIONS TAL Metals

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: reddish-brown	
2nd	ODOR: -	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX: SOIL SAMPLE ID: HGLSB3310-0405

SAMPLING METHOD: DT DUP./REP. OF: HGLSBDUP05 time 0000

BEGINNING DEPTH: 4 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO ( )

END DEPTH: 5

GRAB (X) COMPOSITE ( ) DATE: 5/17/06 TIME: ~~16:30~~ 16:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4ozjar	4	ice			TCLP Metals
					TCLP VOCs
					TCLP SVOCs
					PH
					RCRA Toxicity / Ignitability Corrosivity / Reactivity / SPLP

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: very dark brown	
2nd	ODOR: sweet	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-33

SAMPLE INFORMATION

MATRIX: SOIL SAMPLE ID: HGLSB33-11-0607

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 7

GRAB (X) COMPOSITE ( ) DATE: 5/17/06 TIME: 17:10

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	4	ice		8015	TPH DRO+GRO
				8260	VOCs
				8270C	SVOCs
				8082	PCBs
				8081A/8141	Pesticides Herbicides
					TAL Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: brown with white crystalline	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

DP-30/SD-33

MW-30&33-05 WELL DEVELOPMENT RECORDS

HGL HydroGeoLogic, Inc

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW30933-C
SHEET 1 of 2

PROJECT NAME: HAFB PROJECT NO.: AFC002-037-04-0803 DATE: 6/16/05

LOCATION: DP-30 DATE INSTALLED: 6/12/06

TOTAL DEPTH (FTOC) _____ CASING DIAMETER 4"

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL 3.0 ft

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☒ Pumping ☐ Describe Whale pump

Equipment decomtaminated prior to development ☐ Yes ☐ NO

Describe _____

EQUIPMENT NUMBERS:

pH Meter _____ EC Meter Horiba U10 Turbidity Meter _____ Thermometer _____

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) 28.91 ft.

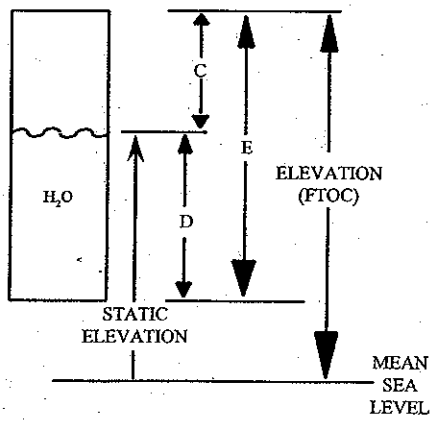
Measured Water Level Depth (C) 22.81 ft.

Length of Static Water Colume (D) 28.91 (B) - 22.81 (C) = 6.10 ft.

6.1
0.16
366
61
976

Casing Water Volume (E) = 0.16 (A) x 6.1 (D) = .98 gal

Total Purge Volume = _____ (gal)



Start ~~pre~~purging at 1355

Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC	D.O. (mg/L) or Temperature ~~F~~ C	Temp C	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/16	1420	23.98	40	7.87	21.6	15.14	23.3	Error 3	brown silty at start, now clear
6/16	1425	23.98	45	7.49	21.5	15.29	23	Error 3	milky
6/16	1430	23.98	50	7.34	21.9	12.68	21.4	Error 3	clear
6/16	1435	23.71	55	7.33	21.0	12.91	20.7	Error 3	clear
6/16	1450	25.32	60	7.20	21.0	12.31	20.5	999	brown & silty
6/16	1455	25.29	65	7.20	21.8	11.49	20.3	999	milky
6/16	1500	27.9	70	7.24	21.7	12.22	21.1	664	whitish-clear
6/16	1505	29.05	75	7.19	21.9	12.17	19.9	344	clear
6/16	1510	29.11	80	7.21	21.8	11.62	20.2	287	clear
6/16	1515	28.21	85	7.10	21.2	12.07	20.1	283	clear

10: Call Motte, turbidity ter should cleaned th compressed r; not available l use U10 ter until Motte operates again

1445 Pump stops working, drop to both of well, switch pow source

continued on page 2

HGL HydroGeoLogic, Inc

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW30-33-05
SHEET 2 of 2

PROJECT NAME: HAFB RFI PROJECT NO.: AFCC02-037-04-08-03 DATE: 6/16/06

LOCATION: DP-30 DATE INSTALLED: 6/12/06

TOTAL DEPTH (FTOC) _____ CASING DIAMETER 4"

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL 3.0 ft

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☒ Pumping ☐ Describe Whale pump

Equipment decontaminated prior to development ☒ Yes ☐ NO

Describe _____

EQUIPMENT NUMBERS:

pH Meter _____ EC Meter _____ Turbidity Meter _____ Thermometer _____

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC	DO Temperature °F	Temp or C	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/16	1520	29.05	90	7.16	21.7	12.29	21.2	184	clear
6/16	1525	29.06	95	7.17	21.9	11.84	19.8	163	clear
6/16	1530	29.14	100	7.18	21.9	11.13	19.8	141	clear
6/16	1535	29.21	105	7.18	21.9	11.71	20.0	130	clear
6/16	1540	29.21	110	7.17	21.2	11.10	20.1	128	clear
6/16	1545	29.22	115	7.16	21.6	12.1	20.0	127	clear
6/16	1550	29.22	120	7.16	21.4	11.81	20.1	127	clear
6/16	1555	29.23	125	7.16	21.3	11.84	20.1	125	clear
6/16	1600	29.23	130	7.17	21.4	11.72	20.1	124	clear

DP-30/SD-33

JULY 2006 SUPPLEMENTAL RFI GROUNDWATER SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFC002-037-04

SITE: DP-30/SD-33

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW30433-01

SAMPLING METHOD B DUP./REP. OF: -

BEGINNING DEPTH - MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH - YES (X) NO ( ) Metals only

GRAB (X) COMPOSITE ( ) DATE: 7/15/06 TIME: 8:10

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl/ice		8260	VOCs
250mL	1	ice			TDS
500mL	1	ice			TAL Metals

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS		MISCELLANEOUS
1st	0.0	COLOR:	clear	
2nd	0.0	ODOR:	none	
		OTHER:		

pH 7.09 Temperature 20.73 Dissolved oxygen 5.30 Specific Conductivity 30.00

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 90°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW30433-01	Project Name: Holloman RFI	LOCID:
Sampler(s): S. Gillette & K. Evers	Project No.: AFC002-037-04	
Well Depth: 30.8'	Date: 7/15/06	Time: 7:15
DTW (ft TOC): 23.1'	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 27'	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/min)	Total Volume (L)	pH	Temp (C)	Cond (umhos/cm)	ORP	DO (mg/L)	Turb (NTU)	Description
730	23.15	0.10	0.50	7.74	22.22	0.366	187.0	8.61	58	Just turned meter on
735	23.15	0.10	1.0	7.23	20.61	30.39	224.8	5.56	33	Clear
740	23.15	0.10	1.5	7.15	20.77	30.17	230.9	5.22	36	"
745	23.15	0.10	2.0	7.13	20.97	30.11	230.0	5.33	36	"
750	23.15	0.10	2.5	7.12	20.96	30.08	228.4	5.29	29	"
755	23.15	0.10	3.0	7.11	20.84	30.03	226.4	5.30	33	"
800	23.15	0.10	3.5	7.09	20.73	30.01	226.1	5.31	31	"
805	23.15	0.10	4.0	7.09	20.73	30.00	225.8	5.30	31	"
810	Collected Sample and MS/MSD for TAL metals									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Holloman RFI

SITE: DP-30/SD-33

SAMPLE INFORMATION

MATRIX: WG SAMPLE ID: HGLMW3033-02

SAMPLING METHOD: B DUP./REP. OF:

BEGINNING DEPTH: - MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO ( )

END DEPTH: -

GRAB (X) COMPOSITE ( ) DATE: 7/15/06 TIME: 1180O

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6	HCl /ice		8260	VOCs
250 mL		ice			TDS
500mL		ice			TAL Metals

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	0.0	COLOR:	
2nd	0.0	ODOR:	
		OTHER:	

pH 7.15 Temperature 20.24 Dissolved oxygen 5.70 Specific Conductivity 39.28

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 98°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: Metals filtered in lab

SAMPLER: K. Evers OBSERVER: S. Gillette

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: ~~MW09~~ MW30+33-02	Project Name: Holloman RFI	LOCID:
Sampler(s): K. Evers, S. Gillette	Project No.: AFCO02-037-04	
Well Depth: 31.45	Date: 7/15/06	Time: 0840
DTW (ft TOC): 23.1	Screen Interval:	
Well Diameter (in):	Placement of Pump (ft TOC): Bailed	
Type of Pump: ~~Peristaltic pump~~ Bailer	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (°C)	Cond. (umhos/cm)	ORP	DO (mg/L)	Turb (NTU)	Description
0943	26.15	—	1.3	7.39	19.81	42.59	191.6	4.37	60	
0946	27.70	—	2.6	7.25	21.15	40.02	198.6	6.28	21	
0953	27.35	—	3.9	7.15	20.24	39.28	208.7	5.70	50	
Wait for water to recharge										
1100	Sample MW30+33-02									

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Holloman RFI

SITE: DP-30/SD-33

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW30433-03

SAMPLING METHOD B DUP./REP. OF: -

BEGINNING DEPTH - MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/15/06 TIME: 1220

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6	HCl/ice		8260	VOCs
250 mL		ice			TDS
500 mL		ice			TAL Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: clear	
2nd 0.0	ODOR: none	
	OTHER:	

pH 7.12 Temperature 20.09 Dissolved oxygen 4.40 Specific Conductivity 39.57

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 98°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analytical

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW30433-03	Project Name: Holloman RFI	LOCID:
Sampler(s): S. Gillette & K. Evers	Project No.: AFC002-037-04	
Well Depth: 26.3'	Date: 7/15/06	Time: 1010
DTW (ft TOC): 22.03'	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 24	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

4/min (L)

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (Gal)	pH	Temp (C)	Conductivity (mmhos/cm)	ORP	DO (mg/L)	Turbidity (NTU)	Description
1015	22.52	0.1	0.5	7.08	21.94	42.03	263.7	5.18	12	clear
1020	22.59	0.1	~~1.5~~	7.05	21.48	40.18	262.4	5.28	6.9	"
1025	22.65	0.1	~~1.5~~ 0.5	7.04	21.53	40.20	257.8	5.45	4.1	"
1030	22.48	0.1	2.0	7.06	21.94	40.23	250.0	5.53	4.0	"
1035	22.35	0.1	2.5	7.09	22.30	40.26	245.5	5.78	4.2	"
~~1040~~	SG	~~0.1~~	~~3.0~~	SG						
~~1045~~		~~0.1~~	~~3.5~~							
Pump stops working but is still in 2 feet of water										
Will bail the remainder of 3 well vol.										
1048	24.34	—	5.0	7.23	20.65	40.57	127.9	4.91	50	
1054	24.92	-	8.0	7.12	20.09	39.57	180.7	4.40	50	
1215	22.03									
1220	Sample MW30433-03									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFCO02-037-04

SITE: DP-30/SD-33

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW30433-04

SAMPLING METHOD SP DUP./REP. OF :

BEGINNING DEPTH 26' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 1810

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl / ice			VOCs
250 mL	1	ice			TDS
500mL	1	ice			Tot. Metals

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	0.0	COLOR:	
2nd	0.0	ODOR:	
		OTHER:	

pH 6.96 Temperature 26.96 Dissolved oxygen 5.71 Specific Conductivity 29.79

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW30433-04	Project Name: Holloman RFI	LOCID:
Sampler(s) S. Gillette & K. Eves	Project No.: AFCC02-037-04	
Well Depth: 30.95	Date: 7/14/06	Time: 1720
DTW (ft TOC): 21.1	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 26'	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (C)	Cond (umhos/cm)	ORP	D.O (mg/L)	Turb (N.T.U.)	Description
1735	21.68	0.10	0.50	6.96	27.16	30.85	246.8	5.88	9.3	Clear
1740	21.79	0.10	1.0	7.02	25.64	31.00	240.4	6.91	7.1	"
1745	21.80	0.10	1.5	6.94	26.88	29.79	286.9	6.80	6.7	"
1750	21.36	0.10	2.0	6.93	26.45	30.95	219.1	6.14	6.8	"
1755	21.36	0.10	2.5	6.94	26.84	30.90	210.5	5.87	4.5	"
1800	21.26	0.10	3.0	6.95	26.81	30.92	207.3	5.76	3.7	"
1805	21.37	0.10	3.5	6.96	26.96	29.79	208.1	5.71	3.6	"
1810	Sample	MW30433-04								

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFC002-037-04

SITE: DP-30/SD-33

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW3033-05

SAMPLING METHOD SP DUP./REP. OF: _____

BEGINNING DEPTH 27.7' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO ( )

END DEPTH _____

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 1655

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl / ice		8260	VOCs
250 mL	1	ice			TDS
500 mL	1	ice			TAL Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd 0.0	ODOR:	
	OTHER:	

pH 6.92 Temperature 30.17 Dissolved oxygen 3.30 Specific Conductivity 27.66

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW30 + 33-05	Project Name: Holloman RFI	LOCID: HGMW3033-05
Sampler(s): K. Evers, S. Gillette	Project No.: AFC002-037-04	
Well Depth: 32.45	Date: 7/14/06	Time: 1600
DTW (ft TOC): 22.86	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 27.7	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (C)	Cond (umhos/cm)	ORP	DO (mg/L)	Turb (NTU)	Description
1612	22.9	0.10	0.50	7.04	32.58	27.82	86.1	3.74	11.0	
1617	22.9	0.10	1.0	6.93	31.14	27.56	103.1	3.35	11.0	
1622	22.9	0.10	1.5	6.91	30.20	27.68	94.8	3.36	11.0	
1627	22.9	0.10	2.0	6.91	30.48	27.65	87.0	3.31	8.3	
1632	22.89	0.10	2.5	6.90	30.99	27.68	82.8	3.55	6.9	
1637	22.89	0.10	3.0	6.91	31.32	27.58	80.8	3.32	7.0	
1642	22.89	0.10	3.5	6.91	30.93	27.70	81.4	3.30	6.0	
1647	22.89	0.10	4.0	6.91	30.41	27.67	81.6	3.32	6.1	
1652	22.89	0.10	4.5	6.92	30.17	27.66	81.8	3.30	6.0	
1655	Collected Sample									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

DP-30/SD-33

JANUARY 2007 SEMI-ANNUAL COMPLIANCE LTM SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: DP-30/SD-33
PROJECT NO: AFC002-037-04-08-04

SAMPLE INFORMATION

SAMPLE ID: MW-30/33-01
DATE: 1-17-08 (BTB) TIME: 1236

MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): MW-30/33-01-011707
MATRIX SPIKE DUP (SD): MW-30/33-01-011707
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Dissolved, Field Filtered
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Total
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
1 L Poly	1	Cool to 4C	160.1	TDS

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.31 Temperature 18.48 (C) Dissolved Oxygen 3.50 (mg/L) Specific Conductivity 24.42 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential -20.8 (mv) Turbidity 164 (NTU) Salinity 25062 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION W AMBIENT TEMPERATURE 38°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dachum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

2931 mikeSyoo
George Esl

Well No.: MW-30/33-01	Location: DP-30/SD-33
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 30.96	Project #: AFC002-037-04-08-04 Date: 1-17-07 Time: 1206
DTW (ft): 22.22 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic pump~~ Bail
Screen Interval FTOC(ft): (-)	Weather (sun)clear, overcast/rain, wind direction, ambient temperature): 5-10 W 38°F
Well Diameter (in): 2"	
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1211	22.22		.25	7.30	18.28	24.38	-20.1	2.99	126	28017	
1215	22.22		1.25	7.33	18.05	24.63	-20.4	3.66	251	27859	
1220	22.22		2.25	7.30	17.38	24.06	-21.0	3.05	153	28206	
1225	22.23		3.25	7.31	17.48	24.51	-21.6	3.65	161	28158	
1230	22.22		4.25	7.29	18.35	24.36	-20.4	3.42	162	28028	
1235	22.22		5.25	7.31	18.46	24.42	-20.8	3.50	164	28062	
1236	Collect Sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 30.96 - 22.22 = 8.74 x .17 = 1.49 x 3 = 4.47 gallons

Signed/Sampler(s):

HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: DP-30/SD-33
PROJECT NO: AFC002-037-04-08-04

SAMPLE INFORMATION

SAMPLE ID MW-30/33-02
DATE: 1-17-07 TIME: 0809
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	160.1	TDS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Dissolved, Field Filtered

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.28 Temperature 16.42 (C) Dissolved Oxygen 4.42 (mg/L) Specific Conductivity 30:80 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential -24.6 (mv) Turbidity 80.0 (NTU) Salinity 36550 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION W AMBIENT TEMPERATURE 27°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Beckum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-30/33-02	Location: DP-30/SD-33
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 31.65	Project #: AFC002-037-04-08-04 Date: 1-17-07 Time: 0730
DTW (ft): 22.32 DTP Top (ft): 0	Courier: X FedEx ___UPS ___Hand ___Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic pump~~ Bailing
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	27°F
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp (C)	Cond (umhos/cm)	ORP (mv)	DO (mg/L)	Turb (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
0733	22.32		.75	8.02	13.97	27.47	-21.4	7.44	1.35	35142	
0740	23.05		1.50	7.36	14.80	28.32	-25.7	4.75	21.5	36753	
0755	24.68		3.00	7.32	16.52	30.57	-26.6	4.77	29.6	36715	
0800			3.75	7.30	17.13	30.13	-25.3	4.23	34.8	36612	
0804			4.5	7.28	16.42	30.80	-24.6	4.42	80.0	36550	
0809	Collect Sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 31.64 - 22.32 = 9.32 x .17 = 1.5 x 3 = 4.5

Pid = 0

Signed/Sampler(s):

HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: DP-30/SD-33
PROJECT NO: AFC002-037-04-08-04

SAMPLE INFORMATION

SAMPLE ID MW-30/33-03
DATE: 1-17-07 TIME: 0906
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	160.1	TDS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Dissolved, Field Filtered

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.11 7.15 Temperature ~~15.42~~ 15.42 (C) Dissolved Oxygen 2.66 (mg/L) Specific Conductivity 28.76 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential -21.4 (mv) Turbidity 13.0 (NTU) Salinity 34.500 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION W AMBIENT TEMPERATURE 27.4
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dockum OBSERVER: P. Murphy

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE
FISH = FISH	BEN=BENTHIC INVERTEBRATE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
BR=BRASS RING	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-30/33-03	Location: DP-30/SD-33
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 26.46	Project #: AFC002-037-04-08-04 Date: 1-17-07 Time: ~~0830~~ 0840
DTW (ft): 22.29 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic pump~~ Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear/overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	0 27°F
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp (C)	Cond (umhos/cm)	ORP (mv)	DO (mg/L)	Turb (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
0845	21.59		.25	7.11	15.02	27.00	-18.3	2.67	15	37499	
0850	22.56		.75	7.12	17.83	28.94	-21.1	2.93	13.2	33555	
0854	22.52		1.25	7.16	17.56	28.61	-1.0	2.95	12.0	33246	
0858	22.51		1.75	7.18	17.36	28.52	-16.9	3.16	5.5	33293	
0904	22.50		2.25	7.15	16.42	28.76	-21.4	2.66	13.0	34502	
0906	Collect Sample.										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: ~~22.29 - 26.46 = 4.17 x .17 = .71 (3) = 2.13 gallons~~

26.46 - 22.29 = 4.17 x .17 = .71 (3) = 2.13 gallons

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: DP-30/SD-33
PROJECT NO: AFC002-037-04-08-04

SAMPLE INFORMATION

SAMPLE ID MW-30/33-04
DATE: 1-17-07 TIME: 1012
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Dissolved, Field Filtered
1 L Poly	1	Cool to 4C	160.1	TDS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.12 Temperature 17.03 (C) Dissolved Oxygen 1.95 (mg/L) Specific Conductivity 24.06 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential -17.1 (mv) Turbidity 43.8 (NTU) Salinity 28405 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 28°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dolkun OBSERVER: P. McAtee

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE
FISH = FISH	BEN=BENTHIC INVERTEBRATE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
BR=BRASS RING	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-30/33-04	Location: DP-30/SD-33
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 31.15	Project #: AFC002-037-04-08-04 Date: 1-17-07 Time: 0928
DTW (ft): 20.27 DTP Top (ft):	Courier: X FedEx ___UPS ___Hand ___Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: peristaltic pump
Screen Interval FTOC(ft): (-)	Weather (sun/clear, ~~overcast~~/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	1-5 west 28°f
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (gal)	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
0931	20.27		.25	7.10	16.17	23.26	-14.7	2.61	37	28150	
0938	20.72		1.00	7.12	15.35	24.18	-19.4	2.37	72.4	29486	
0946	21.33		2.00	7.15	16.92	24.36	-4.7	2.33	90	28724	
0950	21.75		3.00	7.15	16.72	24.24	-12.8	2.35	60	28606	
0955	21.85		4.00	7.14	17.70	24.38	-16.2	2.00	65	28376	
1003	21.98		5.00	7.12	16.63	23.89	-18.8	1.66	49.9	28533	
1007	22.19		6.00	7.12	17.03	24.06	-17.1	1.95	43.8	28485	
1012	collect Samples										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 31.15 - 20.27 = 10.88 X .17 = 1.85 x 3 = 5.56 Gals

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: DP-30/SD-33
PROJECT NO: AFC002-037-04-08-04

SAMPLE INFORMATION

SAMPLE ID: MW-30/33-05
DATE: 1-17-07 TIME: 1145
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): Dup01
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	TAL Metals - Dissolved, Field Filtered
1 L Poly	1	Cool to 4C	160.1	TDS

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.14 Temperature 18.02 (C) Dissolved Oxygen 1.91 (mg/L) Specific Conductivity 22.43 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential -20.6 (mv) Turbidity 123 (NTU) Salinity 25918 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION U AMBIENT TEMPERATURE 32°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER _____ OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-30/33-05	Location: DP-30/SD-33
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 32.64	Project #: AFC002-037-04-11-04 Date: ~~1-16-07~~ 1-17-07 Time: ~~1106~~ 1100
DTW (ft): 22.05 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: peristaltic pump Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	O ~~40~~ 32
Placement of Pump Inlet (ft): 27.64	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp (C)	Cond (umhos/cm)	ORP (mv)	DO (mg/L)	Turb (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1106	22.05		.25	7.17	17.00	22.26	12.8	3.25	11.4	26310	
1110	22.16		1.25	7.12	18.74	22.83	-0.8	1.60	648	26035	
1115	22.28		2.25	7.13	18.68	22.78	-10.2	1.51	1033	25966	
1120	22.28		3.25	7.14	18.76	22.84	-13.9	1.60	759	25954	
1125	22.14		4.25	7.20	18.48	22.74	-13.6	1.98	399	25911	
1134	22.14		5.25	7.16	18.58	22.74	-46.6	2.06	282	25941	
1138	22.14		6.25	7.14	18.02	22.43	-20.6	1.91	123	25918	
1148		Well Sample									

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 32.64 - 22.05 = 10.59 x .17 = 1.80 x 3 = 5.40 gallons

Signed/Sampler(s):

SS-39

SUPPLEMENTAL RFI SOIL AND SEDIMENT SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX: SOIL SAMPLE ID: HGLSB3901R-0204

SAMPLING METHOD: DT DUP./REP. OF: –

BEGINNING DEPTH: 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 4

GRAB (X) COMPOSITE ( ) DATE: ~~7/12~~ 5/18/06 TIME: 8:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
~~4~~ 8oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	0.0	COLOR: light brown	
2nd	0.0	ODOR: none	
		OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: HGLSB3901R-0810

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 10

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 8:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: medium brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: _____

SAMPLER: S. Gillette OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB39-02R-0204

SAMPLING METHOD DT DUP./REP. OF: —

BEGINNING DEPTH 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 4

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 9:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: med-brown	
2nd	ODOR: none	
	OTHER: —	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB3902R-0810

SAMPLING METHOD DT DUP./REP. OF: HGLSBDUP06 time 0000

BEGINNING DEPTH 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 10

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 9:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 3.8	COLOR: white crystalline precip. in brown matrix	
2nd 9.7	ODOR: none	
0.0	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: HGLHA3901R-0204

SAMPLING METHOD: DT DUP./REP. OF:

BEGINNING DEPTH: 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO ( )

END DEPTH: 4

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 10:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: med. brown	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Hollomon AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLHA3901R-0708

SAMPLING METHOD DT DUP./REP. OF: —

BEGINNING DEPTH 7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH 8 YES ( ) NO (X)

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 11:24

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: medium brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: HGLHA39-02R-0204

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE
YES ( ) NO (X)

END DEPTH: 4

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 10:10

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: light brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION X AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: HGLHA39-02R-0809

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 9

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 9:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: med. brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER:

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB3917-0204-

SAMPLING METHOD DT DUP./REP. OF: —

BEGINNING DEPTH 2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE
YES ( ) NO (X)

END DEPTH 4

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 8:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: light brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc. Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: HGLSB39-17-0910

SAMPLING METHOD DT DUP./REP. OF: —

BEGINNING DEPTH 9 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 10

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 8:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz jar	3	ice		6010B	RCRA Metals
				8270C	Aniline
					UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: light yellowish-brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX Sediment SAMPLE ID: HGLSD39-01-0001

SAMPLING METHOD Sip. trowel DUP./REP. OF: —

BEGINNING DEPTH 0.0' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 0.5'

GRAB ( ) COMPOSITE (X) DATE: 5/19/06 TIME: 1440

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz. soil	2	— 4°C			RCRA metals
					UDMH
					aniline (SVOCs)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION — AMBIENT TEMP ~90's

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Test America Analytics

COMMENTS: collected from collection basin; sample mixed before collection

SAMPLER: Scott Kleese OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

SS-39

SUPPLEMENTAL RFI WELL DEVELOPMENT RECORDS

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW39-05
SHEET _____ of _____

PROJECT NAME: Holloman RFI PROJECT NO.: AFCC02-037-HH-11-03 DATE: 6/17/06

LOCATION: SS-39 DATE INSTALLED: _____

TOTAL DEPTH (FTOC) 15.62 CASING DIAMETER 2"

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL 2'6"

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☒ Pumping ☐ Describe Whale pump

Equipment decomtaminated prior to development ☐ Yes ☐ NO

Describe _____

EQUIPMENT NUMBERS: Horiba U10

pH Meter _____ EC Meter _____ Turbidity Meter LaMotte 2020 Thermometer _____

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) 13.62 ft.

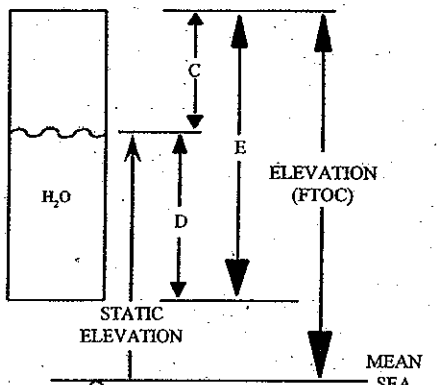
Measured Water Level Depth (C) 5.69 ft.

Length of Static Water Colume (D) 13.62 (B) - 5.69 (C) = 7.93 ft.

13.62
- 5.69
7.93

Casing Water Volume (E) = 0.16 (A) x 7.93 (D) = 1.27 gal

Total Purge Volume = _____ (gal)



0820 Start purging, 0822 well dry
0824 Resume purging, 0825 well dry, this continues for 45 min.
0920 Switch to peristaltic. Battery dies, switch power source

Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC	D.O ~~Temperature~~ ~~F~~ or °C	Temp °C	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/17	930	6.21	17	7.32	78.7	11.7	23.0	500	milky
6/17	935	6.23	19	7.34	76.8	13.46	22.3	70	clear
6/17	940	6.21	21	7.29	74.8	13.22	22.5	52	clear
6/17	945	6.21	23	7.33	74.2	13.24	22.3	50	"
6/17	950	6.21	25	7.32	73.3	13.57	22.1	29	"
6/17	955	6.21	26	7.32	73.3	13.61	22.0	15	"
6/17	~~945~~ 1000	6.21	27	7.31	73.2	12.41	21.9	9.5	"
6/17	1005	6.21	29	7.33	73.0	12.81	21.9	8	"
6/17	1010	6.21	30	7.33	72.9	13.45	21.9	9	"
6/17	1015	6.21	32	7.32	73.0	12.87	21.9	10	"
6/17	1020	6.21	33	7.32	73.0 AFCEE FORM	12.74	22.0 WD.1	9	"
6/17	1025	6.21	34	7.33	73.0	12.81	22.0	9	"

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW3906
SHEET 1 of 2

PROJECT NAME: Holloman AFB PROJECT NO.: AFCO02-037-04-11-03 DATE: 6/15/06

LOCATION: Holloman, NM DATE INSTALLED: 6/14/06

TOTAL DEPTH (FTOC) 16.5' CASING DIAMETER 2"

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL 3.33'

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☒ Pumping ☐ Describe Whale pump

Equipment decomtaminated prior to development ☐ Yes ☐ NO

Describe

EQUIPMENT NUMBERS: Horiba U10 Meter

pH Meter EC Meter Turbidity Meter Thermometer

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) 16.5 ft.

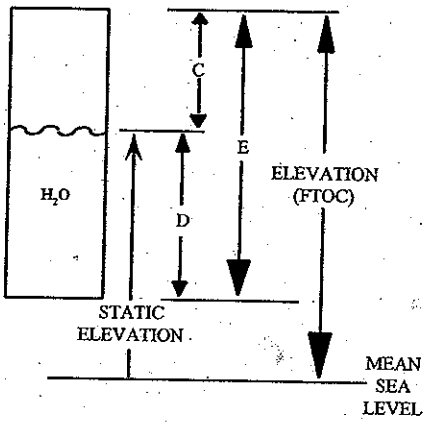
Measured Water Level Depth (C) 7.16 ft.

Length of Static Water Colume (D) 16.5 (B) - 7.16 (C) = 8.34 ft.

Casing Water Volume (E) = 0.16 (A) x 8.34 (D) = 13.34 gal

Total Purge Volume = 13.34 (gal)

2 2
8.34
x0.16
50 04
8 3 4
13 3 4 4



Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC (mS/cm)	Temperature F or C	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/15	1540	7.31	7	9.65	34	23.2	error 2	~~mod. to~~ fine grain
6/15	1551	7.90	10	7.41	33.3	22.2	11	silty fine grain
6/15	1601	7.95	18	7.40	33.2	21.4	900	"
6/15	1608	10.20	24	7.29	32.8	21.3	1000	cloudy
6/15	1612	10.41	30	7.25	34.4	20.7	95	no sediment
6/15	1615	10.15	33	7.27	34.5	20.3	100	clear
6/15	1620	10.02	36	7.25	34.7	20.4	95	clear
6/15	1623	10.09	41	7.24	34.1	20.6	87	clear
6/15	1628	10.17	47	~~7.23~~	33.0	21.1	35	clear
6/15	1633	10.36	53.5	7.18	34.6	21	21	clear

D.O. (mg/L)

op pumping, ell dry, restart at 1550

stop pumping well dry

13.28
14.86
15.29

continued on page 2

HGL HydroGeoLogic, Inc

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW3906
SHEET 2 of 2

PROJECT NAME: Holloman AFB PROJECT NO.: AFCO02-03704-1103 DATE: 6/15/06

LOCATION: " DATE INSTALLED: 6/13/06

TOTAL DEPTH (FTOC) 50 page 1 CASING DIAMETER

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☐ Pumping ☐ Describe

Equipment decomtaminated prior to development ☐ Yes ☐ NO

Describe

EQUIPMENT NUMBERS:

pH Meter EC Meter Turbidity Meter Thermometer

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC	D.O ~~Temperature~~	Temp C	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/15	1638	10.34	56	7.2	23	14.51	22.8	19	clear
6/15	1643	10.38	62	7.22	33.8	16.01	20.9	18	clear
6/15	1648	10.37	67	7.22	34.8	15.78	20.6	10	clear
6/15	1653	10.37	72	7.23	34.7	15.8	20.2	9.4	clear
6/15	1658	10.37	77	7.19	34.7	12.87	20.5	6.8	clear
6/15	1703	10.37	82	7.20	34.7	12.33	20.3	7.9	Clear
6/15	1708	10.35	87	7.21	34.7	12.47	20.1	6.5	clear
6/15	1713	10.35	92	7.19	34.9	13.29	20.8	7.2	"
6/15	1718	10.35	97	7.20	34.7	13.14	20.2	8.2	"

HGL HydroGeoLogic, Inc

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW3906D
SHEET _____ of _____

PROJECT NAME: Holloman RFI PROJECT NO.: AFC002-037-04-11-03 DATE: 6/17/16

LOCATION: SS-39 DATE INSTALLED: _____

TOTAL DEPTH (FTOC) 26.45 CASING DIAMETER 2"

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL 3'

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☐ Pumping ☐ Describe _____

Equipment decomtaminated prior to development ☐ Yes ☐ NO

Describe _____

EQUIPMENT NUMBERS:

pH Meter _____ EC Meter _____ Turbidity Meter _____ Thermometer _____

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

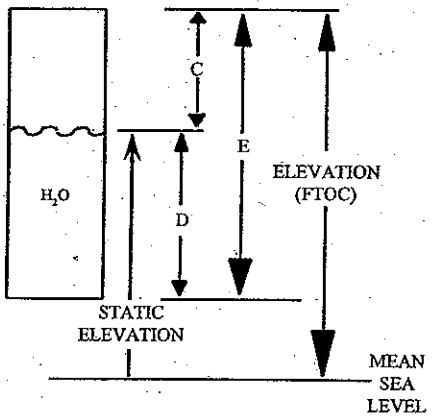
Measured Well Depth (B) 26.45 ft.

Measured Water Level Depth (C) 7.69 ft.

Length of Static Water Colume (D) 26.45 (B) - 7.69 (C) = _____ ft.

Casing Water Volume (E) + _____ (A) x _____ (D) = _____ gal

Total Purge Volume = _____ (gal)



Start purging 1340

Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC	DO ~~Temperature~~ ~~F~~ or C	Temp	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/17	1410	~~13~~14.21	60	7.24	88	14.31	22.5	253	milky
6/17	1415	~~13~~14.21	70	7.23	89.9	10.94	20.9	301	clear
6/17	1420	~~13~~14.21	80	7.17	89.5	12.19	20.5	~~232~~ 209	clear
6/17	1425	12.99	95	7.14	89.7	12.25	20.4	158	clear
6/17	1430	12.99	105	7.13	89.6	11.63	20.5	134	clear
6/17	1435	12.99	115	7.13	89.8	11.65	20.2	117	clear
6/17	1440	12.99	130	7.12	89.6	11.57	20.4	92	clearish/green
6/17	1445	12.99	145	7.12	89.8	12.23	19.9	84	"
6/17	1450	12.99	160	7.30	89.6	11.94	20.7	81	"
6/17	1455	12.99	170	7.29	89.7	12.12	20.1	79	"
6/17	1500	12.99	180	7.18	89.8	12.01	20.2	79	"
6/17	1505	12.99	190	7.21	89.7	11.98	20.1	81	"
6/17	1510	12.99	200	7.23	89.7	12.10	20.3	72	"
6/17	1515	12.99	210	7.23	89.8	11.89	20.2	74	"

WELL DEVELOPMENT RECORD

WELL/PIEZOMETER ID MW39-07
SHEET ____ of ____

PROJECT NAME: Holloman AFB RFI PROJECT NO.: AFC002-037-04-11-03 DATE: 6/17/06

LOCATION: SS-39 DATE INSTALLED: ____

TOTAL DEPTH (FTOC) ____ CASING DIAMETER 2"

MEASURING POINT HEIGHT ABOVE/BELOW GROUND LEVEL ____

METHODS OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☑ Pumping ☐ Describe Whale pump / peristaltic

Equipment decomtaminated prior to development ☐ Yes ☐ NO

Describe ____

EQUIPMENT NUMBERS: Horiba U10

pH Meter ____ EC Meter ____ Turbidity Meter LaMotte 2020 (↳ broken) Thermometer ____

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

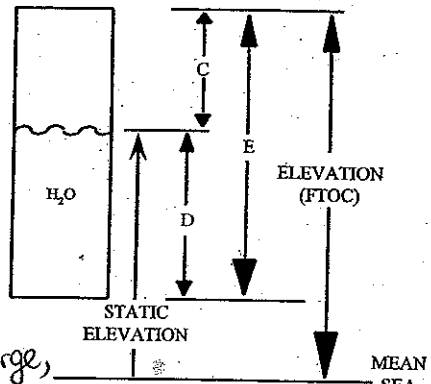
Measured Well Depth (B) 13.38 ft.

Measured Water Level Depth (C) 6.83 ft.

Length of Static Water Colume (D) 13.38 (B) − 6.83 (C) = 6.55 ft.

Casing Water Volume (E) = 0.16 (A) x 6.55 (D) = 1.05 gal

Total Purge Volume = ____ (gal)



1045 Start purging; well dry; allow recharge, ~~st~~ resume purging, well dry. switch to peristaltic at 1050

Date	Time	Water Level (FTOC)	Volume Removed (gal)	pH	EC	D.O. ~~Temperature~~ °F or C	Temp °C	Turbidity/ Sand (ppm)	Type, Size, and Amount of Sediments Discharged During Purging
6/17	1115	~~7~~.49	10	7.18	53.0	13.23	24.2	277	milky
6/17	1120	7.49	13	7.39	53	13.04	22.8	231	clear
6/17	1125	7.49	15	7.38	52.7	11.85	22.9	227	"
6/17	1130	7.49	17	7.36	52.9	11.71	23.0	263	"
6/17	1135	7.49	18	7.33	52.8	11.27	22.5	236	"
6/17	1140	7.49	19	7.33	52.7	11.49	23.2	239	"
6/17	1145	7.49	20	7.32	52.9	11.52	22.3	~~24~~ 106	"
6/17	1150	7.49	21	7.30	53.0	12.10	22.4	157	"
6/17	1155	7.49	23	7.26	52.9	11.90	22.7	117	"
6/17	1200	7.49	24	7.30	53.4	12.85	22.5	121	"
6/17	1205	7.49	25	7.29	53.1	12.24	22.4	119	"
6/17	1210	7.49	27	7.30	53.2	12.21	22.4	116	"

Turbidity did not go below 10 b/c Lamotte was broken.

SS-39

JULY 2006 SUPPLEMENTAL RFI GROUNDWATER SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFC002-037-04

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGL MW39-02

SAMPLING METHOD SP DUP./REP. OF: —

BEGINNING DEPTH _____ MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES (X) NO ( )

END DEPTH _____

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 1425

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl /ice			VOCs
1 L amber	1				UDMH - to STL Denver
1 L amber	1				SVOCs
1 L poly	1				Perchlorate
250 mL	1				TDS
500 mL	1				RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd 0.0	ODOR:	
	OTHER:	

pH 7.00 Temperature 27.93 Dissolved oxygen 5.78 Specific Conductivity 18.98

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN X WIND DRIECTION _____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: K Evers OBSERVER: S. Gillette

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-02	Project Name: Holloman RFI	LOCID:
Sampler(s): K. Evers, S. Gillette	Project No.: AFCO02-037-04	
Well Depth: 26.84	Date: 7/14/06	Time: 1320
DTW (ft TOC): 18.4	Screen Interval:	
Well Diameter (in):	Placement of Pump (ft TOC):	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (C)	Cond. (umhos/cm)	ORP	DO (mg/L)	Turb. (NTU)	Description
1345	18.48	0.10	0.5	7.08	25.31	19.92	97.1	11.02	8.6	
1350	18.48	0.10	1.0	7.00	26.60	18.58	92.4	7.56	6.5	
1355	18.45	0.10	1.5	6.99	26.72	18.61	91.3	6.87	2.2	
1400	18.45	0.10	2.0	6.99	26.74	18.72	86.2	6.57	3.4	
1405	18.45	0.10	2.5	7.00	27.18	18.79	84.1	5.81	3.7	
1410	18.45	0.10	3.0	7.00	27.73	18.91	86.3	5.80	2.9	
1415	18.45	0.10	3.5	7.00	27.81	18.94	87.3	5.80	3.6	
1420	18.45	0.10	4.0	7.00	27.93	18.98	87.7	5.78	3.4	
1425	Collected Sample and MS/MSD									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s): Kimberly Evers

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Holloman RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW39-05

SAMPLING METHOD SP DUP./REP. OF: –

BEGINNING DEPTH 10.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH –

GRAB (X) COMPOSITE ( ) DATE: 7/13/06 TIME: 9:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6	HCl / ice			VOCs
1 L amber	1	ice			UDMH - to STL
1 L amber	1	↓			SVOCs
1 L poly	1	↓			Perchlorate
250 mL	1	↓			TDS
500 mL	1	↓			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	0.0	COLOR: clear	
2nd	0.0	ODOR: none	
		OTHER:	

pH 7.09 Temperature 24.01 Dissolved oxygen 0.99 Specific Conductivity 81.36

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 98°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW-39-05	Project Name: Holloman RFI	LOCID:	
Sampler(s): S. Gillette & K. Evers	Project No.: AFC002-037-04		
Well Depth: 15.33'	Date: ~~7/12/06~~ 7/13/06	Time: 0835	
DTW (ft TOC): 5.60'	Screen Interval:		
Well Diameter (in): 2"	Placement of Pump (ft TOC): 10.5		
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other		

0.18 × 5 = 0.90 (4min) (L)

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (C)	Cond. (mS/cm)	ORP	DO (mg/L)	Turb. (NTU)	Description
845	5.78	0.18	1	7.09	27.04	77.08	103.2	1.62	3.06	clear
850	5.78	0.18	1.9	7.10	25.49	79.01	105.1	2.11	2.87	"
855	5.78	0.18	2.8	7.11	24.01	79.58	94.3	1.31	2.87	"
900	5.78	0.18	3.7	7.09	24.21	79.56	98.1	0.92	2.27	"
905	5.78	0.18	4.6	7.11	24.01	80.99	94.1	1.02	1.71	"
0910	5.78	0.18	5.4	7.11	23.99	81.14	93.8	1.01	2.21	"
0915	5.78	0.18	6.3	7.09	24.01	81.36	92.3	0.99	2.06	"
920	Sample HGL MW39-05									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW39-06

SAMPLING METHOD B DUP./REP. OF: –

BEGINNING DEPTH – MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH –

GRAB (X) COMPOSITE ( ) DATE: 7/12/06 TIME: 18:25

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 ml VOA	6	HCl, ice			VOCs
1 L amber	1	ice			UDMH - to STL Denver
1 L amber	1	"			SVOCs
1 L poly	1	"			Perchlorate
250mL	1	"			TDS
500mL	1	"			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: Clear	
2nd	ODOR: None	
	OTHER:	

pH 7.01 Temperature 23.16 Dissolved oxygen 1.05 Specific Conductivity 41.57

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals sample was filtered

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW 39-06	Project Name: Holloman RFI	LOCID:
Sampler(s): S. Gillette & K. Evers	Project No.: AFCO02-037-04	
Well Depth: 17.16 (hard bottom)	Date: 7/12/06	Time: 1740
DTW (ft TOC): → 16.36	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 2"	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/min)	Total Volume (L)	pH	Temp °C	Sp. Cond. (mmhos/cm)	ORP	DO (mg/L)	Turb. (NTU)	Description
1750	7.35	0.4	0.5	7.10	27.53	42.27	63.7	2.33	7.92	clear
1755	7.42	0.4	2.5	6.93	30.09	41.01	34.7	0.74	1.45	"
1800	7.60	0.4	4.5	7.02	24.19	41.23	51.1	1.02	3.46	"
1805	7.62	0.4	6.5	6.99	23.43	41.62	41.1	1.09	3.44	"
1810	7.65	0.4	8.5	7.00	22.97	41.51	41.8	1.07	2.63	"
1815	7.65	0.4	10.5	6.97	23.34	41.56	42.6	1.06	2.74	"
1820	7.68	0.4	12.5	7.01	23.16	41.57	42.9	1.05	2.71	"
1825	Sample MW39-06 (filtered metals)									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s): S. Gillette

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFC002-037-04

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGL MW39-06UDMH

SAMPLING METHOD SP DUP./REP. OF: -

BEGINNING DEPTH 11.8' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 1135

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
1 L amber	1	ice			UDMH

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: clear	
2nd 0.0	ODOR: none	
	OTHER:	

pH 7.12 Temperature 27.61 Dissolved oxygen 3.69 Specific Conductivity 39.70

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analytical

COMMENTS: Re-do UDMH due to breakage in shipment

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-06	Project Name: Holloman RFI	LOCID: HGLMW39-06UDMH
Sampler(s): S. Gillette & K. Ehers	Project No.: AFC002-037-04	
Well Depth: 16.30	Date: 7/14/06	Time: 1105
DTW (ft TOC): 7.28	Screen Interval:	
Well Diameter (in): 2 in	Placement of Pump (ft TOC): 11.81	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

L/min (L)

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (C)	Cond (umhos/cm)	ORP	DO (mg/L)	Turb (NTU)	Description
1113	7.30	0.2	0.5	7.08	29.60	40.44	106.4	8.70	20	clear
1118	7.32	0.1	1	7.09	29.17	40.00	96.7	3.88	14	"
1123	7.32	0.1	1.5	7.11	28.63	39.80	89.3	3.71	8.7	"
1128	7.32	0.1	2.0	7.12	27.75	39.72	88.7	3.76	8.5	"
1133	7.32	0.1	2.5	7.12	27.61	39.70	88.1	3.69	8.5	"
1135	Sample	MW39-06UDMH								

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Holloman RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGL MW39-060

SAMPLING METHOD SP DUP./REP. OF: -

BEGINNING DEPTH 21' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/13/06 TIME: 1040

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6				VOCs
1 L amber	1				UDMH - to STL
1 L amber	1				SVOCs
1 L poly	1				Perchlorate
250 mL	1				TDS
500 mL	1				RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: clear	
2nd 0.0	ODOR:	
	OTHER:	

pH 7.09 Temperature 26.34 Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 98°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

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Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-06D	Project Name: Holloman RFI	LOCID: HGLMW3906D
Sampler(s): S. Gillette, K. Evers	Project No.: AFCO02-037-04	
Well Depth: 26.80'	Date: 7/13/06	Time: 945
DTW (ft TOC): 6.89'	Screen Interval: 26-16	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 21ft	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/min)	Total Volume (gal)	pH	Temp (C)	Cond (umhos/cm)	ORP	DO (mg/L)	Turb (N.T.U.)	Description
0955	7.03	0.10	0.5	7.06	28.26	122.1	72.5	3.31	34.5	clear
1000	7.04	0.10	1.0	7.05	25.44	120.1	75.6	2.70	27.3	"
1005	7.05	0.10	1.5	7.04	26.29	117.6	74.6	2.48	12.1	"
1010	6.98	0.10	2.0	7.08	26.05	114.3	70.4	3.02	11.5	"
1015	6.98	0.10	2.5	7.06	26.60	114.6	75.1	2.80	7.18	"
1020	6.98	0.10	3.0	7.05	26.87	114.7	74.9	2.59	7.09	"
1025	6.99	0.10	3.5	7.08	26.39	114.5	85.1	2.82	10.27	"
1030	6.99	0.10	4.0	7.09	26.74	114.9	84.2	2.80	9.99	"
1035	6.99	0.10	4.5	7.09	26.34	114.7	84.1	2.78	9.81	"
1040	Collected Sample.									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW39-07

SAMPLING METHOD B DUP./REP. OF: -

BEGINNING DEPTH - MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/12/06 TIME: 11:00

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl ice			VOCs
1L amber	1	ice			UDMH - to STL Denver
1L amber	1	"			SVOCs
1L poly	1	"			Perchlorate
250 mL	1	"			TDS
500mL	1	"			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: Clear	
2nd	ODOR: None	
	OTHER:	

pH 7.00 Temperature 24.74 Dissolved oxygen 1.22 Specific Conductivity 63.35

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: ____

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39 07	Project Name: Holloman RFI	LOCID:
Sampler(s): S.Gillette & K.Evers	Project No.: AFC002-037-04	
Well Depth: 14.78 | WC: 8.1'	Date: 7/12/06	Time: 10:00
DTW (ft TOC): 6.70	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): ~~19.5~~ 14.9' (0.7')	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

(4 min)(L)

Field Parameters

Time	Depth to Water (ft)	Flow Rate	Total Volume	pH	Temp (C)	Cond (umhos/cm)	ORP	DO (mg/L)	Turb (NTU)	Other (describe)
1010	7.25	0.10	0.5	6.86	26.34	66099	98.4	3.52	550	
1015	7.10	0.10	1.0	6.99	25.32	65088	68.6	1.71	450	
1020	7.05	0.10	1.5	6.98	25.19	62396	55.9	1.34	280	
1025	7.00	0.10	2.0	7.00	25.03	62287	47.6	1.40	180	
1030	7.05	0.10	2.5	7.00	24.78	62040	58.6	1.43	140	
1035	7.05	0.10	3.0	6.99	25.42	62876	54.1	1.23	100	
1040	7.05	0.10	3.5	7.00	24.87	62231	45.0	1.24	36	62.29
1045	7.05	0.10	4.0	7.00	24.78	62287	46.0	1.23	26	62.41
1050	7.05	0.10	4.5	7.00	24.72	62261	46.7	1.23	24	62.35
1055	7.05	0.10	5.0	7.00	24.74	62267	46.1	1.22	24	63.35
1100	Collect Sample MW39-07									

Observations

Color: Clear (Other) (describe): Slightly Cloudy, Very light brown

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFCO02-037-04

SITE: SS-39

SAMPLE INFORMATION

MATRIX: WG SAMPLE ID: HGL MW39-07 Metals

SAMPLING METHOD: SP DUP./REP. OF: -

BEGINNING DEPTH: 10.7' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH:

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 10:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4x500ml	1	-, ice			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd 0.0	ODOR:	
	OTHER:	

pH 6.95 Temperature 27.98 Dissolved oxygen 1.01 Specific Conductivity 65.10

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS:

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

-572-5697

HGL HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-07	Project Name: Holloman RFI	LOCID:
Sampler(s): S. Gillette & K. Evers	Project No.: AFCO02-037-04	
Well Depth: 14.60	Date: 7/14/06	Time: 9:45
DTW (ft TOC): 6.80	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 10.7'	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

WC = 7.8
One well vol. = 1.24 gal 3 well vol. = 3.74 gal or 14 L

Field Parameters

Time	Depth to Water (ft)	Flow Rate (lpm)	Total Volume (gal)	pH	Temp (C)	Cond. (umhos/cm)	ORP	D.O. (mg/L)	Turb. (N.T.U.)	Description
9:57	6.97	0.2	0.5	7.01	26.85	66.666	193.7	2.07	60	clear
10:02	6.95	0.2	1.5	6.97	27.44	66.37	169.7	1.35	60	"
10:07	6.96	0.2	2.5	6.96	26.58	66.07	144.0	1.28	65	"
10:12	6.95	0.2	3.5	6.95	26.54	65.53	112.4	1.14	50	"
10:17	6.95	0.2	4.5	6.94	26.63	65.38	99.6	1.07	39	"
10:22	6.95	0.2	5.5	6.94	26.80	65.21	32.4	1.00	31	"
10:27	6.95	0.2	6.5	6.95	27.80	65.14	67.7	0.99	31	"
10:32	6.95	0.2	7.0	6.95	27.39	65.07	66.1	1.00	30	"
10:37	6.95	0.2	7.5	6.95	27.98	65.10	65.6	1.01	30	"
10:40	Collected	metals	sample							

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW39-08

SAMPLING METHOD B DUP./REP. OF: -

BEGINNING DEPTH - MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/13/06 TIME: 14:50

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl, ice			VOCs
1 L amber	1	ice			WDNH - to STL Denver
1 L amber	1	"			SVOCs
1 L poly	1	"			Perchlorate
250 mL	1	"			TDS
500 mL	1	"			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: Clear	
2nd	ODOR: None	
	OTHER:	

pH 7.13 Temperature 32.00 Dissolved oxygen 0.45 Specific Conductivity 102.3

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-08	Project Name: Holloman RFI	LOCID:
Sampler(s): K. Eves, S. Gillette	Project No.: AFCO02-037-04	
Well Depth: 10.00	Date: 7/13/06	Time: 1400
DTW (ft TOC): 4.83'	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 7.5'	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (gal)	pH	Temp (C)	Cond. (mmhos/cm)	ORP	DO (mg/L)	Turb. (N.T.U.)	Description
1410	4.98	0.20	1.0	7.14	32.59	101.9	127.9	4.02	84.6	None
1415	4.99	0.20	2.0	7.14	31.82	102.2	66.9	0.59	19.0	"
1420	5.00	0.20	3.0	7.15	31.17	100.2	51.8	0.47	20.0	"
1425	5.00	0.20	4.0	7.15	31.24	101.6	45.8	0.50	20.1	"
1430	5.01	0.20	5.0	7.14	31.52	102.0	49.3	0.48	19.6	"
1435	5.01	0.20	6.0	7.13	31.89	102.0	47.4	0.46	19.7	"
1440	5.01	0.20	7.0	7.13	31.91	102.1	48.0	0.45	19.6	"
1445	5.01	0.20	8.0	7.13	32.00	102.3	49.1	0.45	19.7	"
1450	Collected Sample HGL-MW39-08									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s): Kembyl Eves

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Holloman RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX: WG SAMPLE ID: HGLMW39-09

SAMPLING METHOD: SP DUP./REP. OF: HGLGWDUP10

BEGINNING DEPTH: 7.1' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: -

GRAB (X) COMPOSITE ( ) DATE: 7/13/06 TIME: 1646

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6	HCl /ice			VOCs
1L amber	1	ice			UDMH
1L amber	1	↓			SVOCs
1L poly	1				Perchlorate
250mL	1				TDS
500 mL	1				TAL Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: clear	
2nd 0.0	ODOR: none	
	OTHER:	

pH 7.49 Temperature 29.17 Dissolved oxygen 1.42 Specific Conductivity 94.21

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 95°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-09	Project Name: Holloman RFI	LOCID: HGLMW39-09
Sampler(s): K.Evers, S.Gillette	Project No.: AFC002-037-04	
Well Depth: 10.09 "	Date: 7/13/06	Time: 1530
DTW (ft TOC): 4.09 "	Screen Interval: ~~0~~ 5	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 7.1"	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

(4 mL)(L)

Field Parameters

Time	Depth to Water (ft)	Pump Rate (L/min)	Total Volume (L)	pH	Temp (C)	Cond. (mS/cm)	ORP	DO (mg/L)	Turb (N.T.U.)	Description
1539	4.89	0.1	0.5L	7.46	~~29.44~~	~~86.62~~	25.1	4.81	837	brown
1544	4.84	0.1	1	7.55	31.47	85.12	13.8	1.10	645	light brown
1549	4.87	0.1	1.5	7.58	32.04	85.55	20.4	1.81	323	yellowish
1553	4.92	0.1	2	7.59	31.05	85.99	19.4	1.19	219	"
1559	4.93	0.1	2.5	7.60	29.46	87.74	26.7	1.33	157	clear
1603	4.94	0.1	3	7.60	29.82	88.02	26.0	1.30	101.7	"
1608	5.07	0.1	3.5	7.58	29.72	89.63	31.1	1.40	79.3	"
1613	5.09	0.1	4.0	7.56	30.00	90.56	35.9	1.36	68.4	"
1618	5.09	0.1	5.0	7.54	29.89	92.44	40.2	1.56	50.5	"
1623	5.09	0.1	5.5	7.51	29.66	93.31	42.5	1.32	32.7	"
1628	5.17	0.1	6.0	7.49	29.38	94.10	42.3	1.89	35.7	"
1633	5.18	0.1	6.5	7.48	29.17	94.57	42.3	1.43	30.2	"
1638	5.18	0.1	7.0	7.49	29.24	94.21	42.1	1.42	32.1	"
1640	Collect @ HGLMW39-09 and HGLGWDUP10									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc.

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Holloman RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX: WG SAMPLE ID: HGLMW39-10

SAMPLING METHOD: SP DUP./REP. OF: -

BEGINNING DEPTH: 3.3' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: -

GRAB (X) COMPOSITE ( ) DATE: 7/13/06 TIME: 1810

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6	HCl/ice			VOCs
1 L amber	1	ice			UDMH
1 L amber	1				SVOCs
1 L poly	1				Perchlorate
250 mL	1				TDS
500 mL	1	↓			TAL Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: Clear	
2nd 0.0	ODOR: none	
	OTHER:	

pH 7.43 Temperature 30.23 Dissolved oxygen 0.72 Specific Conductivity 102.4

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 90°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: Metals filtered in lab

SAMPLER: K. Eves OBSERVER: S. Gillette

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-10	Project Name: Holloman RFI	LOCID: HGLMW39-10
Sampler(s): K. Evers, S. Gilkey	Project No.: AFC002-037-04	
Well Depth: 5.02	Date: 7/13/06	Time: 17:20
DTW (ft TOC): 1.62	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 33'	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp (C)	Cond (mmho/cm)	ORP	D.O. (mg/L)	Turb (N.T.U.)	Description
		L/min	L							
1735	1.67	0.20	1.0	7.29	31.85	109.1	73.5	5.4	65.2	clear
1740	1.69	0.20	2.0	7.35	29.32	107.4	66.6	1.20	36.7	"
1745	1.72	0.20	3.0	7.45	31.00	104.1	50.3	0.77	14.0	"
1750	1.73	0.20	4.0	7.46	29.89	103.7	51.0	0.82	10.66	"
1755	1.71	0.20	5.0	7.44	30.19	103.8	52.1	0.79	9.46	"
1800	1.72	0.2	6.0	7.43	30.47	102.8	45.4	0.71	1.59	"
1805	1.72	0.2	7.0	7.43	30.23	102.4	50.7	0.72	2.67	"
1810	Sample	MW39-10								

Observations

Color: ~~Clear~~ Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

ned/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFCO02-037-04

SITE: SS-39

SAMPLE INFORMATION

MATRIX: WG SAMPLE ID: HGLMW39-11

SAMPLING METHOD: SP DUP./REP. OF: -

BEGINNING DEPTH: 8.1 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH:

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 9:35

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40mL VOA	6	HCl, ice			VOCs
1L amber	1	ice			UDMH - to STL
1L amber	1				SVOCs
1L poly	1				Perchlorate
250mL	1				TDS
500mL	1	↓			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.6	COLOR:	
2nd 0.0	ODOR:	
	OTHER:	

pH 7.01 Temperature 29.19 Dissolved oxygen 0.27 Specific Conductivity 126.6

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-11	Project Name: Holloman RFI	LOCID:	
Sampler(s): S. Gillette & K. Eves	Project No.: AFC002-037-04		
Well Depth: 10.5'	Date: 7/12/06	Time: 1520	
DTW (ft TOC): 5.47'	Screen Interval:		
Well Diameter (in): 2"	Placement of Pump (ft TOC): 8'		
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other		

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/min)	Total Volume (L)	pH	Temp (C)	Spec. Cond. (mS/cm)	ORP (mV)	DO (mg/L)	Turb. (NTU)	Description
1528	5.65	0.4	0.5	7.30	36.62	98.02	16.6	1.37	452	yellowish
1533	5.35	0.4	2.5	7.34	30.58	94.29	8.0	0.70	381	"
1538	5.42	0.4	4.5	7.33	29.80	91.95	-0.3	0.76	270	"
1543	5.98	0.4	6.5	7.23	29.72	101.6	19.0	0.81	189	clear
1548	6.02	0.4	8.5	7.13	29.23	112.8	17.1	0.44	114	"
1553	6.38	0.4	10.5	7.11	28.56	118.1	22.8	0.86	80	"
1558	6.41	0.4	12.5	7.08	28.91	118.3	26.3	0.81	55	"
1603	6.66	0.4	14.5	7.06	28.75	121.6	25.7	0.79	45	"
1608	6.67	0.4	16.5	7.05	28.43	122.8	26.1	0.78	45	"
1610	Parameters stable, turn pump off, allow to recharge 80%									
1620	Sample MW39-11'									

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW39-11-Metals

SAMPLING METHOD B DUP./REP. OF :

BEGINNING DEPTH - MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 9:35

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
500 mL	1	ice			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: Clear	
2nd	ODOR: None	
	OTHER:	

pH 7.01 Temperature 29.19 Dissolved oxygen 0.27 Specific Conductivity 126.6

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals will be filtered in lab

SAMPLER: S. Gillette OBSERVER: L. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-11	Project Name: Holloman RFI	LOCID:
Sampler(s): S. Gillette & K. Evers	Project No.: AFCO02-037-04	
Well Depth: 10.5	Date: 7/14/06	Time: 8:35
DTW (ft TOC): 5.66	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 8.1	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

(L/min) Liter

Time	Depth to Water (ft)	Flow Rate (L/min)	Total Volume (gal)	pH	Temp (C)	Cond (umhos/cm)	ORP	DO (mg/L)	Turb (N.T.U.)	Description
8:46	6.00	0.2	1	7.02	29.04	128.9	176.0	0.76	210	cloudy
8:51	6.10	0.2	2	7.05	29.25	125.2	134.2	0.51	90	"
8:56	6.15	0.2	3	7.05	29.26	123.3	106.1	0.40	45	clear
9:01	6.18	0.2	4	7.04	29.24	125.3	94.7	0.36	21	"
9:06	6.24	0.2	5	7.03	29.20	125.8	86.7	0.34	20	"
9:11	6.30	0.2	6	7.03	29.13	126.3	76.7	0.29	33	"
9:16	6.30	0.2	7	7.02	29.16	126.4	72.7	0.29	26	"
9:21	6.31	0.2	8	7.01	29.13	126.4	65.6	0.28	28	"
9:26	6.31	0.2	9	7.01	29.07	126.5	63.0	0.28	27	"
9:31	6.31	0.2	10	7.01	29.19	126.6	63.0	0.27	27	"
9:35	Collected Sample			Metals						

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s): K. Evers

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SS-39

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLMW39-12

SAMPLING METHOD B DUP./REP. OF: -

BEGINNING DEPTH - MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH -

GRAB (X) COMPOSITE ( ) DATE: _____ TIME: _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL	6	HCl, ice			VOCs
1 L amber	1	ice			UDMH - to STL Denver
1 L amber	1	"			SVOCs
1 L poly	1	"			Perchlorate
250 mL	1	"			TDS
500mL	1	"			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: Yellowish then clear	
2nd	ODOR: None	
	OTHER:	

pH 6.98 Temperature 28.72 Dissolved oxygen 1.08 Specific Conductivity 127.8

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: _____

SAMPLER: S. Gillette OBSERVER: K. Evers

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW-39-12	Project Name: Holloman RFI	LOCID: HGLMW3912
Sampler(s): S.Gillette & K.Evers	Project No.: AFC002-037-04	
Well Depth: 10.8'	Date: 7/12/06	Time: 1330
DTW (ft TOC): 5.41'	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 8.1 ft	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/min)	Total Volume (L)	pH	Temp (C)	Sp. Cond (mS/cm)	ORP	DO (mg/L)	Turb (NTU)	Description
1348	6.21	0.3	1	6.94	30.64	131.4	63.7	1.13	240	yellowish
1353	6.60	0.3	2.5	6.95	30.61	132.0	24.9	1.02	500	"
1358	6.60	0.3	4.0	6.99	29.83	130.0	26.3	1.09	1000	cloudy
1403	6.81	0.3	5.5	7.00	29.41	129.0	42.3	0.93	Error 2	very cloudy
1408	6.88	0.3	7.0	6.98	28.58	129.0	45.5	0.98	"	"
1413	~~6.94~~	0.3	8.5	6.97	29.62	129.6	47.3	0.90	1100	"
1418	7.65	0.4	9.0	7.02	29.51	130.1	48.9	1.09	800	cloudy
1423	7.66	0.4	10.5	7.02	28.68	129.6	51.3	1.20	170	cloudy
1428	7.60	0.4	12	7.02	28.87	129.6	50.2	1.08	80	clear
1433	7.62	0.4	14	6.99	29.43	129.3	54.4	1.11	55	"
1438	~~7.55~~ 7.62	0.4	16	6.95	28.94	127.4	51.6	1.02	50	"
1443	7.55	0.4	18	6.97	28.57	127.2	54.5	1.14	45	"
1448	7.50	0.4	20	6.98	28.72	127.8	53.2	1.08	40	"
1450	Sample	MW39-12								

Note: Could not get pump to operate at 0.1 L/min due to high H

Observations

Color: Clear Other (describe): yellowish at beg.

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: AFC002-037-04

SITE: SS-39

SAMPLE INFORMATION

MATRIX: WG SAMPLE ID: HGLMW39-12Metals

SAMPLING METHOD: SP DUP./REP. OF: -

BEGINNING DEPTH: 7.8' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH:

GRAB (X) COMPOSITE ( ) DATE: 7/14/06 TIME: 8:30

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
500mL	1	- ice			RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	0.0	COLOR:	
2nd	0.0	ODOR:	
		OTHER:	

pH 6.99 Temperature 27.31 Dissolved oxygen 0.42 Specific Conductivity 136.0

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 95°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: Trace Analysis

COMMENTS: Metals filtered in lab

SAMPLER: K. Evers OBSERVER: S. Gillette

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL
HydroGeoLogic, Inc
Exceeding Expectations

GROUNDWATER FIELD SAMPLING DATA SHEET

Location: Holloman AFB, Alamogordo, NM

Well Name.: MW39-12	Project Name: Holloman RFI	LOCID:
Sampler(s): S. Gillette & K. Eves	Project No.: AFC002-037-04	
Well Depth: 10.08 WC=4.56'	Date: 7/14/06	Time: 725
DTW (ft TOC): 5.52	Screen Interval:	
Well Diameter (in): 2"	Placement of Pump (ft TOC): 7.8	
Type of Pump: Peristaltic pump	Courier: X Hand ___ FedEx ___ Other	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (rpm)	Total Volume (gal)	pH	Temp (C)	Cond. (umhos/cm)	ORP	DO (mg/L)	Turb (N.T.U.)	Color/Odor Description
7:30	5.71	0.20	1.0	7.08	25.66	129.9	181.9	6.23	265	Cloudy
7:35	5.91	0.20	2.0	7.03	25.99	129.9	157.5	0.95	48.8	"
7:40	6.05	0.20	3.0	7.01	26.73	130.9	161.1	0.74	102.6	"
7:45	6.14	0.20	4.0	7.00	26.86	130.7	132.8	0.54	89.9	"
7:50	6.17	0.20	4.0	7.00	26.74	130.5	122.4	0.44	106.1	clearish
7:55	6.23	0.20	5.0	7.00	26.69	130.4	113.3	0.38	110	"
8:00	6.26	0.20	6.0	6.99	27.02	130.0	110.0	0.35	150	"
8:05	6.26	0.20	7.0	6.99	27.23	129.9	107.5	0.30	140	clear
8:10	6.27	0.20	8.0	6.99	27.17	130.0	102.6	0.40	120	"
8:15	6.28	0.20	9.0	6.99	27.25	130.2	100.9	0.42	100	"
8:20	6.28	0.20	10.0	6.98	27.39	130.0	97.3	0.42	100	"
8:25	6.28	0.20	11.0	6.99	27.31	130.0	100.1	0.42	100	
8:30	Sample	HGL MW39-12		Metals						

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H_2S Fuel-like

Notes:

Signed/Sampler(s): S Gillette

SS-39

JANUARY 2007 SEMI-ANNUAL COMPLIANCE LTM
SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION:	Holloman AFB, NM	PROJECT NAME:	Holloman 2006 LTM - Jan.
SITE:	SS-39	PROJECT NO:	AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID: MW-39-02

DATE: 1-17-07 TIME: 1627

MATRIX TYPE: WG

SAMPLING METHOD: G

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DPETH (FT):

SAMPLE END DPETH (FT):

GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): _____

MATRIX SPIKE DUP (SD): _____

FIELD DUP (FD): _____

AMBIENT BLANK (AB): _____

EQUIPMENT BLANK (EB): _____

TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
1 L Poly	1	Cool to 4C	160.1	TDS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.48 Temperature 18.01 (C) Dissolved Oxygen 4.23 (mg/L) Specific Conductivity 16.32 (umhos/cm)

Iron — (mg/L) Oxidation/Reduction Potential -17.8 (mv) Turbidity 56.3 (NTU) Salinity 18625 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 34°f

SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-02	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 27.04	Project #: AFC002-037-04-11-04 Date: 1-17-08 Time: 1603
DTW (ft): 17.09 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic Pump~~ Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature): 5-10 W 34°f
Well Diameter (in): 2"	
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume ~~(L)~~	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1605	17.09		~~0.25~~	7.37	16.52	14.65	-16.9	1.57	95.4	17509	
~~1608~~ 1618	17.26		1.25	~~7.47~~ 7.44	17.02	14.62	-15.8	3.08	44.5	17229	
1612	17.26		2.25	7.46	17.60	15.61	-17.2	3.88	47.6	18219	
1617	17.26		3.25	7.44	17.75	15.91	-17.6	3.98	49.2	18561	
1622	17.26		4.25	7.48	17.85	16.02	-17.5	4.08	52.6	18565	
1626	17.26		5.25	7.48	18.01	16.32	-17.8	4.23	56.3	18625	
1627	Collect Sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 27.04 - 17.09 * 1.95 x .17 = 1.69 x 3 = 5.07

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-05
DATE: 1-18-07 TIME: 1248
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
1 L Poly	1	Cool to 4C	160.1	TDS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.14 Temperature 14.75 (C) Dissolved Oxygen 1.48 (mg/L) Specific Conductivity 59.95 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 144.5 (mv) Turbidity 190 (NTU) Salinity 74.61 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 32°F
SHIPMENT VIA: FEDEX ____ HAND DELIVER ____ COURIER X OTHER ____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dodson OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-05	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 15.49	Project #: AFC002-037-04-11-04 Date: 1-18-07 Time: 1219
DTW (ft): 4.55 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: peristaltic pump
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	W 32°f
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L) G	pH	Temp (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1228	4.80		.50	7.45	10.09	43.06	140.1	6.62	200	60.46	
1231	5.01		1.00	7.33	11.71	45.76	140.8	4.26	70	61.41	
1233	5.22		1.50	7.28	13.11	49.39	141.8	3.01	100	63.82	
1236	5.21		2.00	7.20	13.91	52.86	142.7	2.04	130	67.05	
1239	5.21		2.50	7.18	14.01	56.21	143.6	1.63	180	71.17	
1242	5.21		3.00	7.15	14.42	58.[illegible]	144.2	1.63	160	73.13	
1244	5.21		3.50	7.14	14.61	59.55	144.5	1.41	200	74.24	
1246	5.21		4.08	7.14	14.75	59.95	1445	1.48	190	74.61	
[illegible]											
1248	collect Sample										

Observations

Color: Clear Other (describe):
Odor: None Low Medium High Very Strong H2S Fuel-like
Notes: 5.58 gal.
Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION:	Holloman AFB, NM	PROJECT NAME:	Holloman 2006 LTM - Jan.
SITE:	SS-39	PROJECT NO:	AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID: MW-39-06

DATE: 1-17-07 TIME: 1522

MATRIX TYPE: WG

SAMPLING METHOD: G

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DPETH (FT):

SAMPLE END DPETH (FT):

GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): _____

MATRIX SPIKE DUP (SD): _____

FIELD DUP (FD): Dup02

AMBIENT BLANK (AB): _____

EQUIPMENT BLANK (EB): _____

TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
1 L Poly	1	Cool to 4C	160.1	TDS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.23 Temperature 13.78 (C) Dissolved Oxygen 2.98 (mg/L) Specific Conductivity 31.03 (umhos/cm)

Iron — (mg/L) Oxidation/Reduction Potential -14.4 (mv) Turbidity 265 (NTU) Salinity 39621 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION W AMBIENT TEMPERATURE 38°F

SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-06	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 16.47	Project #: AFC002-037-04-11-04 Date: 1-17-06 Time: 1412
DTW (ft): 5.94 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic Pump~~ Bailer (Disp)
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	5-10 W 38°F
Placement of Pump Inlet (ft):	

Field Parameters

OR 10%

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (Bg 0.10	pH 0.50	Temp (C)	Cond. (umhos/cm) 3%	ORP (mv) 10%	DO (mg/L) 10%	Turb. (NTU) 10MN	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1422	6.06	100	0.00	7.38	14.26	31.20	-16.7	6.73	53.3	39322	
1430	Lost flow, surge to Bail										
1440	5.93		0.0	7.26	13.29	30.36	-14.8	2.12	22.1	39124	
1447	6.03		1.00	7.22	13.16	30.14	-20.1	2.30	800	39089	
1454	6.14		2.00	7.21	13.76	30.48	-18.4	4.01	737	38804	
1500	6.05		4.00	7.22	13.76	30.90	-18.6	2.30	250	39341	
1506	6.19		5.00	7.21	13.79	30.95	-18.3	2.01	379	39343	
1514	6.23		6.00	7.21	13.58	30.99	-17.5	3.82	283	39827	
1522	6.18		7.00	7.23	13.78	31.03	-14.4	2.98	265	39621	
1522	Collect Sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 16.47 - 5.94 = 10.53 x .17 = 1.79 x 3 = 5.37

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-06D
DATE: 1-18-07 TIME: 1330
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): X
MATRIX SPIKE DUP (SD): X
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	160.1	TDS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 6.95 Temperature 17.59 (C) Dissolved Oxygen 1.07 (mg/L) Specific Conductivity 86.99 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 158.0 (mv) Turbidity 18 (NTU) Salinity 101.8 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 40's
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES

DC=DRILL CUTTINGS
SL=SLUDGE
WG=GROUND WATER
SO=SOIL
LH=HAZARDOUS LIQUID WASTE
GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE
WS=SURFACE WATER
SE=SEDIMENT
SW=SWAB/WIPE
FISH = FISH
BEN=BENTHIC INVERTEBRATE

SAMPLING METHOD CODES

B=BAILER
G=GRAB
BP=BLADDER PUMP
HA=HAND AUGER
BR=BRASS RING
H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE
PP=PERISTALTIC PUMP
C=CONTINUOUS FLIGHT AUGER
SS=SPLIT SPOON
DT=DRIVEN TUBE
SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-06D	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 26.87	Project #: AFC002-037-04-11-04 Date: 1-18-07 Time: 1308
DTW (ft): 5.75 DTP Top (ft):	Courier: X FedEx ___UPS ___Hand ___Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic pump~~ Bennett
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	5-10 W 40°F
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L) 3	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1313	5.86		.50	7.41	14.13	65.38	150.9	3.62	36	82.81	
1315	5.98		1.00	7.52	14.33	65.91	150.5	3.77	10	82.86	
1318	6.16		1.50	7.47	14.48	69.01	151.6	3.11	65	85.3	
1321	6.22		2.00	7.24	16.80	76.72	155.3	1.45	9.6	91.31	
1324	6.12		3.00	7.03	17.41	82.35	157.3	1.03	~~55~~ 72	96.65	
1327	6.22		4.00	6.97	17.51	85.85	157.3	.98	21	99.82	
1329	6.22		5.00	6.96	17.88	87.12	158.1	.94	26	101.2	
1331	6.22		6.00	6.95	17.98	87.49	157.9	1.01	32	101.5	
1335	6.22		7.00	6.95	17.59	86.99	158.0	1.07	18	101.8	
1336	Collect Sample										

Observations

Color: Clear Other (describe):
Odor: None Low Medium High Very Strong H2S Fuel-like
Notes: 10.77 gal.
Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-07
DATE: 1-18-07 TIME: 1415
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
1 L Poly	1	Cool to 4C	J60.1	TDS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.06 Temperature 13.12 (C) Dissolved Oxygen 1.45 (mg/L) Specific Conductivity 50.95 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 147.5 (mv) Turbidity 950 (NTU) Salinity 65.80 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 40°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER _____ OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-07	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 14.73	Project #: AFC002-037-04-11-04 Date: 1-18-07 Time: 1355
DTW (ft): 5.18 DTP Top (ft):	Courier: X FedEx ___UPS ___Hand ___Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic pump~~ Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature): 10 W 40 F
Well Diameter (in): 2"	
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (Gal)	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1402	5.70		.50	7.17	10.84	45.53	145.0	2.77	15	62.26	
1404	6.32		1.50	7.13	12.59	48.03	146.4	1.58	750	63.31	
1406	6.32		2.50	7.09	12.94	49.50	147.2	1.39	800	64.42	
1410	6.32		3.50	7.06	13.01	50.93	147.4	1.35	1000	65.65	
1414	6.32		4.50	7.06	13.12	50.95	147.5	1.45	950	65.80	
1415	Collect Sample.										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 4.87 sal

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-08
DATE: 1-18-07 TIME: 0951
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	160.1	TDS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.45 Temperature 9.28 (C) Dissolved Oxygen 2.93 (mg/L) Specific Conductivity 64.71 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 133.4 (mv) Turbidity 700 (NTU) Salinity 93.16 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 34°f
SHIPMENT VIA: FEDEX ____ HAND DELIVER ____ COURIER X OTHER ____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Pockman OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-08		Location: SS-39	
Sampler(s):		Project Name: Holloman 2006 LTM - Jan.	
Well Depth: 5.18		Project #: AFC002-037-04-11-04	Date: 1-18-07 Time: 0936
DTW (ft): .40	DTP Top (ft):	Courier: __X__FedEx ____UPS ____Hand ____Other	
MP Ht. Above/Below Ground Surface:		Sampling Method : G	
Condition of Bottom of Well:		Type of Pump: Peristaltic Pump	
Screen Interval FTOC(ft): (-)		Weather (sun/clear, overcast/rain, wind direction, ambient temperature): 1-5 W 34°F	
Well Diameter (in): 2"			
Placement of Pump Inlet (ft):			

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
0939	.60		.25	7.38	10.38	67.41	128.2	7.54	330	93.55	
0947	.70		1.25	7.47	8.77	64.29	131.2	3.59	320	93.21	
0948	.70		2.25	7.47	9.17	64.98	132.3	2.99	700	93.04	
0950	.70		3.25	7.45	9.28	64.71	133.4	2.93	700	93.16	
0951	collect sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 5.18 - .40 = 2.43 Gallons

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION:	Holloman AFB, NM	PROJECT NAME:	Holloman 2006 LTM - Jan.
SITE:	SS-39	PROJECT NO:	AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID: MW-39-09

DATE: 1-18-07 TIME: 0917

MATRIX TYPE: WG

SAMPLING METHOD: G

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DPETH (FT):

SAMPLE END DPETH (FT):

GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): _____

MATRIX SPIKE DUP (SD): _____

FIELD DUP (FD): _____

AMBIENT BLANK (AB): _____

EQUIPMENT BLANK (EB): _____

TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
1 L Poly	1	Cool to 4C	160.1	TDS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.27 Temperature 10.98 (C) Dissolved Oxygen 3.76 (mg/L) Specific Conductivity 81.34 (umhos/cm)

Iron — (mg/L) Oxidation/Reduction Potential 117.9 (mv) Turbidity — (NTU) Salinity 107.6 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 36°F

SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

4.75 DTW 4.15

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-09	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 6.13	Project #: AFC002-037-04-11-04 Date: 1-18-07 Time: 0900
DTW (ft): .60 DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic pump~~ Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	1-5 W 34°F
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume ~~TDS~~	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
0902	.60		.25	7.27	9.83	69.49	114.4	5.04	120	98.08	
0906	1.60		1.25	7.26	9.93	78.06	116.6	4.04	err.3	107.4	Silty Brown, exceeds Turb. meter.
0911	2.28		2.25	7.27	10.08	80.62	118.5	3.88	—	108.7	
0915	2.86		3.25	7.27	10.98	81.34	117.9	3.76	—	107.0	
0917	collect sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 6.13 - .60 = 5.53 x .17 = .94 = 2.82 gal.

Signed/Sampler(s):

- 6.13 / 4.15 = 1.98
- 5.811 / 4.15 = 2.8
- 10.28 / 4.15 = 6.13

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-10
DATE: 1-18-07 TIME: 0834
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
1 L Poly	1	Cool to 4C	160.1	TDS
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.47 Temperature 7.93 (C) Dissolved Oxygen 13.39 (mg/L) Specific Conductivity 34.23 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 98.8 (mv) Turbidity 150 (NTU) Salinity 69.83 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 32°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dockum OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

1.59
1.14
.46
1.14 TOP of Riser

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-10	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 5.1 - 1.14 = 4.96	Project #: AFC002-037-04-11-04 Date: 1-18-07 Time: 0822
DTW (ft): [redacted] DTP Top (ft):	Courier: X FedEx ___ UPS ___ Hand ___ Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: ~~Peristaltic Pump~~ Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	0 wind 32°F
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (Bailed)	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
0825	.05		.25	7.11	9.03	25.72	110.8	32.12	28.9	38.07	
0827	.05		1.25	7.38	7.66	30.39	101.7	39.02	164	47.00	
0830	.05		2.25	7.46	7.82	35.10	100.8	15.46	150	54.16	
0833	.05		3.25	7.47	7.93	34.23	98.8	13.38	150	69.83	
0834	Collect Sample										

Observations

Color: Clear Other (describe):
Odor: None Low Medium High Very Strong H2S Fuel-like
Notes: 4.96 - .05 = 4.91 x .17 = .83 (3) = 2.49 Gal
Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-11
DATE: 1-18-07 TIME: 1027
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate
1 L Poly	1	Cool to 4C	160.1	TDS
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.23 Temperature 10.91 (C) Dissolved Oxygen 1.74 (mg/L) Specific Conductivity 84.90 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 155.1 (mv) Turbidity 90 (NTU) Salinity 116.1 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 34°F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Ockwin OBSERVER: P. Martinez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-11		Location: SS-39	
Sampler(s):		Project Name: Holloman 2006 LTM - Jan.	
Well Depth: 5.65		Project #: AFC002-037-04-11-04	Date: 1-18-07 Time: 1009
DTW (ft): .80	DTP Top (ft):	Courier: X FedEx ___UPS ___Hand ___Other	
MP Ht. Above/Below Ground Surface:		Sampling Method : G	
Condition of Bottom of Well:		Type of Pump: ~~Peristaltic Pump~~ Bailer	
Screen Interval FTOC(ft): (-)		Weather (sun/clear, overcast/rain, wind direction, ambient temperature):	
Well Diameter (in): 2"		1-5 W 34°F	
Placement of Pump Inlet (ft):			

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp (C)	Cond (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1012	1.00		.25	7.24	10.56	82.88	149.0	2.37	240	114.1	
1015	1.50		1.25	7.26	10.53	84.95	151.2	2.51	400	117.1	
1019	3.25		2.25	7.21	10.84	84.60	153.6	1.47	250	116.6	
1026	2.75		3.25	7.23	10.91	84.90	155.1	1.74	90	116.1	
1027	collect sample										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 2.47 gal.

Signed/Sampler(s):

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB, NM
PROJECT NAME: Holloman 2006 LTM - Jan.
SITE: SS-39
PROJECT NO: AFC002-037-04-11-04

SAMPLE INFORMATION

SAMPLE ID MW-39-12
DATE: 1-18-07 TIME: 1057
MATRIX TYPE: WG
SAMPLING METHOD: G
LOT CONTROL #: ___ ___ ___ ___
(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)
CHAIN-OF-CUSTODY #: _____
SAMPLE BEG. DPETH (FT):
SAMPLE END DPETH (FT):
GRAB ( ) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:
MATRIX SPIKE (MS): _____
MATRIX SPIKE DUP (SD): _____
FIELD DUP (FD): _____
AMBIENT BLANK (AB): _____
EQUIPMENT BLANK (EB): _____
TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40mL VOA	3	Cool to 4C HCL pH<2	SW8260B	VOCs
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Total
500 ml Poly	1	Cool to 4C HN03	SW6010B	RCRA Metals - Dissolved Field Filtered
1 L Poly	1	Cool to 4C	160.1	TDS
1 L Poly	1	Cool to 4C	SW8321A	Perchlorate

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.28 Temperature 11.22 (C) Dissolved Oxygen 1.76 (mg/L) Specific Conductivity 89.32 (umhos/cm)
Iron — (mg/L) Oxidation/Reduction Potential 164.3 (mv) Turbidity — (NTU) Salinity 122.4 (ppt)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION W AMBIENT TEMPERATURE 34° F
SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER X OTHER _____
SHIPPED TO: _____
COMMENTS: _____
SAMPLER: S. Dockum OBSERVER: P. Mathez

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BP=BLADDER PUMP	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	BR=BRASS RING	H=HOLLOW STEM AUGER
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER	CS=COMPOSITE SAMPLE	PP=PERISTALTIC PUMP
SE=SEDIMENT	SW=SWAB/WIPE	C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
FISH = FISH	BEN=BENTHIC INVERTEBRATE	DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: MW-39-12	Location: SS-39
Sampler(s):	Project Name: Holloman 2006 LTM - Jan.
Well Depth: 5.65	Project #: AFC002-037-04-11-04 Date: 1-18-07 Time: 1043
DTW (ft): .85 DTP Top (ft):	Courier: X FedEx ___UPS ___Hand ___Other
MP Ht. Above/Below Ground Surface:	Sampling Method : G
Condition of Bottom of Well:	Type of Pump: Peristaltic pump Bail
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2"	1-5 W 34°F
Placement of Pump Inlet (ft):	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp. (C)	Cond. (umhos/cm)	ORP (mv)	DO (mg/L)	Turb. (NTU)	Salinity (ppt)	Type, Size, and Amount of Sediment Discharged
1043	.85		.25	7.28	10.72	88.71	164.8	2.25	210	121.4	
1049	1.85		1.25	7.32	11.08	89.84	165.8	2.07	800	122.6	
1053	2.60		2.25	7.30	11.18	89.02	163.9	1.77	—	120.3	Error 3, Brown
1056	3.24		3.25	7.28	11.22	89.32	164.3	1.76	—	122.4	
1057	collect SAmple										

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: 2.45 gal.

Signed/Sampler(s):

SD-27

SD-27

SUPPLEMENTAL RFI SOIL AND SEDIMENT SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX Sediment SAMPLE ID: HGL SD 27-01-0002

SAMPLING METHOD hand DUP./REP. OF: No

BEGINNING DEPTH 00'-02 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH @ 2' YES (X) NO ( ) → Radionuclides

GRAB ( ) COMPOSITE ( ) DATE: 5/16/06 TIME: 1544

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
					VOC
					SVOC
					TPH GRO - DRO
					RCRA Metals
					Radionuclides

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 80°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER _____ OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: [signature] OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX Soil SAMPLE ID: HGLSB-27-01-0608

SAMPLING METHOD DPT DUP./REP. OF : No

BEGINNING DEPTH 06' MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH 8' YES ( ) NO (X)

GRAB (X) COMPOSITE ( ) DATE: 5/16/06 TIME: 1240

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
					VOCs
					SVOC
					TPH GRO + DRO
					RCRA Metals
					Radionuclides

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 80°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER _____ OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: _____ OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX Soil SAMPLE ID: HGL SB27-02-1113

SAMPLING METHOD DPT DUP./REP. OF: D SB Dup #3 (Radionuclides only)

BEGINNING DEPTH 11 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH 13 YES ( ) NO (X)

GRAB (X) COMPOSITE ( ) DATE: 5/16/06 TIME: 1112

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
					VOC
					SVOC
					TPH GRO + DRO
					RCRA Metals
					Radionuclides

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 80°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER _____ OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: Sarah Gillette OBSERVER: [signature]

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Hollomon AFB PROJECT: Supplemental RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX Soil SAMPLE ID: HGLSB27-03-1113

SAMPLING METHOD HDPT DUP./REP. OF: SB Dup 02 (all but Radionuclides)

BEGINNING DEPTH 13'11 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 13

GRAB (X) COMPOSITE ( ) DATE: 5/16/06 TIME: 1004

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz	2			8260	VOCs
				8270	SVOCs
				8015	TPH-GRO + DRO
				6000/7421	RCRA Metals
1 liter	1			900/901	Radionuclides

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 80°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER _____ OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: B Bean OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RI

SITE: SD-27

SAMPLE INFORMATION

MATRIX: Soil SAMPLE ID: HGLSB27-03-1618

SAMPLING METHOD: DPT DUP./REP. OF: NA

BEGINNING DEPTH: 16' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 18'

GRAB (X) COMPOSITE ( ) DATE: 5/16/06 TIME: 1005

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz	2			8260	VOCs
				8270	SVOCs
				8015	TPH GRO DRO
				6000/7421	RCRA Metals
1 liter	1			900/901	Radionuclides

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 80°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER _____ OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: [signature] OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX Soil SAMPLE ID: HGLSB27-04-0810

SAMPLING METHOD DPT DUP./REP. OF : _____

BEGINNING DEPTH _____ MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO ( )

END DEPTH _____

GRAB ( ) COMPOSITE ( ) DATE: 5/16/06 TIME: 1315

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
					VOC
					SVOC
					TPH GRO + DRO
					RCRA Metals
					Radionuel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 80°

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER _____ OTHER _____

SHIPPED TO: _____

COMMENTS: _____

SAMPLER: [signature] OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc
Exceeding Expectations

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: HGLSB27-05-0708

SAMPLING METHOD: DT DUP./REP. OF: —

BEGINNING DEPTH: 7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH: 8 YES ( ) NO (X)

GRAB (X) COMPOSITE ( ) DATE: 5/18/06 TIME: 14:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz jar	3	ice		8015	TPH DRO and GRO
				8260B	Volatiles
				8270C	Semivolatiles
				6010B	RCRA Metals

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.0	COLOR: med. reddish-brown	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 100°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER X OTHER ____

SHIPPED TO: TraceAnalysis

COMMENTS: ____

SAMPLER: S. Gillette OBSERVER: ____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

SD-27

GROUNDWATER SAMPLE DATA SHEETS

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: HGL GW27-02 PROJECT : AFCEE2-037-04-10-03

SITE: SD-27

SAMPLE INFORMATION

MATRIX VOCs SAMPLE ID: HGL GW2702

SAMPLING METHOD Peristaltic DUP./REP. OF : N/A

BEGINNING DEPTH N/A MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH N/A YES (X) NO ( ) for VOCs only

GRAB (X) COMPOSITE ( ) DATE: 5/16/06 TIME: 1630

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40mL VOA	6	HCl	Peristaltic		VOCs
1L Amber	2	—	"		SVOCs and radionuclides
500 mL poly	1	HNO_3	"		RCRA Metals
1L Amber	1	—	"		Radionuclides - filtered
500 mL poly		HNO_3	"		RCRA Metals - field filtered

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR: sewage, sulfur	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP _____

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: Courier, Trace Analytical

COMMENTS: _____

SAMPLER: S. Gillette OBSERVER: B. Brodersen

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Holloman AFB PROJECT: Supplemental RFI

SITE: SD-27 (Pad 9)

SAMPLE INFORMATION

MATRIX GW SAMPLE ID: HGLGW27-02-05 2006

SAMPLING METHOD Peristaltic Pump DUP./REP. OF: NA

BEGINNING DEPTH — MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES (X) NO ( )

END DEPTH — filtered metals, metals, Radionuclides filtered Radionuclides, SVOCs

GRAB (X) COMPOSITE ( ) DATE: 5/20/06 TIME: 0930

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
500ml Poly	1	HNO_3		F. Metals	Filtered Metals ~~Mg/Mn~~
500ml Poly	~~2~~	HNO_3		6000/7421	MS/MSD - ~~Filtered~~ Non Filtered Metals
1L Amber	~~2~~	—		900/901	MS/MSD - ~~Filtered~~ Non Filtered Radio
4 Amber	2	—		8270	MS/MSD - SVOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP 94°

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: _____

COMMENTS: Sewage odor emanating from well

SAMPLER: _____ OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: HGL GW27-03 PROJECT : AFCEE-037-04-10-03

SITE: SD-27

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLGW27-03

SAMPLING METHOD Peristaltic DUP./REP. OF : GWDUP01 1205

BEGINNING DEPTH N/A MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH N/A

GRAB (X) COMPOSITE ( ) DATE: 5/16/06 TIME: 1220

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	6	HCl	Peristaltic		VOCs
1 L Amber	2	—	"		SVOCs and radionuclides
500 mL poly	1	HNO_3	"		RCRA Metals
1 L Amber	1	—	"		Radionuclides - filtered
500 mL poly	1	HNO_3	"		RCRA metals - field filtered

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP _____

SHIPMENT VIA: FED-X X HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: Courier, TraceAnalytical

COMMENTS: _____

SAMPLER: S. Gillette OBSERVER: B. Brodersen

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION: SB-27-07 PROJECT: Supplemental RFI

SITE: SD-27

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLGW27-07

SAMPLING METHOD Peristaltic Pump DUP./REP. OF: GWDup-01

BEGINNING DEPTH _____ MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO ( )

END DEPTH _____

GRAB (X) COMPOSITE ( ) DATE: 6/16/06 TIME: 1040

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
~~8~~ 40ml VOA	3	HCL 4°C		8015M	GRO
1-liter Amb	2	HCL 4°C		8015M	DRO
40ml VOA	3	HCL 4°C		8260	VOC
1-lit Amber	2	— 4°C		8270	SVOCs
500ml poly	2	HNO3 ; 4°C			RCRA Metals (Total / Diss)
1 lite Amb	1	— ; 4°C			Radionuclides (Total)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP 90's

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: Trace Analysis

COMMENTS: Diss Metals were filtered in the field

SAMPLER S. Burt for S. Gillette OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc.

FIELD SAMPLING REPORT

LOCATION: SB27-08 PROJECT: Supplemental RFI

SITE: SD-22

SAMPLE INFORMATION

MATRIX WG SAMPLE ID: HGLGW27-08

SAMPLING METHOD Peristaltic DUP./REP. OF:

BEGINNING DEPTH MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES (X) NO ( )

END DEPTH

GRAB (X) COMPOSITE ( ) DATE: 6/16/02 TIME: 1145

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
40ml VOA	3	HCL ; 4°C		8260	VOCs
"	3	↓ ↓		8015M	GRO
1-liter Amb	2	↓ ↓		8015M	DRO
1-liter Amb	2	4°C		8270	SVOC
500ml plsty	2	HNO3 ; 4°C			Metals (Total + Diss)
1-liter Amb	1	4°C			Radionuclides (Total)

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

pH _____ Temperature _____ Dissolved oxygen _____ Specific Conductivity _____

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DRIECTION _____ AMBIENT TEMP _____

SHIPMENT VIA: FED-X _____ HAND DELIVER _____ COURIER X OTHER _____

SHIPPED TO: Trace Analysis

COMMENTS: Diss Metals sample collected in field

SAMPLER: S. Rivera for S. Gillette OBSERVER: _____

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP\WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB\WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

CHAIN-OF-CUSTODIES

SUPPLEMENTAL RFI SAMPLES

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HydroGeoLogic, Inc	Phone #: 703-736-4563
Address: (Street, City, Zip)	Fax #:
Contact Person: Kevin Cottrell	E-mail: kcottrell@hgl.com
Invoice to: (If different from above)	
Project #: AFC002-037-04	Project Name: Supplemental RFI
Project Location (including state): Holloman AFB, NM.	Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLSB10-03-2022	2	4oz		X							X		5/19/06	1436
	HGLSB10-04-0810	2	4oz		X							X			1505
	HGLSB10-05-1011	2	4oz		X							X			1535
	HGLSB10-06-1112	2	4oz		X							X			1552
	HGLSB10-07-1011	2	4oz		X							X			1620
	HGLSB10-07-1314	2	4oz		X							X			1623
	HGLSB10-07-1314 (MS)	2	4oz		X							X			1623
	HGLSB10-07-1314 (MSD)	2	4oz		X							X			1623
	SBDup01	2	4oz		X							X		↓	0000
	TB-001	2	40ml	X				X						Lab	0000
	HGLSB27-03-1113	3	4oz/40ml		X							X		5/14/06	1004

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015(GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	RCRA Metals (1,000 / 7421)	Radionuclides				Turn Around Time if different from standard	Hold
			X								X	X				X	X						
			X								X	X				X	X						
			X								X	X				X	X						
			X								X	X				X	X						
			X								X	X				X	X						
			X								X	X				X	X						
			X								X	X	BTB 5/19/06			X	BTB 5/19/06						
			X								X	X	BTB 5/19/06			X	BTB 5/19/06						
			X								X	X				X	X						
			X								X					X	XX						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Brett Brown	5/19/06	1701	Jeffrey Lu	5-17-06	1701
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y N
Headspace Y N
Temp. °C
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HydroGeoLogic, Inc. | Phone #: 703-736-4563

Address: (Street, City, Zip) | Fax #:

Contact Person: Ken Cottrell | E-mail: kcottrell

Invoice to: (If different from above)

Project #: AFC002 - 037 - 04 | Project Name: Supplemental RFI

Project Location (including state): Holloman AFB, NM | Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLGW27-02-051606 MSD	6	40 ml	X	X			X				X		5/16/06	1630
	HGLGW Dup-01-051606	11		X	X			X	X			X			0000
					X							X			1110
					X							X			
					X							X			
					X							X			
					X							X			
					X							X			
	RB051506	5		X				X	X			X			
	RB05-051606	5		X				X	X			X			

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C 7625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	RCRA Metals (6000/7471)	Radionuclides (900/901)	F.Hexa Radionuclides (900/901)	Turn Around Time if different from standard	Hold
			X								X	X					X				
			X								X	X					X	X	X	X	
			X								X	X					X	X			
			X								X	X					X	X			
			X								X	X					X	X			
			X								X	X					X				
			X								X	X					X			BTB 5/19/0	
			X								X	X					X			BTB 5/19/0	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5/17/06	1701		5-17-06	1701
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY: Intact Y N | Headspace Y N | Temp | Log-in Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HydroGeoLogic, Inc. | Phone #: 703

Address: (Street, City, Zip) | Fax #:

Contact Person: Ken Colwell | E-mail: kcolwell@hgl.com

Invoice to: (If different from above)

Project #: AFC002-037-04 | Project Name: Supplemental RFI

Project Location (including state): | Sampler Signature: Brett Riedeman

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	TB-051706	2	40ml	X				X						5/17/06	0000
	HGLSB33-07-0203	4	4oz		X							X		5/17/06	1445
	HGLSB33-07-0405	4	4oz		X							X		5/17/06	1445
	HGLSB33-08-0405	4	4oz		X							X			1600
	HGLSB33-08-1012	4	4oz		X							X			1600
	HGLSB33-10-0405	4	4oz		X							X			1645
	HGLSB33-11-0607	4	4oz		X							X			1710
	HGLSBDup-04	4	4oz		X							X			0000
	HGLSB Dup-05	4	4oz		X							X			0000

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015(GRO)(DRO)/ TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	TCL Metals	Herbicides	Pesticides - 8141	RCRA Toxicity / Ignitability / Reactivity / Corrosivity (S+CN)	Turn Around Time if different from standard	Hold
			X								X	X	X	X			X	X	X	BTB	5/19/06	
							X	X	X						X					X	X	
			X								X	X	X	X			X	X	X			
						X	X	X							X					X	X	
			X			X	X	X			X	X	X	X			X	X	X			
						X	X	X							X					X	X	
			X								X	X	X	X			X	X	X			
			X								X	X	X	X			X	X	X			
						X	X	X							X					X	X	

LAB USE ONLY: Intact Y / N; Headspace Y / N; Temp; Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Brett Riedeman	5/18/06	1647		5/18	1647
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL / Trace Analysis — Phone #: 806-794-1296

Address: (Street, City, Zip) 6701 Aberdeen, Ste 9, Lubbock, TX 79424 — Fax #:

Contact Person: Mike Able — E-mail:

Invoice to: Trace Analysis
(If different from above) STL quote # 69763 Rev 1

Project #: STL quote # 69763 Rev 1 — Project Name: Holloman AFB

Project Location (including state): Holloman AFB, NM — Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLRB006-051806-A1	1	1+	X								X		5/18/06	1145
	HGLRB006-051806-A2	1	1+	X								X		↓	1147

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	(4 DAY)				Turn Around Time if different from standard
																X					
																X					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5/18/06	1300			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by	Date:	Time:

LAB USE ONLY
Intact Y N
HeadSpace Y N
Temp
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

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COC = HGL005

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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # ____

Company Name: HGL / Trace Analysis
Phone #: 806-794-1296
Address: (Street, City, Zip) 6701 Aberdeen, Ste 9, Lubbock, TX 79424
Fax #:
Contact Person: Mike Able
E-mail:
Invoice to: ~~Trace Analysis~~ STL quote #69763 Rev 1
(If different from above)
Project #: STL quote #69763 Rev 1
Project Name: Holloman AFB
Project Location (including state): Holloman AFB, NM
Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	UDMH	Turn Around Time if different from standard	Hold
	HGLRB006-051806-A1	1	1L	X								X		5/18/06	1145																		X		
	HGLRB006-051806-HA	1	1L	X								X		↓	1147																		X		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	5/18/06	1300			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp ____
Log-in-Review ____

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # ____

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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: HydroGeoLogic **Phone #:** 703-736-4563

Address: (Street, City, Zip) **Fax #:**

Contact Person: Ken Cottrell **E-mail:** kcottrell@...

Invoice to: (If different from above)

Project #: AFC002 037-04 **Project Name:** Jn... RCI

Project Location (including state): Holloman AFB, NM **Sampler Signature:** Brett ...

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME
	~~TB 051906~~ TB 051806	2	40 ml	X					X				X			5/18/06	—
	RIHGLRB06-051806-AI			X					X	X			X			↓	1145
	HGLRB06-051806-HA			X					X	X			X			↓	1147
	HGLHA3901R-0204	3	4 oz		X									X		5/18/06	1010
	HGLHA3901R-0708	3	4 oz		X									X		5/18/06	1195
	HGLHA3902R-0204	3	4 oz		X									X		5/18/06	0945
	HGLHA3902R-0809	3	4 oz		X									X		5/18/06	1010
	HGLSB3902R-0204	3	4 oz		X									X		5/18/06	0915
	HGLSB3902R-0910	3	4 oz		X									X		5/18/06	0915
	~~[illegible]~~ HGLSBDUP06	3	4 oz		X									X		5/18/06	0000
	HGLSB3901R-0204	3	4 oz		X									X		5/18/06	~~0000~~ 0920

ANALYSIS REQUEST (Circle or Specify Method No.)

FIELD CODE	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides ~~8081A~~ / 608 8141	BOD, TSS, pH	Moisture Content	Tot Metals	Herbicides	RCRA Metals	Aniline	UDMH	Turn Around Time if different from standard	Hold
~~TB 051906~~ TB 051806												X												
RIHGLRB06-051806-AI				X								X	X		X			X	X					
HGLRB06-051806-HA																		~~X~~	~~X~~	X	X			
HGLHA3901R-0204																				X	X	X		
HGLHA3901R-0708																				X	X	X		
HGLHA3902R-0204																				X	X	X		
HGLHA3902R-0809																				X	X	X		
HGLSB3902R-0204																				X	X	X		
HGLSB3902R-0910																				X	X	X		
HGLSBDUP06																				X	X	X		
HGLSB3901R-0204																				X	X	X		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Brett Bradford (signature)	5/19/06	1231	(signature)	5-19-06	1231
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-in Review

REMARKS:

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Carrier # ______

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HydroGeoLogic
Phone #: 703-736-4563
Address: (Street, City, Zip)
Fax #:
Contact Person: Ken Cottrell
E-mail: Kcottrell@hgl.com
Invoice to:
(If different from above)
Project #: AFCC02-037-04
Project Name: Supplemental RFI
Project Location (including state): Holloman AFB, NM
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLSB3901R-0810	3	4oz		X								X	5/18/06	0820
	HGLSB3917-0804	3	4oz		X								X	5/18/06	0840
	HGLSB3917-0910	3	4oz		X								X	5/18/06	0840
	HGLSB2705-0708	2	11oz		X								X	5/18/06	1410
	HGLSB3301-0809	4	4oz		X								X	5/18/06	1600
	HGLSB3302-0809	4	4oz		X								X	5/18/06	1635
	HGLSB3303-0809	4	4oz		X								X	5/18/06	1620

ANALYSIS REQUEST	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	RCRA Metals	TCLP Metals	TAL Metals	Hardness	Turn Around Time if different from standard	~~Hold~~ Pesticides - 8141
HGLSB3901R-0810												X						X	X	X			
HGLSB3917-0804												X						X	X	X			
HGLSB3917-0910												X						X	X	X			
HGLSB2705-0708				X								X	X					X					
HGLSB3301-0809				X								X	X	X	X					X	X		X
HGLSB3302-0809				X								X	X	X	X					X	X		X
HGLSB3303-0809				X								X	X	X	X					X	X		X

	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
		5/19/06	1231		5-19-06	1231
	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y N
Headspace Y / N
Temp
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: 93006

Company Name: HydroGeologic	Phone #: 703-478-5186
Address: (Street, City, Zip) 1155 Herndon Pkwy Ste 900	Fax #: 703-471-4180
Contact Person: Ken Cottrell	E-mail: kcottrell@hgl.com
Invoice to: (If different from above)	
Project #: AFCEC02-037	Project Name: Holloman RFI
Project Location (including state): Holloman AFB, NM	Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLSB3011-0309	4	4 oz		X							X	X	5/19/06	9:00
	HGLSB3011-0309MS	4	4 oz		X							X	X	5/19/06	9:05
	HGLSB3011-0309MSD	4	4 oz		X							X	X	5/19/06	9:10
	HGLSB3016-0910	4	4 oz		X							X	X	5/19/06	9:20
	HGLSB3013-0507	4	4 oz		X							X	X	5/19/06	9:40
	HGLSB3013-1012	4	4 oz		X							X	X	5/19/06	9:55
	HGLSB3012-~~0709~~ 93006	4	4 oz		X							X	X	5/19/06	10:10
	HGLSB3012-0709	4	4 oz		X							X	X	5/19/06	10:15
	HGLSB30-01-0809	4	4 oz		X							X	X	5/19/06	11:25
	HGLSB30-02-0305	4	4 oz		X							X	X	5/19/06	11:50
	HGLSB30-08-0809	4	4 oz		X							X	X	5/19/06	8:00

ANALYSIS REQUEST	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	RCRA Texas 11 + Reactivity + Ignitability + Corrosivity + Reactivity (CS+CN)	TAL Metals	Herbicides	Pesticides - 8141	Turn Around Time if different from standard	Hold
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		
				X			X	X	X				X	X	X	X		X	X	X	X		

Relinquished by: Sarah Stuhl	Date: 5/20/06	Time: 1225	Received by:
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received at Laboratory by:

Date: 5/20/06 Time: 1225

LAB USE ONLY
Intact Y N
Headspace Y N
Temp
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: HydroGeoLogic	Phone #: 7034785186
Address: (Street, City, Zip) 1155 Herndon Pkwy Ste 900	Fax #: 7034714180
Contact Person: Ken Cottrell	E-mail: kcottrell@hgl.com
Invoice to: (If different from above)	
Project #: ATCC02-037-04	Project Name: Hollaman RFI
Project Location (including state): Hollaman AFB, NM	Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLSB30-03-0203	4	4 oz		X							X	X	5/19/00	1345
	HGLSB30-04-0204	4	4 oz		X							X	X	5/19/00	1400
	HGLSB30-05-0709	4	4 oz		X							X	X	5/19/00	1420
	HGLSB30-06-0809	4	4 oz		X							X	X	5/19/00	1440
	HGLSB30-07-0304	4	4 oz		X							X	X	5/19/00	1500
	~~HGL~~SD39-01-0001	~~3~~ 4	4 oz		X							X	X	5/19/00	1440
	HGLSD3901-0001	3	4 oz		X							X	X	5/19/00	1440
	HGLSD3901-0001	3	4 oz		X							X	X	5/19/00	1440

ANALYSIS REQUEST	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO (DRO) TVHC	~~PAH 8270C / 625~~ LUFT 5 Metals	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	~~RCI~~ RCRA Metals	GC/MS Vol 8260B / 624	GC/MS Semi. Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS (pH)	Moisture Content	RCRA Toxicity / Ignitability / Corrosivity / Reactivity (S+CN)	TAL Metals	Herbicides	Pesticides - 8141	Turn Around Time if different from standard	~~Hold~~ Archive
HGLSB30-03-0203				X			X	X	X	X		X	X	X	X	X			X	X	X		
HGLSB30-04-0204				X								X	X	X	X				X	X	X		
HGLSB30-05-0709				X								X	X	X	X				X	X	X		
HGLSB30-06-0809				X								X	X	X	X				X	X	X		
HGLSB30-07-0304				X								X	X	X	X				X	X	X		
~~HGL~~SD39-01-0001					X						X												X
HGLSD3901-0001					X						X												X
HGLSD3901-0001					X						X												X

Relinquished by:	Date: 5/22/00	Time: 1225
Received by:	Date: 5/22/00	Time: 1225
Relinquished by:	Date:	Time:
Received by:	Date:	Time:
Relinquished by:	Date:	Time:
Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp
Login Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: HydroGeologic
Phone #: 703-478-5186
Address: (Street, City, Zip) 1155 Herndon Pkwy Ste 900
Fax #: 703-471-4180
Contact Person: Ken Cottrell
E-mail: kcottrell@hgl.com
Invoice to: (If different from above)
Project #: ATCO.037-01
Project Name: Holloman RFI
Project Location (including state): Holloman AFB, NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLSB30-20-0708	4	4oz		X							X	X	5/19/06	8:25
	HGLSB3020-0809	4	4oz		X							X	X	5/19/06	8:30
	HGLSB3017-0607	4	4oz		X							X	X	5/18/06	9:00
	HGLSB3017-0809	4	4oz		X							X	X	5/18/06	9:05
	HGLSBDUP07	4	4oz		X							X	X	5/18/06	0000
	HGLSB3018-0506	4	4oz		X							X	X	5/20/06	9:30
	HGLSB3018-0709	4	4oz		X							X	X	5/19/06	9:35
	HGLGW27-02-052006	1	500 ml	X					X			X		5/20/06	0808
	HGLGW27-02-052006 MS	3	-	X					X			X		5/20/06	0808
	HGLGW27-02-052006 MSD	3	-	X					X			X		5/20/06	0808
	HGLRB07-052006-TU	12	-	X				X	X			X		5/20/06	0840

ANALYSIS REQUEST (Circle or Specify Method No.)	
MTBE 8021B / 602 / 8260B / 624	
BTEX 8021B / 602 / 8260B / 624	
TPH 418.1 / TX1005 / TX1005 Ext(C35)	
TPH 8015 (GRO) (DRO) TVHC	X
PAH 8270C / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	X
TCLP Volatiles	X
TCLP Semi Volatiles	X
TCLP Pesticides RCRA Metals (FILTERED)	
PCBs RCRA	X
GC/MS Vol. 8260B/624	X
GC/MS Semi. Vol. 8270C/625	X
PCB's (8082) 608	X
Pesticides (8081A) 608	X
BOD, TSS (pH)	X
Moisture Content Radionuclides (gross)	X
RCRA Toxicity / Reactivity / Corrosivity / Reactivity (S,R,C,N)	X
TAL Metals	X
Herbicides	X
Pesticides - 8141	X
Turn Around Time if different from standard	
~~Hold~~ Radionuclides - FILTERED (900/901)	X

Relinquished by: Date: Time: 5/22/06 12:25
Received by: Date: 5/22/06 Time: 1225

Relinquished by: Date: Time:
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

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Intact Y N
Headspace Y N
Temp
Log-In-Review

REMARKS:

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name:	Hydro GeoLogic, Inc.
Phone #:	703-478-5186
Address: (Street, City, Zip)	1155 Herndon Pkwy, Ste 900
Fax #:	703-471-4180
Contact Person:	Ken Cottrell
E-mail:	kcottrell@hgl.com
Invoice to: (If different from above)	
Project #:	AFC002-037-04
Project Name:	Supplemental RFI
Project Location (including state):	Holloman AFB, NM
Sampler Signature:	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLRB07-052006-AL	6	1	X				X	X			X		5/20/06	1250
	TB-052006	2	40 mL	X				X				X		—	—

ANALYSIS REQUEST (Circle or Specify Method No.)

	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	RCRA Toxicity / Ignitability / Corrosivity / Reactivity (SIC)					Turn Around Time if different from standard	Hold
							X	X	X			X						X	X					

Relinquished by:	Date: 5/20/06	Time: 1225
Received by:	Date: 5/20/06	Time: 1225
Relinquished by:	Date:	Time:
Received by:	Date:	Time:
Relinquished by:	Date:	Time:
Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y N
Headspace Y N
Temp
Log-in Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HydroGeoLogic — Phone #:

Address: (Street, City, Zip) — Fax #:

Contact Person: Ken Cottrell (PM) — E-mail: kcottrell@hgl.com

Invoice to: (If different from above)

Project #: AFC002-037-04 — Project Name: Supplemental RFI

Project Location (including state): Holloman AFB, NM — Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLTR19-01-0102	3	4oz		X							X		5/22/06	0910
	HGLTR19-01-0203	3	4oz		X							X		5/22/06	0915

	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608 + (8141)	BOD, TSS, pH	Moisture Content	Herbicides	TAL Metals					Turn Around Time if different from standard	Hold
															X			X	X						
															X			X	X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y N
Headspace Y N
Temp
Log-in Review

REMARKS:

- ☐ Dry Weight Basis Required
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: HGL
Phone #: 703-478-5186
Address: (Street, City, Zip) 1155 Herndon Pkwy Ste 900
Fax #: 703-471-4180
Contact Person: Kenneth Cottrell
E-mail: Kcottrell@hgl.com
Invoice to: (If different from above)
Project #: AFCEC2 037.04
Project Name: Holloman AFB RFI
Project Location (including state): Holloman AFB, Alamogordo, NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLSB29-L4-0204	4	4 oz		X							X		6/16/06	1300
	HGLSB29-L4-0204MS	4	4 oz		X							X		6/16/06	1300
	HGLSB29-L4-0204MSD	4	4 oz		X							X		6/16/06	1300
	HGLSB29-K3-1416	4	4 oz		X							X		6/16/06	1500
	HGLSB29-I5-1417	4	4 oz		X							X		6/17/06	0840
	HGLSB29-~~S~~F7-2022	4	4 oz		X							X		6/17/06	1015
	HGLSB29-F4-1820	4	4 oz		X							X		6/17/06	1115
	HGLSB29-D6-2426	4	4 oz		X							X		6/17/06	1540
	HGLRBSB-061706	9	VOA	X				X	X			X		6/17/06	1700
	HGLTB061706	2	40 mL	X				X				X		6/17/06	1730

	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	RCRA Metals	Explosives	Perchlorate			Turn Around Time if different from standard	Hold
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			
				X								X	X					X	X	X			

Relinquished by: Date: 6/17/06 Time: 1730
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL, Inc.
Phone #: 703-478-5186
Address: (Street, City, Zip) 1155 Herndon Pkwy Ste 900
Fax #: 703-471-4170
Contact Person: Kenneth Cottrell
E-mail: kcottrell@hgl.com
Invoice to: (If different from above)
Project #: AFCEE02-C37-04
Project Name: Holloman RFI
Project Location (including state): Holloman AFB, Alamogordo, NM
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLGW27-07	11	vary	X				6	2			X		6/15/06	1040
	HGLGW27-08	11	vary	X				6	2			X		6/15/06	1145
	HGLGW27-08MS	11	vary	X				6	2			X		6/15/06	1145
	HGLGW27-08MSD	11	vary	X				6	2			X		6/15/06	1145
	HGL RBGW061506	9	vary	X				6	2			X		6/15/06	1800
	HGLSB29-L6-0103	4	4oz		X							X		6/16/06	1020
	HGLSBDUP08	4	4oz		X							X		6/16/06	0000
	HGLTB061606														

ANALYSIS REQUEST (Circle or Specify Method No.)	
MTBE 8021B / 602 / 8260B / 624	
BTEX 8021B / 602 / 8260B / 624	
TPH 418.1 / TX1005 / TX1005 Ext(C35)	
TPH 8015 GRO / DRO / TVHC	X
PAH 8270C / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC/MS Vol. 8260B / 624	X
GC/MS Semi. Vol. 8270C / 625	X
PCB's 8082 / 608	
Pesticides 8081A / 608	
BOD, TSS, pH	
Moisture Content	
RCRA Metals	X
Radionuclides	X
Explosives	X
Perchlorate	X
Turn Around Time if different from standard	
Hold	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	6/16/06	1240	[signature]	16 Jun 06	12:40 pm
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-in-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name:	HGL, Inc.	Phone #:	703-478-5180
Address: (Street, City, Zip)	1155 Heradon Pkwy Herndon VA	Fax #:	703-471-4180
Contact Person:	Ken Cottrell	E-mail:	Kcottrell@hgl.com
Invoice to: (If different from above)			
Project #:	AFCEC2-037-04	Project Name:	Holloman RFI
Project Location (including state):	Holloman AFB, Alamogordo, NM	Sampler Signature:	Mark Hamlin

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625 - Analytes	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Perchlorate HPLC	TRRP Metals			Turn Around Time if different from standard	Hold
	HGLMW29-07	1	1L	X								X		7/11/06	1155																X					
	HGL MW29-02	1	1L	X								X		7/11/06	1115																X					
	HGL MW29-05	1	1L	X								X		7/11/06	1300																X					
	HGL MW29-01	1	1L	X								X		7/11/06	1340																X					
	HGL MW29-06	1	1L	X								X		7/11/06	1405																X					
	HGL MW29-08	1	1L	X								X		7/11/06	1425																X					
	HGLGWDUP09	1	1L	X								X		7/11/06	0000																X					
	HGL MW29-04	1	1L	X								X		7/11/06	1455																X					
	HGL MW29-03	1	1L	X								X		7/11/06	1505																X					
	HGL MW39-02	10	VOA	X				X	X			X		7/12/06	9:10				X								X				X	X	X				
	HGL MW39-07	10	VOA	X				X	X			X		7/12/06	11:00				X								X				X	X	X				

Relinquished by:	Date:	Time:	Received by:	Date: Time:
Kenneth Cottrell	7/12/06	12:10		12Jul06 12:10
Relinquished by:	Date:	Time:	Received by:	Date: Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date: Time:

LAB USE ONLY

Intact Y N
Headspace Y N
Temp
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL, Inc. | Phone #: 703-478-5186

Address: (Street, City, Zip) 1155 Herndon Pkwy VA | Fax #: 703-471-4180

Contact Person: Ken Cottrell | E-mail: kcottrell@hgl.com

Invoice to: (If different from above)

Project #: AFCC02 | Project Name: Holloman RFI

Project Location (including state): Holloman AFB, Alamogordo, NM | Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLTBO71206	6	40 ml	X				X				X		7/12/06	1140

	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
												X	X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Sarah Cottrell	7/12/06	1210	[signature]	12Jul06	1210
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Sarah Cottrell change	7/21				
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y N

Headspace Y N

Temp

Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name:	HGL, Inc.
Phone #:	703-478-5186
Address: (Street, City, Zip)	1155 Herndon Pkwy Herndon, VA 20170
Fax #:	703-471-4170
Contact Person:	Ken Cottrell
E-mail:	kcottrell@hgl.com
Invoice to: (If different from above)	
Project #:	AFC002-037-04
Project Name:	Holloman RFI
Project Location (including state):	Holloman AFB, Alamogerdo, NM
Sampler Signature:	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLMW3902	1	amber	X								X		7/12/06	9:10
	HGLMW3907	1	1L amber	X								X		7/12/06	1100
	HGLMW3912	1	1L amber	X								X		7/12/06	1450

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	LDM11				Turn Around Time if different from standard	Hold
																	X					
																	X					
																	X					

Relinquished by:	Date:	Time:
[signature]	7/12/06	1615
Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:

Received by:	Date:	Time:
Received by:	Date:	Time:
Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp °C
Login Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #_____

Company Name: HGL, Inc. Phone #: 703-478-5180

Address: (Street, City, Zip) 1155 Herndon Pkwy Herndon VA Fax #: e-mail: 703-471-4180

Contact Person: Ken Cottrell kcottrell@hgl.com

Invoice to: (if different from above)

Project #: AFC002-037-04 Project Name: Holloman RFT

Project Location: Holloman AFB, Alamogordo, NM Sampler Signature: Sarah Kottrell

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	MW39-12	9	vary	X				X				X		7/12/06	1150
	HGLMW39-11	9	vary	X				X				X		7/12/06	1620
	HGLMW39-06	10	vary	X				X	X			X		7/12/06	1825
	HGLMW39-05	10	vary	X				X				X		7/13/06	920
	HGLMW39-06D	10	vary	X				X				X		7/13/06	1040
	HGLTB071306	6	40mL	X				X				X		7/13/06	1130

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCBs 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	TDS	RCRA Metals	Turn Around Time if different from Standard	Hold
		GRO/DRO										Anions only								
		X			X						X	X					X	X		
		X			X						X	X					X	X		
		X			X						X	X					X	X		
		X			X						X	X					X	X		
		X			X						X	X					X	X		
		X			X						X									

Relinquished by: Sarah Kottrell Date: 7/13/06 Time: 1200

Received by: Date: 13Jul06 Time: 12:00

Relinquished by: Date: Time:

Received by: Date: Time:

Relinquished by: Date: Time:

Received at Laboratory by: Date: Time:

LAB USE ONLY

Intact Y / N

Headspace Y / N

Temp °

Log-In Review

REMARKS: Metals in MW39-06 are filtered. Metals in MW39-05 and MW39-06D are unfiltered. Please filter and preserve upon receipt

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name:	HGL, Inc.	Phone #:	703-478-5186
Address: (Street, City, Zip)	1155 Herndon Pkwy Herndon VA	Fax #:	703-471-4180
Contact Person:	Len Cottrell	E-mail:	Lcottrell@hgl.com
Invoice to: (If different from above)			
Project #:	AFCO02-037-04	Project Name:	Holloman RFI
Project Location (including state):	Holloman AFB, Alamogordo, NM	Sampler Signature:	

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLMW39-11	1	1L	X								X		7/12/06	1620
	HGLMW39-06	1	1L	X								X		7/12/06	1825
	HGLMW39-05	1	1L	X								X		7/13/06	920
	HGLMW39-06D	1	1L	X								X		7/13/06	1040

ANALYSIS REQUEST	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content							Turn Around Time if different from standard	Hold
																		UDMH						
																		X						
																		X						
																		X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Lwall Cottrell	7/13/06	1430			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N

REMARKS:
48-hr hold time, extract ASAP
☐ Dry Weight Basis Required
☐ TRRP Report Required

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL, Inc.	Phone #: 703-478-5186
Address: (Street, City, Zip) 155 Herndon Pkwy Herndon VA	Fax #: 703-471-4180
Contact Person: Ken Cottrell	E-mail: kcottrell@hgl.com
Invoice to: (If different from above)	
Project #: AFCEC02-037-04	Project Name: Holloman RFI
Project Location (including state): Holloman AFB, Alamogordo, NM	Sampler Signature: Sarah Hall

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLMW39-08	10	vary	X				X				X		7/13/06	1450
	HGLMW39-09	10	vary	X				X				X		7/13/06	1640
	HGLGWDUP10	10	vary	X				X				X		7/13/06	0000
	HGLMW39-10	10	vary	X				X				X		7/13/06	1810
	HGLRB071306	1	vial	X				X				X		7/13/06	1900
	HGLMW39-12Metals	1	500 mL	X								X		7/14/06	8:30
	HGLMW39-11Metals	1	500 mL	X								X		7/14/06	9:35
	HGLMW39-07Metals	1	500 mL	X								X		7/14/06	1040
	HGLTRIPBLK06	6	vial	X				X				X		7/13/06	1150

ANALYSIS REQUEST (Circle or Specify Method No.)	
MTBE 8021B / 602 / 8260B / 624	
BTEX 8021B / 602 / 8260B / 624	
TPH 418.1 / TX1005 / TX1005 Ext(C35)	
TPH 8015 GRO / DRO / TVHC	X
PAH 8270C / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC/MS Vol. 8260B / 624	X
GC/MS Semi. Vol. 8270C / 625 - analytes	X
PCB's 8082 / 608	
Pesticides 8081A / 608	
BOD, TSS, pH	
Moisture Content	
TDS	X
RCRA Metals (Fe)	X
TAL Metals	X
Turn Around Time if different from standard	
Hold	

Relinquished by:	Date:	Time:
[signature]	11/14/06	1220
Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:

Received by:	Date:	Time:
[signature]	14Jul06	12:20
Received by:	Date:	Time:
Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp
Log-In-Review

REMARKS:

Metals are unpreserved and unfiltered. Please add preservative (HNO3) and filter upon receipt.

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL, Inc. | Phone #: 703-478-5186

Address: (Street, City, Zip) 1155 Herndon Pkwy | Fax #: 703-471-4180

Contact Person: Ken Cottrell | E-mail: kcottrell@hgl.com

Invoice to: (If different from above)

Project #: AFCC02-037-04 | Project Name: Holloman RFI

Project Location (including state): Holloman AFB, Alamogordo, NM | Sampler Signature: Sarah Gallegos

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGL MW39-08	1	1L amber	X								X		7/13/06	1450
	HGL MW39-09	1	"	X								X		7/13/06	1610
	HGL MW39-10	1	1L	X								X		7/13/06	1810
	HGL FIELD DUP 10	1	1L	X								X		7/13/06	0000
	HGL FB 071306	1	1L	X								X		7/13/06	1900
	HGL MW39-06 UDMH	1	1L	X								X		7/14/06	1135
	HGL MW39-11 UDMH	1	1L	X								X		7/14/06	1100
	HGL MW39-02B	1	1L	X								X		7/14/06	1125
	HGL MW39-02MS	1	1L	X								X		7/14/06	1125
	HGL MW39-02MSD	1	1L	X								X		7/14/06	1125

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	UDMH					Turn Around Time if different from standard	Hold
																X	X						
																X	X						
																X	X						
																X	X						
																X	X						
																X	X						
																X	X						
																X	X						
																X	X						
																X	X						

Relinquished by: | **Date:** 7/14/06 | **Time:** 1510 | **Received by:** | **Date:** | **Time:**

Relinquished by: | **Date:** | **Time:** | **Received by:** | **Date:** | **Time:**

Relinquished by: | **Date:** | **Time:** | **Received at Laboratory by:** | **Date:** | **Time:**

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-In-Review

REMARKS: UDMH: 48 hour hold time

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL, Inc. | Phone #: 703-478-5186

Address: (Street, City, Zip) 1155 Herndon Pkwy Herndon VA | Fax #: 703-471-4180

Contact Person: Ken Cottrell | E-mail: kcottrell@hgl.com

Invoice to: (If different from above)

Project #: AFCC02-037-04 | Project Name: Holloman

Project Location (including state): Holloman AFB, Alamogordo, NM | Sampler Signature: Sarah Gallitto

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLMW39-02B	10	vary	X				X				X		7/14/06	1425
	HGLMW39-02MS	10	vary	X				X				X		7/14/06	1425
	HGLMW39-02MSD	10	vary	X				X				X		7/14/06	1425
	HGLMW30&33-05	8	vary	X				X				X		7/14/06	1655
	HGLMW30&33-04	8	vary	X				X				X		7/14/06	1810
	HGLMW30&33-01	8	vary	X				X				X		7/15/06	8:10
	HGLMW30&33-01MS	~~1~~ 2	500 mL	X								X		7/15/06	8:10
	HGLMW30&33-01MSD	1	500 mL	X								X		7/15/06	8:10
	HGLMW30&33-02	8	vary	X				X				X		7/15/06	11:00
	HGLMW30&33-03	8	vary	X				X				X		7/15/06	1220
	HGLGWDUP11	1	500 mL	X								X		7/15/06	0000

ANALYSIS REQUEST (Circle or Specify Method No.)	
MTBE 8021B / 602 / 8260B / 624	
BTEX 8021B / 602 / 8260B / 624	
TPH 418.1 / TX1005 / TX1005 Ext(C35)	
TPH 8015 GRO / DRO / TVHC	X
PAH 8270C / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC/MS Vol. 8260B / 624	X
GC/MS Semi. Vol. 8270C / 625 Aniline	X
PCB's 8082 / 608	
Pesticides 8081A / 608	
BOD, TSS, pH	
Moisture Content	
TPDS	X
TAL Metals	X
RCRA Metals	X
Perchlorate	X
Turn Around Time if different from standard	
Hold	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	7/15/06	1820	[signature]	7/15/06	1920
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y N
Headspace Y N
Temp
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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email: lab@traceanalysis.com

TraceAnalysis, Inc.

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El Paso, Texas 79932
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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL, Inc.	Phone #: 703-478-5186
Address: (Street, City, Zip) 1155 Herndon Pkwy Herndon VA	Fax #: 703-471-4180
Contact Person: Ken Cottrell	E-mail: Kcottrell@hgl.com
Invoice to: (If different from above)	
Project #: AFCC02-037-04	Project Name: Holloman RFI
Project Location (including state): Holloman AFB, Alamogordo, NM	Sampler Signature: Sarah Mellville

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	HGLTB071506	6	40 mL	X				X				X		7/15/06	1530

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	(TPH 8015 GRO / DRO) TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
			X								X							

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	7/15/06	1820	[signature]	7/15/06	1820
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: HGL Inc.	**Phone #:** 703 478-5186
Address: (Street, City, Zip) 1155 Herndon Pkwy Herndon VA	**Fax #:** 703-471-1180
Contact Person: Lon Cottrell	**E-mail:** lcottrell@hgl.com
Invoice to: (If different from above)	
Project #: Accord C37 C4	**Project Name:** Hillcrest RFI
Project Location (including state): Holloman AFB, Alamogordo NM	**Sampler Signature:**

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content						Turn Around Time if different from standard	Hold
	HGL 5227 I-10	1	1402		X							X		7/1/08	7:20							X						X				X	X	X				

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
		8:10			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact ___ Y / N ___
Headspace ___ Y / N ___
Temp ___
Log-in-Review ___

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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CHAIN-OF-CUSTODIES

JANUARY 2007 COMPLIANCE LTM SAMPLES

COC - 0107 - 01

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Page 1 of 3

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Fax (915) 585-4944
1 (888) 588-3443

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: Hydrogeologic — **Phone #:** (w) 703-736-4576 (c) 703-994-2647

Address: (Street, City, Zip) 1155 Herndon Parkway, Ste 900, Herndon, VA 20170 — **Fax #:** 703-471-4180

Contact Person: ~~Ken Cottrell~~ BTB Brett Broadrick — **E-mail:** bbroadrick@hydro.com

Invoice to: (If different from above) Ken Cottrell (same address) ph # 703-736-4573

Project #: Holloman AFB Supplemental RFI — **Project Name:**

Project Location (including state): Holloman AFB, NM — **Sampler Signature:**

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	TB - 011607	2	40 ml	X				X						—	—
	MW-30/33-02-011607	6		X				X	X				X	1/16/07	0909
	RB 011607	4	3-40ml	X				X	X					1/16/07	0855
	MW-30/33-03-011607	6		X				X	X				X	1/16/07	0906
	MW-30/33-04-011607	6		X				X	X				X	1/16/07	1012
	MW-30/33-05-011607	6		X				X	X				X	1/16/07	1145
	MW-30/33-01-011607	6		X				X	X				X	1/16/07	1236
	MW-30/33-01-011607MS			X				X	X				X	1/16/07	1236
	MW-30/33-01-011607MSD			X				X	X				X	1/16/07	1236
	MW-30/33-Dup	6		X				X	X				X	1/16/07	0000
	MW-39-06-011707	7		X				X	X				X	1/16/07	1522

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	TAL Metals (Total)	TDS	TAL metals (Dissolved) (*)	RCRA Metals (Dissolved) (*)	Turn Around Time if different from standard	Hold
											X											
											X						X	X				
											X						X	X				
											X						X	X				
											X						X	X				
											X						X	X				
											X						X	X				
											X						X	X				
											X						X	X				
											X						X	X	X	X		

Relinquished by: _____ **Date:** 1-18-07 **Time:** 1535

Received by: _____ **Date:** 18Jan07 **Time:** 3:30pm

Relinquished by: _____ **Date:** _____ **Time:** _____

Received by: _____ **Date:** _____ **Time:** _____

Relinquished by: _____ **Date:** _____ **Time:** _____

Received at Laboratory by: _____ **Date:** _____ **Time:** _____

LAB USE ONLY

Intact ___ Y / N ___

Headspace ___ Y / N ___

Temp _____ °C

Log-in-Review _____

REMARKS:

(*) Needs to be filtered by Lab

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

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email: lab@traceanalysis.com

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1 (888) 588-3443

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: HydroGeoLogic, Inc. **Phone #:** 703-736-4526(w) 703-944-2647(c)

Address: (Street, City, Zip) 11155 Herndon Parkway, Ste 900, Herndon VA 20170 **Fax #:** 703-471-4180

Contact Person: Brett Broderson **E-mail:** bbroderson@hgl.com

Invoice to: (If different from above) Ken Cottrell Ph. 703-736-4563

Project #: **Project Name:** Holloman AFB Supplemental RFI

Project Location (including state): Holloman AFB, NM **Sampler Signature:**

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	Dup-02	6		X				X	X				X	1-17-07	0000
	MW-39-02-011707	2		X				X	X				X	1-17-07	1627
	MW-39-06D-011807	2		X				X	X				X	1-18-07	1336
	MW-39-07-011807	2		X				X	X				X	1-18-07	1415
	MW-39-07-MS-011807	2		X				X	X				X	1-18-07	1415
	MW-39-07-MSD-011807	2		X				X	X				X	1-18-07	1415
	MW-39-10-011807	2		X				X	X				X	1-18-07	0834
	MW-39-09-011807	2		X				X	X				X	1-18-07	0917
	MW-39-08-011807	2		X				X	X				X	1-18-07	0951
	MW-39-11-011807	2		X				X	X				X	1-18-07	1027
	MW-39-12-011807	2		X				X	X				X	1-18-07	1057

ANALYSIS REQUEST (Circle or Specify Method No.)	Turn Around Time if different from standard	Hold
MTBE 8021B / 602 / 8260B / 624		
BTEX 8021B / 602 / 8260B / 624		
TPH 418.1 / TX1005 / TX1005 Ext(C35)		
TPH 8015 GRO / DRO / TVHC		
PAH 8270C / 625		
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7		
TCLP Metals Ag As Ba Cd Cr Pb Se Hg		
TCLP Volatiles		
TCLP Semi Volatiles		
TCLP Pesticides		
RCI		
GC/MS Vol. 8260B / 624		
GC/MS Semi. Vol. 8270C / 625		
PCB's 8082 / 608		
Pesticides 8081A / 608		
BOD, TSS, pH		
Moisture Content (Perchlorate)		
TDS		
RCRA metals (Total)		
RCRA metals (DI SPLP) (*)		

Relinquished by:	**Date:** 1-18-07	**Time:** 1535
Received by:	**Date:** 18 Jan 07	**Time:** 3:30pm
Relinquished by:	**Date:**	**Time:**
Received by:	**Date:**	**Time:**
Relinquished by:	**Date:**	**Time:**
Received at Laboratory by:	**Date:**	**Time:**

LAB USE ONLY

Intact ___ Y / N ___

Headspace ___ Y / N ___

Temp ___ °

Log-in-Review ___

REMARKS: (*) Needs to be filtered by Lab.

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

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LAB Order ID #_____

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Fax (915) 585-4944
1 (888) 588-3443

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: HydroGeologic
Phone #: 703-736-4526(w) 703-994-2647(c)
Address: (Street, City, Zip) 11155 Herndon Parkway Suite 900 Herndon VA 20170
Fax #: 703-471-6180
Contact Person: Brett Broadbent
E-mail: bbroadbent@hgl.com
Invoice to: (If different from above) Kim Lettang II 703-736-4563
Project #: Holloman AFB Supplemental RFI
Project Name:
Project Location (including state): Holloman AFB, NM
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	MW-39-05-011807	7		X				X	X				X	1-18-07	1248
	RB-011807	4		X				X	X					1-18-07	1510

ANALYSIS REQUEST (Circle or Specify Method No.)

	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	TDS	RCRA metals (Total)	RCRA metals (Dissolved)			Turn Around Time if different from standard	Hold
												X					X	X	X	X				
												X					X	X	X	X				

Relinquished by:	**Date:** 1-18-07	**Time:** 1525
Received by:	**Date:** 18JAN07	**Time:** 3:30pm
Relinquished by:	**Date:**	**Time:**
Received by:	**Date:**	**Time:**
Relinquished by:	**Date:**	**Time:**
Received at Laboratory by:	**Date:**	**Time:**

LAB USE ONLY
Intact ___ Y / N
Headspace ___ Y / N
Temp ___ °C
Log-In-Review ___

REMARKS: * needs to be f. ltd by LAB

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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APPENDIX E

DATA VALIDATION PACKAGES

Quality by Design

Laboratory Quality Assurance Consulting

97 Puhili Street
Hilo, Hawaii 96720

Phone: (808) 969-9424
Fax: (808) 969-9094
e-mail: qbd-hilo@hawaiiantel.net

EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils and Waters
Dates of Sampling: May 19-20, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. 6052304
Purchase Order No. P0000715
QBD Job No. 1296C

Reviewed and approved,

Thomas S. Davis, Principal — 1/4/07 Date

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Attachments

Attachment 1 Data Qualifier Flag Definitions
Attachment 2 Summary Table of Data Qualifier Flags
Attachment 3 Revised Laboratory Forms

A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; *"Functional Guidelines for Evaluating Inorganics Analyses,"* as revised, 2004; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of one electronic data package consisting of an 11-page case narrative, a 115-page report for GRO and DRO, a 46-page lab report for the water samples, a 265-page lab report for the soil samples, and a 1,043-page supporting data package from TraceAnalysis, Inc. in Lubbock, Texas, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

No results were flagged as unusable due to QC failures and no samples with multiple results were flagged "X" to indicate that more technically valid results were available. All results were acceptable, although some received less severe qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 8260B	Method 8270C	Method 8081
HGLSB3011-0309	91036	Soil			
HGLSB3016-0910	91039	Soil	X	X	X
HGLSB3013-0507	91040	Soil			
HGLSB3013-1012	91041	Soil	X	X	X
HGLSB3012-0306	91042	Soil			
HGLSB3012-0709	91043	Soil	X	X	X
HGLSB30-01-0809	91044	Soil	X	X	X
HGLSB30-02-0305	91045	Soil	X	X	X
HGLSB30-08-0809	91046	Soil	X	X	X
HGLSB30-03-0203	91047	Soil	X	X	X
HGLSB30-04-0204	91048	Soil	X	X	X
HGLSB30-05-0709	91049	Soil	X	X	X
HGLSB30-06-0809	91050	Soil	X	X	X
HGLSB30-07-0304	91051	Soil	X	X	X
HGLSD39-01-0001	91052	Soil			
HGLSB30-20-0708	91053	Soil			
HGLSB3020-0809	91054	Soil	X	X	X
HGLSB3017-0607	91055	Soil			
HGLSB3017-0809	91056	Soil	X	X	X
HGLSBDup07	91057	Soil	X	X	X
HGLSB3018-0506	91058	Soil			
HGLSB3018-0709	91059	Soil	X	X	X
HGLGW27-02-052006	91060	Water			
HGLRB07-052006-TCL	91061	Water	X	X	
HGLRB07-052006-AL	91062	Water			
TB-052006	91063	Water	X		

Sample Identification	Laboratory Identification	Method 8082	Method 8141	Method 8151	Method 8015Mod
HGLSB3011-0309	91036				
HGLSB3016-0910	91039	X	NR	NR	X
HGLSB3013-0507	91040				
HGLSB3013-1012	91041	X	NR	NR	X
HGLSB3012-0306	91042				
HGLSB3012-0709	91043	X	NR	NR	X
HGLSB30-01-0809	91044	X	NR	NR	X
HGLSB30-02-0305	91045	X	NR	NR	X

Sample Identification	Laboratory Identification	Method 8082	Method 8141	Method 8151	Method 8015Mod
HGLSB30-08-0809	91046	X	NR	NR	X
HGLSB30-03-0203	91047	X	NR	NR	X
HGLSB30-04-0204	91048	X	NR	NR	X
HGLSB30-05-0709	91049	X	NR	NR	X
HGLSB30-06-0809	91050	X	NR	NR	X
HGLSB30-07-0304	91051	X	NR	NR	X
HGLSD39-01-0001	91052				
HGLSB30-20-0708	91053				
HGLSB3020-0809	91054	X	NR	NR	X
HGLSB3017-0607	91055				
HGLSB3017-0809	91056	X	NR	NR	X
HGLSBDup07	91057	X	NR	NR	X
HGLSB3018-0506	91058				
HGLSB3018-0709	91059	X	NR	NR	X
HGLGW27-02-052006	91060				
HGLRB07-052006-TCL	91061				X
HGLRB07-052006-AL	91062				
TB-052006	91063				

Sample Identification	Laboratory Identification	Methods 6010B/7471	Method 9045	Haz Waste Character-istics	Methods 1311/8260B
HGLSB3011-0309	91036		X	X	X
HGLSB3016-0910	91039	X			
HGLSB3013-0507	91040		X	X	X
HGLSB3013-1012	91041	X			
HGLSB3012-0306	91042		X	X	X
HGLSB3012-0709	91043	X			
HGLSB30-01-0809	91044	X			
HGLSB30-02-0305	91045	X			
HGLSB30-08-0809	91046	X			
HGLSB30-03-0203	91047	X			
HGLSB30-04-0204	91048	X			
HGLSB30-05-0709	91049	X			
HGLSB30-06-0809	91050	X			
HGLSB30-07-0304	91051	X			
HGLSD39-01-0001	91052				
HGLSB30-20-0708	91053		X	X	X
HGLSB3020-0809	91054	X			

Sample Identification	Laboratory Identification	Methods 6010B/7471	Method 9045	Haz Waste Character-istics	Methods 1311/8260B
HGLSB3017-0607	91055		X	X	X
HGLSB3017-0809	91056	X			
HGLSBDup07	91057	X			
HGLSB3018-0506	91058		X	X	X
HGLSB3018-0709	91059	X			
HGLGW27-02-052006	91060	X			
HGLRB07-052006-TCL	91061	X			
HGLRB07-052006-AL	91062			X	X
TB-052006	91063				

Sample Identification	Laboratory Identification	Methods 1311/8270C	Methods 1311/8081	Methods 1311/8151	Methods 1311/6010B/ 7471
HGLSB3011-0309	91036	X	X	NR	X
HGLSB3016-0910	91039				
HGLSB3013-0507	91040	X	X	NR	X
HGLSB3013-1012	91041				
HGLSB3012-0306	91042	X	X	NR	X
HGLSB3012-0709	91043				
HGLSB30-01-0809	91044				
HGLSB30-02-0305	91045				
HGLSB30-08-0809	91046				
HGLSB30-03-0203	91047				
HGLSB30-04-0204	91048				
HGLSB30-05-0709	91049				
HGLSB30-06-0809	91050				
HGLSB30-07-0304	91051				
HGLSD39-01-0001	91052				
HGLSB30-20-0708	91053	X	X	NR	X
HGLSB3020-0809	91054				
HGLSB3017-0607	91055	X	X	NR	X
HGLSB3017-0809	91056				
HGLSBDup07	91057				
HGLSB3018-0506	91058	X	X	NR	X
HGLSB3018-0709	91059				
HGLGW27-02-052006	91060				
HGLRB07-052006-TCL	91061				
HGLRB07-052006-AL	91062	X	X	NR	X

Sample Identification	Laboratory Identification	Methods 1311/8270C	Methods 1311/8081	Methods 1311/8151	Methods 1311/6010B/ 7471
TB-052006	91063				

Sample Identification	Laboratory Identification	Methods 900/901	Aniline	UDMH	
HGLSB3011-0309	91036				
HGLSB3016-0910	91039				
HGLSB3013-0507	91040				
HGLSB3013-1012	91041				
HGLSB3012-0306	91042				
HGLSB3012-0709	91043				
HGLSB30-01-0809	91044				
HGLSB30-02-0305	91045				
HGLSB30-08-0809	91046				
HGLSB30-03-0203	91047				
HGLSB30-04-0204	91048				
HGLSB30-05-0709	91049				
HGLSB30-06-0809	91050				
HGLSB30-07-0304	91051				
HGLSD39-01-0001	91052		NR	NR	
HGLSB30-20-0708	91053				
HGLSB3020-0809	91054				
HGLSB3017-0607	91055				
HGLSB3017-0809	91056				
HGLSBDup07	91057				
HGLSB3018-0506	91058				
HGLSB3018-0709	91059				
HGLGW27-02-052006	91060				
HGLRB07-052006-TCL	91061	NR			
HGLRB07-052006-AL	91062				
TB-052006	91063				

Key:

Method 8260B	=	Volatile Organics by GC/MS
Method 8270C	=	Semivolatile Organics by GC/MS
Method 8081	=	Chlorinated Pesticides by GC
Method 8082	=	Polychlorinated Biphenyls by GC
Method 8141	=	Organophosphorus Pesticides by GC
Method 8151	=	Chlorphenoxy Herbicides by GC
Method 8015 Mod	=	TPH-GRO and TPH-DRO by GC
Methods 6010B/7471	=	Metals by ICP and CVAA
Method 9045	=	pH by probe
Haz Waste Characteristics	=	Reactivity, Corrosivity, Ignitability by SW-846, Chapter 7
Methods 1311/8260B	=	TCLP Volatile Organics by GC/MS
Methods 1311/8270C	=	TCLP Semivolatile Organics by GC/MS
Methods 1311/8082	=	TCLP Polychlorinated Biphenyls by GC
Methods 1311/8141	=	TCLP Organophosphorus Pesticides by GC
Methods 1311/8151	=	TCLP Herbicides by GC
Methods 1311/6010B/7471	=	TCLP Metals by ICP and CVAA
Methods 900/901	=	Radiochemistry
Aniline	=	Aniline by EPA 8270C (GC/MS)
UDMH	=	1,1-Dimethyl hydrazine by ion chromatography
NR	=	Not reported – Requested on COC, reported by lab and validated by QBD under separate cover

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
Method 8260B	6052304	Debbie Copsey	Thomas Davis
Method 8270C	6052304	Debbie Copsey	Thomas Davis
Method 8081	6052304	Debbie Copsey	Thomas Davis
Method 8082	6052304	Debbie Copsey	Thomas Davis
Method 8015 MOD	6052304	Lorraine Davis	Thomas Davis
Methods 6010B/7471	6052304	Lorraine Davis	Thomas Davis
Method 9045	6052304	Lorraine Davis	Thomas Davis
Haz Waste Characteristics	6052304	Lorraine Davis	Thomas Davis
Methods 1311/8260B	6052304	Debbie Copsey	Thomas Davis
Methods 1311/8270C	6052304	Debbie Copsey	Thomas Davis
Methods 1311/8082	6052304	Debbie Copsey	Thomas Davis
Methods 1311/6010B/7471	6052304	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The date and time relinquished and the date and time received by the laboratory do not match on the COC form. However, the shipping waybill was referenced and appropriate physical custody could be documented by obtaining shipping information from the courier service, so no data qualifier flags are recommended.

E. Review of Volatile Organic Analyses by GC/MS

EPA Method 8260B

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment, field, and trip blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Eleven target analytes were detected in the method blank associated with the water samples in QC Batch No. 26937, of which only toluene was a common laboratory contaminant. Four target analytes were detected in the method blank for soil samples in QC Batch No. 26929 and nine analytes were detected in the method blank for soil samples in QC Batch No. 26968, of which toluene and methylene chloride were common laboratory contaminants. Eleven other target analytes were detected in the trip blank. For the analytes that were not common laboratory contaminants, the samples were evaluated in accordance with this decision tree, with any data qualifier flags listed in Table 3.

- If the sample result was less than five times (5X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 5X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.

- If the sample result was greater than 5X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Common laboratory contaminants were evaluated in accordance with the following decision tree, with any data qualifier flags listed in Table 3.

- If the sample result was less than ten times (10X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 10X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.
- If the sample result was greater than 10X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB07-052006-TCL	Toluene	Method blank Trip Blank	MB=0.310 TB=0.290	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	Chlorobenzene	Method blank	MB=0.040	MB=ND	1.00	U
HGLRB07-052006-TCL	m,p-Xylene	Method blank Trip Blank	MB=0.100 TB=0.110	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	2-Chlorotoluene	Method blank Trip Blank	MB=0.060 TB=0.030	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	n-Propylbenzene	Trip Blank	TB=0.060	TB=ND	1.00	U
HGLRB07-052006-TCL	1,3,5-Trimethylbenzene	Method blank	MB=0.090	MB=ND	1.00	U
HGLRB07-052006-TCL	1,2,4-Trimethylbenzene	Method blank Trip Blank	MB=0.090 TB=0.040	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	sec-Butylbenzene	Method blank Trip Blank	MB=0.130 TB=0.050	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	p-Isopropyltoluene	Method blank Trip Blank	MB=0.120 TB=0.060	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	4-Chlorotoluene	Method blank	MB=0.080	MB=ND	1.00	U
HGLSB3016-0910	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB3016-0910	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB3016-0910	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB3013-1012	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB3013-1012	Toluene	Method blank	MB=3.11	MB=ND	10.0	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3013-1012	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB3012-0709	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB3012-0709	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-01-0809	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-01-0809	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-02-0305	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-02-0305	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-08-0809	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-08-0809	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-08-0809	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB30-03-0203	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-03-0203	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-04-0204	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-04-0204	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-05-0709	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-05-0709	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-06-0809	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-06-0809	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-07-0304	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB30-07-0304	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB30-07-0304	Ethylbenzene	Method blank	MB=1.12	MB=ND	10.0	U
HGLSB30-07-0304	Isopropylbenzene	Method blank	MB=1.65	MB=ND	10.0	U
HGLSB30-07-0304	1,3,5-Trimethylbenzene	Method blank	MB=1.93	MB=ND	10.0	U
HGLSB30-07-0304	1,2,4-Trimethylbenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB30-07-0304	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB3020-0809	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB3020-0809	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB3020-0809	Ethylbenzene	Method blank	MB=1.12	MB=ND	10.0	U
HGLSB3020-0809	1,3,5-Trimethylbenzene	Method blank	MB=1.93	MB=ND	10.0	U
HGLSB3020-0809	1,2,4-Trimethylbenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB3020-0809	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB3017-0809	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB3017-0809	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB3017-0809	1,3,5-Trimethylbenzene	Method blank	MB=1.93	MB=ND	10.0	U
HGLSB3017-0809	1,2,4-Trimethylbenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB3017-0809	p-Isopropyltoluene	Method blank	MB=1.42	MB=ND	10.0	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3017-0809	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSBDup07	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSBDup07	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSBDup07	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB3018-0709	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB3018-0709	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB3018-0709	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value as listed in Table 4 .

Table 4. VOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB07-052006-TCL	1,1-Dichloroethane	Value > RL	Value=0.300	RL=1.00	0.330	J
HGLRB07-052006-TCL	Chloroform	Value > RL	Value=0.540	RL=5.00	0.540	J
HGLRB07-052006-TCL	n-Butylbenzene	Value > RL	Value=0.120	RL=1.00	0.120	J
TB-052006	Methylene chloride	Value > RL	Value=2.03	RL=5.00	2.03	J
TB-052006	Chloroform	Value > RL	Value=0.050	RL=1.00	0.050	J
TB-052006	Toluene	Value > RL	Value=0.290	RL=1.00	0.290	J
TB-052006	m,p-Xylene	Value > RL	Value=0.110	RL=1.00	0.110	J
TB-052006	2-Chlorotoluene	Value > RL	Value=0.030	RL=1.00	0.030	J
TB-052006	n-Propylbenzene	Value > RL	Value=0.060	RL=1.00	0.060	J
TB-052006	1,2,4-Trimethylbenzene	Value > RL	Value=0.040	RL=1.00	0.040	J
TB-052006	sec-Butylbenzene	Value > RL	Value=0.050	RL=1.00	0.050	J
TB-052006	p-Isopropyltoluene	Value > RL	Value=0.060	RL=1.00	0.060	J
HGLSB3020-0809	n-Propylbenzene	Value > RL	Value=1.16	RL=10.0	1.16	J
HGLSB3017-0809	Chloromethane	Value > RL	Value=9.44	RL=10.0	9.44	J
HGLSB3017-0809	n-Propylbenzene	Value > RL	Value=1.15	RL=10.0	1.15	J
HGLSB3017-0809	n-Butylbenzene	Value > RL	Value=2.23	RL=1.00	2.23	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed Table 5, were reported as not detected.

Table 5. VOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB3017-0809	HGLSBDup07	
Chloromethane	9.44	18.6	65.3
n-Propylbenzene	1.15	ND	NC
n-Butylbenzene	2.23	1.59	33.5

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

F. Review of Semivolatile Organic Analyses by GC/MS

EPA Method 8270C

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: The percent recovery for the surrogate terphenyl-d_{14} was out of the acceptance criteria of 16.3 to 168 percent at 300 and 286 percent in the LCS/LCSD pair associated with QC Batch No. 27154. No data qualifier flags are recommended because the surrogates were evaluated separately in the samples.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: The recoveries for pyridine were out of the criteria of 12.6 to 50.0 percent at 5 and 3 percent in the MS/MSD pair and at 11 and 10 percent in the LCS/LCSD pair associated with Sample HGLRB07-052006-AL. The associated result has been flagged "J" to indicate an estimated value, as listed in Table 6.

A single percent recovery for acenaphthene was out of the criteria of 18.8 to 134 percent at 134 percent in the LCS associated with Sample HGLRB07-052006-TCL. A single percent recovery each for n-nitroso-di-n-propylamine and 1,2,4-trimethylbenzene were out of the criteria of 10 to 121 percent at 127 percent and 10 to 126 percent at 127 percent, respectively, in the LCS associated with QC Batch 27154. Since all other accuracy measurements (e.g., the other LCS, the MS/MSD pair, and the calibration verifications) were acceptable, no data qualifier flags are recommended.

Percent recoveries were out of criteria for the soil MS/MSD pair for 4-chloro-3-methylphenol, pentachlorophenol, n-nitroso-di-n-propylamine, and acenaphthene at 199 and 191 percent; 8 and 7 percent; 118 and 120 percent; and 117 and 115 percent, respectively, in QC Batch No. 27214. Since the percent recovery results for each associated LCS/LCSD pair were acceptable, only the results for these analytes in the sample spiked, HGLSB30-08-0809, have been flagged. Only the result for pentachlorophenol, which was not detected, has been flagged "UJ" to indicate an estimated reporting limit, as listed in Table 6. Since all of the other percent recoveries were high and the sample results were not detected, no additional data qualifier flags are recommended.

Table 6. SVOC Data Qualifiers Due to Precision and Accuracy Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB07-052006-AL	Pyridine	MS/MSD LCS/LCSD	%R=5, 3 %R=11, 10	%R=12.6-50.0	0.0458	J
HGLSB30-08-0809	Pentachlorophenol	MS/MSD	%R=8, 7	%R=10-114	0.0400	UJ

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have

been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value as listed in Table 7.

Table 7. SVOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB07-052006-AL	Pyridine	Value > RL	Value=0.0458	RL=0.050	0.0458	J
HGLSB3013-0507	TCLP m,p-Cresol	Value > RL	Value=0.0115	RL=0.0500	0.0115	J
HGLSD39-01-0001	Dimethylphthalate	Value > RL	Value=1.12	RL=1.25	1.12	J
HGLSD39-01-0001	Diethylphthalate	Value > RL	Value=0.932	RL=1.25	0.932	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. All analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

G. Review of TPH-DRO Analyses by GC

EPA Method 8015B Mod

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: A MS/MSD pair was not analyzed for water with this set of analyses. Instead, the laboratory analyzed a single MS and a BS/BSD pair to measure precision and accuracy. All percent recoveries and RPDs were within laboratory, method, or QAPP criteria.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Two samples contained Diesel Range Organics that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value as listed in Table 8.

Table 8. TPH DRO Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB07-052006-TCL	TPH-DRO	Value > RL	Value=0.330	RL=50	0.330	J
HGLSB3013-1012	TPH-DRO	Value > RL	Value=12.8	RL=50	12.8	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. All analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

H. Review of TPH-GRO Analyses by GC

EPA Method 8015B Mod

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have

been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. All analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

I. Review of Chlorinated Pesticides Analyses by GC

EPA Method 8081A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: The laboratory stated that nine analytes in the water MS/MSD were out of criteria due to interfering peaks from non-target compounds. Since the only water sample for which results were reported was not the sample used for spiking, and the results for the LCS/LCSD were acceptable, no data qualifier flags are recommended.

Percent recoveries were out of criteria for the soil MS/MSD pairs for endosulfan II, endosulfan sulfate, p,p'-DDT, and endrin ketone in QC Batch No. 27045, for endosulfan II and endosulfan sulfate in QC Batch No. 27113, and endosulfan II and endosulfan sulfate in QC Batch No. 27202. Percent recovery values ranged

from zero to 14 percent. Since the percent recovery results for each associated LCS/LCSD pair were acceptable, only the results for these analytes in the sample spiked have been flagged. Results that were not detected have been flagged "UJ" to indicate an estimated reporting limit and positive hits were flagged "J" to indicate an estimated value, as listed in Table 9. The laboratory also footnoted that several RPD results were out of criteria, but since all the associated sample results were not detected, no data qualifier flags are recommended for these exceedences.

Table 9. Chlorinated Pesticide Data Qualifiers Due to Precision & Accuracy Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3011-0309	TCLP Endosulfan II	MS/MSD	%R=0,0	%R=46.7-148	0.00210	UJ
HGLSB3011-0309	TCLP Endosulfan sulfate	MS/MSD	%R=0,0	%R=0-394	0.00381	UJ
HGLSB3011-0309	TCLP p,p'-DDT	MS/MSD	%R=7,0	%R=45.3-146	0.00271	UJ
HGLSB3011-0309	TCLP Endrin ketone	MS/MSD	%R=10,0	%R=16-287	0.00222	UJ
HGLSB3013-1012	Endosulfan II	MS/MSD	%R=4,4	%R=10-88.7	0.00210	UJ
HGLSB3013-1012	Endosulfan sulfate	MS/MSD	%R=3,3	%R=10-132	0.00140	UJ
HGLSB30-02-0305	Endosulfan II	MS/MSD	%R=4,5	%R=10-88.7	0.00210	UJ
HGLSB30-02-0305	Endosulfan sulfate	MS/MSD	%R=5,12.5	%R=10-132	0.0210	J

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 10, were reported as not detected.

Table 10. Chlorinated Pesticide Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB3017-0809	HGLSBDup07	
gamma-Chlordane	0.00220	ND	NC
alpha-Chlordane	0.00250	0.00410	48.5
p,p'-DDD	0.00160	ND	NC
p,p'-DDT	0.00160	0.00220	31.6
Endosulfan sulfate	ND	0.00150	NC

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

J. Review of Polychlorinated Biphenyl Analyses by GC

EPA Method 8082

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted.

Discussion: The surrogate percent recovery for the surrogate decachlorobiphenyl was out of the criteria of 50.4 to 129 percent at 48 percent in Sample HGLSB3012-0709. Since the recovery indicated a low bias, the associated results, which were not detected, have been flagged "UJ" to indicate an estimated reporting limit as listed in Table 11.

Table 11. PCB Data Qualifiers Due to Surrogate Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3012-0709	Total PCB	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1016	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1221	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1232	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1242	Surrogate	%R=48	%R=50.4-129	0.00168	UJ

Table 11. PCB Data Qualifiers Due to Surrogate Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3012-0709	Aroclor 1248	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1254	Surrogate	%R=48	%R=50.4-129	0.000634	UJ
HGLSB3012-0709	Aroclor 1260	Surrogate	%R=48	%R=50.4-129	0.000675	UJ

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. All analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

L. Review of Metals Analyses by ICP and CVAA

EPA Methods 6010B/7470/7471

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that the proper number of standards were used and the correlation coefficient criteria was met All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Calcium, potassium, and sodium, which are not common laboratory contaminants, were detected in all three soil method blanks associated with all samples at values ranging from 43.1 to 410 mg/kg. Since the sample results were greater than five times (5X) the blank concentrations, no data qualifier flags are recommended.

4. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: All of the percent recoveries for calcium, sodium, manganese, iron, and aluminum were out of criteria or unusable in the soil MS/MSD pairs due to high concentrations of analytes in the original sample that were greater than five times the amount spiked. Some of the values were calculated incorrectly. For example, the percent recovery for iron in QC Batch No. 26829 was reported as 142 percent but should be 1,420 percent. Since all other QC checks were in criteria, no data qualifier flags are recommended.

The laboratory footnoted a single percent recovery for silver of 116 percent in the soil MS associated with QC Batch No. 26830, but this value is acceptable under the criteria listed in EPA Method 6010B and in the base QAPP, so no data qualifier flags are recommended.

Percent recoveries were out of the method criteria of 75 to 125 percent at 60 and 63 percent for antimony and 55 and 51 percent for zinc in the soil MS/MSD pair associated with QC Batch No. 26830. Since the results for the LCS/LCSD pair were acceptable, only the results for these analytes in the sample spiked, HGLSB30-08-0809, have been flagged. The result that was not detected has been flagged "UJ" to indicate an estimated reporting limit and the positive hit has been flagged "J" to indicate an estimated value, as listed in Table 12.

Table 12. Metals Data Qualifiers Due to Precision & Accuracy Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB30-08-0809	Antimony	MS/MSD	%R=60, 63	%R=75-125	0.992	UJ
HGLSB30-08-0809	Zinc	MS/MSD	%R=55, 51	%R=75-125	70.0	J

5. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

6. Sample Duplicates

Sample duplicates were analyzed as required by the referenced method and all RPDs were within acceptable criteria.

7. CVAA Special Requirements

All special criteria for cold vapor atomic absorption analysis were performed at a frequency required by the referenced method and were within acceptable criteria.

8. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and digestion procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value, as listed in Table 13.

Table 13. Metals Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3011-0309	Beryllium	Value < RL	Value=0.181	RL=5.00	0.181	J
HGLSB3011-0309	Cadmium	Value < RL	Value=0.234	RL=0.500	0.234	J
HGLSB3011-0309	Mercury	Value < RL	Value=0.0096	RL=0.0400	0.0096	J
HGLSB3011-0309	Nickel	Value < RL	Value=5.08	RL=10.0	5.08	J
HGLSB3013-1012	Beryllium	Value < RL	Value=0.128	RL=5.00	0.128	J
HGLSB3013-1012	Cadmium	Value < RL	Value=0.177	RL=0.500	0.177	J
HGLSB3013-1012	Mercury	Value < RL	Value=0.0336	RL=0.0400	0.0336	J
HGLSB3013-1012	Nickel	Value < RL	Value=3.28	RL=10.0	3.28	J
HGLSB3013-1012	Vanadium	Value < RL	Value=9.48	RL=10.0	9.48	J
HGLSB3012-0709	Beryllium	Value < RL	Value=0.116	RL=5.00	0.116	J
HGLSB3012-0709	Cadmium	Value < RL	Value=0.131	RL=0.500	0.131	J
HGLSB3012-0709	Nickel	Value < RL	Value=2.20	RL=10.0	2.20	J
HGLSB3012-0709	Vanadium	Value < RL	Value=9.09	RL=10.0	9.09	J
HGLSB30-01-0809	Beryllium	Value < RL	Value=0.227	RL=5.00	0.227	J
HGLSB30-01-0809	Cadmium	Value < RL	Value=0.301	RL=0.500	0.301	J
HGLSB30-01-0809	Nickel	Value < RL	Value=3.97	RL=10.0	3.97	J
HGLSB30-02-0305	Beryllium	Value < RL	Value=0.967	RL=5.00	0.967	J
HGLSB30-08-0809	Beryllium	Value < RL	Value=0.235	RL=5.00	0.235	J
HGLSB30-08-0809	Cadmium	Value < RL	Value=0.316	RL=0.500	0.316	J
HGLSB30-08-0809	Nickel	Value < RL	Value=2.64	RL=10.0	2.64	J
HGLSB30-03-0203	Beryllium	Value < RL	Value=0.0910	RL=5.00	0.0910	J
HGLSB30-03-0203	Nickel	Value < RL	Value=2.21	RL=10.0	2.21	J
HGLSB30-03-0203	Vanadium	Value < RL	Value=5.61	RL=10.0	5.61	J
HGLSB30-04-0204	Beryllium	Value < RL	Value=0.0450	RL=5.00	0.0450	J
HGLSB30-04-0204	Cobalt	Value < RL	Value=0.858	RL=5.00	0.858	J
HGLSB30-04-0204	Nickel	Value < RL	Value=1.48	RL=10.0	1.48	J
HGLSB30-04-0204	Vanadium	Value < RL	Value=4.72	RL=10.0	4.72	J
HGLSB30-05-0709	Beryllium	Value < RL	Value=0.146	RL=5.00	0.146	J
HGLSB30-05-0709	Cadmium	Value < RL	Value=0.164	RL=0.500	0.164	J
HGLSB30-05-0709	Nickel	Value < RL	Value=2.53	RL=10.0	2.53	J
HGLSB30-05-0709	Vanadium	Value < RL	Value=9.55	RL=10.0	9.55	J
HGLSB30-06-0809	Beryllium	Value < RL	Value=0.137	RL=5.00	0.137	J
HGLSB30-06-0809	Cadmium	Value < RL	Value=0.147	RL=0.500	0.147	J

Table 13. Metals Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB30-06-0809	Nickel	Value < RL	Value=2.45	RL=10.0	2.45	J
HGLSB30-06-0809	Lead	Value < RL	Value=0.670	RL=1.00	0.670	J
HGLSB30-07-0304	Aluminum	Value < RL	Value=566	RL=1000	566	J
HGLSB30-07-0304	Cobalt	Value < RL	Value=0.348	RL=1.00	0.348	J
HGLSB30-07-0304	Iron	Value < RL	Value=459	RL=1000	459	J
HGLSB30-07-0304	Nickel	Value < RL	Value=0.591	RL=10.0	0.591	J
HGLSB30-07-0304	Vanadium	Value < RL	Value=1.76	RL=10.0	1.76	J
HGLSD39-01-0001	Silver	Value < RL	Value=0.136	RL=0.200	0.136	J
HGLSB3020-0809	Beryllium	Value < RL	Value=0.439	RL=5.00	0.439	J
HGLSB3020-0809	Mercury	Value < RL	Value=0.0286	RL=0.0400	0.0286	J
HGLSB3020-0809	Nickel	Value < RL	Value=7.17	RL=10.0	7.17	J
HGLSB3017-0607	TCLP Cadmium	Value < RL	Value=0.0260	RL=0.0500	0.0260	J
HGLSB3017-0809	Beryllium	Value < RL	Value=0.116	RL=5.00	0.116	J
HGLSB3017-0809	Cadmium	Value < RL	Value=0.0970	RL=0.500	0.0970	J
HGLSB3017-0809	Lead	Value < RL	Value=0.763	RL=1.00	0.763	J
HGLSB3017-0809	Mercury	Value < RL	Value=0.0144	RL=0.0400	0.0144	J
HGLSB3017-0809	Nickel	Value < RL	Value=2.35	RL=2.35	2.35	J
HGLSB3017-0809	Vanadium	Value < RL	Value=7.19	RL=10.0	7.19	J
HGLSBDup07	Antimony	Value < RL	Value=1.49	RL=10.0	1.49	J
HGLSBDup07	Nickel	Value < RL	Value=2.21	RL=10.0	2.21	J
HGLSBDup07	Vanadium	Value < RL	Value=4.19	RL=10.0	4.19	J
HGLSB3018-0709	Antimony	Value < RL	Value=4.51	RL=10.0	4.51	J

9. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup07 is a duplicate of Sample HGLSB3017-0809. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in the Table 14, were reported as not detected.

Table 14. Metals Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB3017-0809	HGLSBDup07	
Aluminum	2950	5390	
Antimony	ND	1.49	
Barium	37.6	37.4	
Beryllium	0.116	ND	NC

Table 14. Metals Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB3017-0809	HGLSBDup07	
Cadmium	0.0970	ND	NC
Calcium	150000	155000	3.3
Chromium	2.92	2.83	3.1
Cobalt	1.23	1.14	7.6
Copper	3.51	1.70	69.5
Iron	2330	2590	10.6
Lead	0.763	10.4	173
Magnesium	7360	6110	18.6
Manganese	42.3	66.7	44.8
Mercury	0.0144	ND	NC
Nickel	2.35	2.21	6.1
Potassium	1870	709	90.0
Silver	1.35	ND	NC
Sodium	308	297	3.6
Vanadium	7.19	4.19	52.7
Zinc	26.7	8.12	107

Key: ND = Not detected
NC = Not calculable

10. Laboratory Contact

There was no verbal or written communication with the laboratory.

11. Other Comments

None.

12. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Inorganics

U = The analyte was analyzed for but not detected above the numerical quantitation limit. The numerical value may be either a detection limit or a quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils and Waters
Dates of Sampling: May 19-20, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
VOC Data Qualifiers						
HGLSB3016-0910	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB3016-0910	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB3016-0910	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB3013-1012	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB3013-1012	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB3013-1012	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB3012-0709	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB3012-0709	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-01-0809	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-01-0809	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-02-0305	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-02-0305	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-08-0809	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-08-0809	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB30-08-0809	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-03-0203	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-03-0203	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-04-0204	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-04-0204	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-05-0709	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-05-0709	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-06-0809	Methylene chloride	Method blank	MB=7.48	MB=ND	50.0	U
HGLSB30-06-0809	Toluene	Method blank	MB=3.11	MB=ND	10.0	U
HGLSB30-07-0304	1,2,4-Trimethylbenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB30-07-0304	1,3,5-Trimethylbenzene	Method blank	MB=1.93	MB=ND	10.0	U
HGLSB30-07-0304	Ethylbenzene	Method blank	MB=1.12	MB=ND	10.0	U
HGLSB30-07-0304	Isopropylbenzene	Method blank	MB=1.65	MB=ND	10.0	U
HGLSB30-07-0304	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB30-07-0304	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB30-07-0304	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB3020-0809	1,2,4-Trimethylbenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB3020-0809	1,3,5-Trimethylbenzene	Method blank	MB=1.93	MB=ND	10.0	U
HGLSB3020-0809	Ethylbenzene	Method blank	MB=1.12	MB=ND	10.0	U
HGLSB3020-0809	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB3020-0809	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB3020-0809	n-Propylbenzene	Value > RL	Value=1.16	RL=10.0	1.16	J
HGLSB3020-0809	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB3017-0809	1,2,4-Trimethylbenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB3017-0809	1,3,5-Trimethylbenzene	Method blank	MB=1.93	MB=ND	10.0	U
HGLSB3017-0809	Chloromethane	Value > RL	Value=9.44	RL=10.0	9.44	J
HGLSB3017-0809	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB3017-0809	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB3017-0809	n-Butylbenzene	Value > RL	Value=2.23	RL=1.00	2.23	J
HGLSB3017-0809	n-Propylbenzene	Value > RL	Value=1.15	RL=10.0	1.15	J
HGLSB3017-0809	p-Isopropyltoluene	Method blank	MB=1.42	MB=ND	10.0	U
HGLSB3017-0809	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSBDup07	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSBDup07	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSBDup07	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLSB3018-0709	Methylene chloride	Method blank	MB=4.72	MB=ND	50.0	U
HGLSB3018-0709	Naphthalene	Method blank	MB=8.49	MB=ND	50.0	U
HGLSB3018-0709	Toluene	Method blank	MB=2.74	MB=ND	10.0	U
HGLRB07-052006-TCL	1,1-Dichloroethane	Value > RL	Value=0.300	RL=1.00	0.330	J
HGLRB07-052006-TCL	1,2,4-Trimethylbenzene	Method blank Trip Blank	MB=0.090 TB=0.040	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	1,3,5-Trimethylbenzene	Method blank	MB=0.090	MB=ND	1.00	U
HGLRB07-052006-TCL	2-Chlorotoluene	Method blank Trip Blank	MB=0.060 TB=0.030	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	4-Chlorotoluene	Method blank	MB=0.080	MB=ND	1.00	U
HGLRB07-052006-TCL	Chlorobenzene	Method blank	MB=0.040	MB=ND	1.00	U
HGLRB07-052006-TCL	Chloroform	Value > RL	Value=0.540	RL=5.00	0.540	J
HGLRB07-052006-TCL	m,p-Xylene	Method blank Trip Blank	MB=0.100 TB=0.110	MB=ND TB=ND	1.00	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB07-052006-TCL	n-Butylbenzene	Value > RL	Value=0.120	RL=1.00	0.120	J
HGLRB07-052006-TCL	n-Propylbenzene	Trip Blank	TB=0.060	TB=ND	1.00	U
HGLRB07-052006-TCL	p-Isopropyltoluene	Method blank Trip Blank	MB=0.120 TB=0.060	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	sec-Butylbenzene	Method blank Trip Blank	MB=0.130 TB=0.050	MB=ND TB=ND	1.00	U
HGLRB07-052006-TCL	Toluene	Method blank Trip Blank	MB=0.310 TB=0.290	MB=ND TB=ND	1.00	U
TB-052006	1,2,4-Trimethylbenzene	Value > RL	Value=0.040	RL=1.00	0.040	J
TB-052006	2-Chlorotoluene	Value > RL	Value=0.030	RL=1.00	0.030	J
TB-052006	Chloroform	Value > RL	Value=0.050	RL=1.00	0.050	J
TB-052006	m,p-Xylene	Value > RL	Value=0.110	RL=1.00	0.110	J
TB-052006	Methylene chloride	Value > RL	Value=2.03	RL=5.00	2.03	J
TB-052006	n-Propylbenzene	Value > RL	Value=0.060	RL=1.00	0.060	J
TB-052006	p-Isopropyltoluene	Value > RL	Value=0.060	RL=1.00	0.060	J
TB-052006	sec-Butylbenzene	Value > RL	Value=0.050	RL=1.00	0.050	J
TB-052006	Toluene	Value > RL	Value=0.290	RL=1.00	0.290	J
SVOC Data Qualifiers						
HGLSB3013-0507	TCLP m,p-Cresol	Value > RL	Value=0.0115	RL=0.0500	0.0115	J
HGLSB30-08-0809	Pentachlorophenol	MS/MSD	%R=8, 7	%R=10-114	0.0400	UJ
HGLSD39-01-0001	Diethylphthalate	Value > RL	Value=0.932	RL=1.25	0.932	J
HGLSD39-01-0001	Dimethylphthalate	Value > RL	Value=1.12	RL=1.25	1.12	J
HGLRB07-052006-AL	Pyridine	MS/MSD LCS/LCSD	%R=5, 3 %R=11, 10	%R=12.6-50.0	0.0458	J
HGLRB07-052006-AL	Pyridine	Value > RL	Value=0.0458	RL=0.050	0.0458	J
TPH-DRO Data Qualifiers						
HGLSB3013-1012	TPH-DRO	Value > RL	Value=12.8	RL=50	12.8	J
HGLRB07-052006-TCL	TPH-DRO	Value > RL	Value=0.330	RL=50	0.330	J
TPH-GRO Data Qualifiers						
	None					
Chlorinated Pesticide Data Qualifiers						
HGLSB3011-0309	TCLP Endosulfan II	MS/MSD	%R=0,0	%R=46.7-148	0.00210	UJ
HGLSB3011-0309	TCLP Endosulfan sulfate	MS/MSD	%R=0,0	%R=0-394	0.00381	UJ
HGLSB3011-0309	TCLP p,p'-DDT	MS/MSD	%R=7,0	%R=45.3-146	0.00271	UJ
HGLSB3011-0309	TCLP Endrin ketone	MS/MSD	%R=10,0	%R=16-287	0.00222	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3013-1012	Endosulfan II	MS/MSD	%R=4,4	%R=10-88.7	0.00210	UJ
HGLSB3013-1012	Endosulfan sulfate	MS/MSD	%R=3,3	%R=10-132	0.00140	UJ
HGLSB30-02-0305	Endosulfan II	MS/MSD	%R=4,5	%R=10-88.7	0.00210	UJ
HGLSB30-02-0305	Endosulfan sulfate	MS/MSD	%R=5,12.5	%R=10-132	0.0210	J
PCB Data Qualifiers						
HGLSB3012-0709	Total PCB	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1016	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1221	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1232	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1242	Surrogate	%R=48	%R=50.4-129	0.00168	UJ
HGLSB3012-0709	Aroclor 1248	Surrogate	%R=48	%R=50.4-129	0.0046	UJ
HGLSB3012-0709	Aroclor 1254	Surrogate	%R=48	%R=50.4-129	0.000634	UJ
HGLSB3012-0709	Aroclor 1260	Surrogate	%R=48	%R=50.4-129	0.000675	UJ
Metals Data Qualifiers						
HGLSB3011-0309	Beryllium	Value < RL	Value=0.181	RL=5.00	0.181	J
HGLSB3011-0309	Cadmium	Value < RL	Value=0.234	RL=0.500	0.234	J
HGLSB3011-0309	Mercury	Value < RL	Value=0.0096	RL=0.0400	0.0096	J
HGLSB3011-0309	Nickel	Value < RL	Value=5.08	RL=10.0	5.08	J
HGLSB3013-1012	Beryllium	Value < RL	Value=0.128	RL=5.00	0.128	J
HGLSB3013-1012	Cadmium	Value < RL	Value=0.177	RL=0.500	0.177	J
HGLSB3013-1012	Mercury	Value < RL	Value=0.0336	RL=0.0400	0.0336	J
HGLSB3013-1012	Nickel	Value < RL	Value=3.28	RL=10.0	3.28	J
HGLSB3013-1012	Vanadium	Value < RL	Value=9.48	RL=10.0	9.48	J
HGLSB3012-0709	Beryllium	Value < RL	Value=0.116	RL=5.00	0.116	J
HGLSB3012-0709	Cadmium	Value < RL	Value=0.131	RL=0.500	0.131	J
HGLSB3012-0709	Nickel	Value < RL	Value=2.20	RL=10.0	2.20	J
HGLSB3012-0709	Vanadium	Value < RL	Value=9.09	RL=10.0	9.09	J
HGLSB30-01-0809	Beryllium	Value < RL	Value=0.227	RL=5.00	0.227	J
HGLSB30-01-0809	Cadmium	Value < RL	Value=0.301	RL=0.500	0.301	J
HGLSB30-01-0809	Nickel	Value < RL	Value=3.97	RL=10.0	3.97	J
HGLSB30-02-0305	Beryllium	Value < RL	Value=0.967	RL=5.00	0.967	J
HGLSB30-08-0809	Antimony	MS/MSD	%R=60, 63	%R=75-125	0.992	UJ
HGLSB30-08-0809	Beryllium	Value < RL	Value=0.235	RL=5.00	0.235	J
HGLSB30-08-0809	Cadmium	Value < RL	Value=0.316	RL=0.500	0.316	J
HGLSB30-08-0809	Nickel	Value < RL	Value=2.64	RL=10.0	2.64	J
HGLSB30-08-0809	Zinc	MS/MSD	%R=55, 51	%R=75-125	70.0	J
HGLSB30-03-0203	Beryllium	Value < RL	Value=0.0910	RL=5.00	0.0910	J
HGLSB30-03-0203	Nickel	Value < RL	Value=2.21	RL=10.0	2.21	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB30-03-0203	Vanadium	Value < RL	Value=5.61	RL=10.0	5.61	J
HGLSB30-04-0204	Beryllium	Value < RL	Value=0.0450	RL=5.00	0.0450	J
HGLSB30-04-0204	Cobalt	Value < RL	Value=0.858	RL=5.00	0.858	J
HGLSB30-04-0204	Nickel	Value < RL	Value=1.48	RL=10.0	1.48	J
HGLSB30-04-0204	Vanadium	Value < RL	Value=4.72	RL=10.0	4.72	J
HGLSB30-05-0709	Beryllium	Value < RL	Value=0.146	RL=5.00	0.146	J
HGLSB30-05-0709	Cadmium	Value < RL	Value=0.164	RL=0.500	0.164	J
HGLSB30-05-0709	Nickel	Value < RL	Value=2.53	RL=10.0	2.53	J
HGLSB30-05-0709	Vanadium	Value < RL	Value=9.55	RL=10.0	9.55	J
HGLSB30-06-0809	Beryllium	Value < RL	Value=0.137	RL=5.00	0.137	J
HGLSB30-06-0809	Cadmium	Value < RL	Value=0.147	RL=0.500	0.147	J
HGLSB30-06-0809	Lead	Value < RL	Value=0.670	RL=1.00	0.670	J
HGLSB30-06-0809	Nickel	Value < RL	Value=2.45	RL=10.0	2.45	J
HGLSB30-07-0304	Aluminum	Value < RL	Value=566	RL=1000	566	J
HGLSB30-07-0304	Cobalt	Value < RL	Value=0.348	RL=1.00	0.348	J
HGLSB30-07-0304	Iron	Value < RL	Value=459	RL=1000	459	J
HGLSB30-07-0304	Nickel	Value < RL	Value=0.591	RL=10.0	0.591	J
HGLSB30-07-0304	Vanadium	Value < RL	Value=1.76	RL=10.0	1.76	J
HGLSD39-01-0001	Silver	Value < RL	Value=0.136	RL=0.200	0.136	J
HGLSB3020-0809	Beryllium	Value < RL	Value=0.439	RL=5.00	0.439	J
HGLSB3020-0809	Mercury	Value < RL	Value=0.0286	RL=0.0400	0.0286	J
HGLSB3020-0809	Nickel	Value < RL	Value=7.17	RL=10.0	7.17	J
HGLSB3017-0607	TCLP Cadmium	Value < RL	Value=0.0260	RL=0.0500	0.0260	J
HGLSB3017-0809	Beryllium	Value < RL	Value=0.116	RL=5.00	0.116	J
HGLSB3017-0809	Cadmium	Value < RL	Value=0.0970	RL=0.500	0.0970	J
HGLSB3017-0809	Lead	Value < RL	Value=0.763	RL=1.00	0.763	J
HGLSB3017-0809	Mercury	Value < RL	Value=0.0144	RL=0.0400	0.0144	J
HGLSB3017-0809	Nickel	Value < RL	Value=2.35	RL=2.35	2.35	J
HGLSB3017-0809	Vanadium	Value < RL	Value=7.19	RL=10.0	7.19	J
HGLSBDup07	Antimony	Value < RL	Value=1.49	RL=10.0	1.49	J
HGLSBDup07	Nickel	Value < RL	Value=2.21	RL=10.0	2.21	J
HGLSBDup07	Vanadium	Value < RL	Value=4.19	RL=10.0	4.19	J
HGLSB3018-0709	Antimony	Value < RL	Value=4.51	RL=10.0	4.51	J

Attachment 3 Reviewed/Revised Laboratory Forms

Analytical Report

Sample: 91036 - HGLSB30-11-0309

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26879	Date Analyzed:	2006-05-26	Analyzed By:	SM
Prep Batch:	23561	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.65	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91036 - HGLSB30-11-0309

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG
		TCLP Extraction:	2006-05-26	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00450	mg/L	0.025	0.200	90	16.8 - 143

continued ...

Validated EPA Level 3 (Verification), Quality by Design, January 4, 2007

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.00530	mg/L	0.025	0.200	106	35.8 - 155

Sample: 91036 - HGLSB30-11-0309

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	27149	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23542	Sample Preparation:	2006-05-24	Prepared By:	AG
		TCLP Extraction:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0699	mg/L	1	0.400	17	10 - 110.33
Phenol-d5		0.0481	mg/L	1	0.400	12	10 - 82.08
Nitrobenzene-d5		0.186	mg/L	1	0.400	46	26.72 - 155
2-Fluorobiphenyl		0.195	mg/L	1	0.400	49	35.89 - 150.5
2,4,6-Tribromophenol		0.243	mg/L	1	0.400	61	10 - 204.91
Terphenyl-d14		0.393	mg/L	1	0.400	98	33.98 - 168.85

Sample: 91036 - HGLSB30-11-0309

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

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sample 91036 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**1.01**	**1.01**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91036 - HGLSB30-11-0309

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27056	Date Analyzed:	2006-06-02	Analyzed By:	JG
Prep Batch:	23753	Sample Preparation:	2006-05-31	Prepared By:	JG
		TCLP Extraction:	2006-06-01	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.7	mg/L	1	50.0	97	70 - 130
Toluene-d8		48.4	mg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		46.7	mg/L	1	50.0	93	70 - 130

Sample: 91039 - HGLSB30-16-0910

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[1]	0.00740	mg/Kg	0.16	0.100	46	50.4 - 128.7

Sample: 91039 - HGLSB30-16-0910

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC		**0.00170**	**0.00170**	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor		**0.000970**	**0.000970**	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane		**0.0493**	**0.0493**	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane		**0.0391**	**0.0391**	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE		**0.00280**	**0.00280**	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin		**0.00290**	**0.00290**	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD		**0.0185**	**0.0185**	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00680	mg/Kg	0.16	0.100	42	10 - 171
Deca chlorobiphenyl		0.00890	mg/Kg	0.16	0.100	56	10 - 179

[1] Surrogate out due to peak interference.

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Sample: 91039 - HGLSB30-16-0910

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27154	Date Analyzed:	2006-05-31	Analyzed By:	AG
Prep Batch:	23540	Sample Preparation:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

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sample 91039 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.87	mg/Kg	1	2.67	70	10 - 98.8
Phenol-d5		2.12	mg/Kg	1	2.67	79	10 - 105

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		2.63	mg/Kg	1	2.67	98	10 - 114
2-Fluorobiphenyl		1.93	mg/Kg	1	2.67	72	10 - 122
2,4,6-Tribromophenol		3.09	mg/Kg	1	2.67	116	10 - 117
Terphenyl-d14		3.05	mg/Kg	1	2.67	114	10 - 116

Sample: 91039 - HGLSB30-16-0910

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Total Aluminum		**5190**	**5190**	<27.0	mg/Kg	100	0.270	10	0.27	
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536	
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774	
Total Barium		**49.0**	**49.0**	<0.601	mg/Kg	1	0.601	1	0.600628	
Total Beryllium	J	**0.181**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008	J
Total Cadmium	J	**0.234**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491	J
Total Calcium		**163000**	**163000**	<13.7	mg/Kg	20	0.683	50	0.683	
Total Chromium		**5.61**	**5.61**	<0.125	mg/Kg	1	0.125	1	0.125172	
Total Cobalt		**2.06**	**2.06**	<0.164	mg/Kg	1	0.164	1	0.163974	
Total Copper		**4.17**	**4.17**	<0.268	mg/Kg	1	0.268	0.5	0.26781	
Total Iron		**4490**	**4490**	<20.8	mg/Kg	100	0.208	10	0.208	
Total Lead		**5.93**	**5.93**	<0.650	mg/Kg	1	0.650	1	0.650424	
Total Magnesium		**5870**	**5870**	<0.263	mg/Kg	1	0.263	5	0.263	
Total Manganese		**118**	**118**	<0.295	mg/Kg	1	0.295	1	0.295	
Total Mercury	J	**0.00960**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088	J
Total Nickel	J	**5.08**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898	J
Total Potassium		**1490**	**1490**	<0.291	mg/Kg	1	0.291	50	0.291	
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141	
Total Silver		**1.40**	**1.40**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386	
Total Sodium		**637**	**637**	<0.820	mg/Kg	10	0.0820	50	0.082	
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512	
Total Vanadium		**11.3**	**11.3**	<0.126	mg/Kg	1	0.126	10	0.125985	
Total Zinc		**23.6**	**23.6**	<0.124	mg/Kg	1	0.124	1	0.124	

Sample: 91039 - HGLSB30-16-0910

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**161**	**161**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	150	90	62.8 - 115

Sample: 91039 - HGLSB30-16-0910

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**1.71**	**1.71**	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.740	mg/Kg	10	0.100	74	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.998	mg/Kg	10	0.100	100	71.9 - 123.7

Sample: 91039 - HGLSB30-16-0910

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.67~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419

50.0 U

continued . . .

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sample 91039 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~3.00~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048	
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421	
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21	
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041	
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535	
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387	
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632	
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534	
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675	
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475	
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979	
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364	
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228	
Naphthalene	JB	~~5.46~~	<50.0	7.58	µg/Kg	10	0.441	5	0.441	50.0 U
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324	

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		451	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		500	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		500	µg/Kg	10	50.0	100	78 - 120

Sample: 91040 - HGLSB30-13-0507

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26879	Date Analyzed:	2006-05-26	Analyzed By:	SM
Prep Batch:	23561	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.42	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91040 - HGLSB30-13-0507

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG
		TCLP Extraction:	2006-05-26	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225

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sample 91040 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00390	mg/L	0.025	0.200	78	16.8 - 143
Deca chlorobiphenyl		0.00460	mg/L	0.025	0.200	92	35.8 - 155

Sample: 91040 - HGLSB30-13-0507

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	27149	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23542	Sample Preparation:	2006-05-24	Prepared By:	AG
		TCLP Extraction:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	J	**0.0115**	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0849	mg/L	1	0.400	21	10 - 110.33
Phenol-d5		0.0605	mg/L	1	0.400	15	10 - 82.08
Nitrobenzene-d5		0.222	mg/L	1	0.400	56	26.72 - 155
2-Fluorobiphenyl		0.233	mg/L	1	0.400	58	35.89 - 150.5
2,4,6-Tribromophenol		0.232	mg/L	1	0.400	58	10 - 204.91
Terphenyl-d14		0.402	mg/L	1	0.400	100	33.98 - 168.85

Sample: 91040 - HGLSB30-13-0507

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311

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QC Batch: 27132
Prep Batch: 23797

Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-06
TCLP Extraction:

Analyzed By: TP
Prepared By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**1.01**	**1.01**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury		**0.000240**	**0.000240**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91040 - HGLSB30-13-0507

Analysis: TCLP Volatiles
QC Batch: 27056
Prep Batch: 23753

Analytical Method: S 8260B
Date Analyzed: 2006-06-02
Sample Preparation: 2006-05-31
TCLP Extraction: 2006-06-01

Prep Method: TCLP 1311
Analyzed By: JG
Prepared By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.5	mg/L	1	50.0	97	70 - 130
Toluene-d8		48.9	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		46.9	mg/L	1	50.0	94	70 - 130

Sample: 91041 - HGLSB30-13-1012

Analysis: Ag, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

continued . . .

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sample 91041 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.28**	**1.28**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91041 - HGLSB30-13-1012

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**3770**	**3770**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91041 - HGLSB30-13-1012

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91041 - HGLSB30-13-1012

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**35.6**	**35.6**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91041 - HGLSB30-13-1012

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.128**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91041 - HGLSB30-13-1012

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**149000**	**149000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91041 - HGLSB30-13-1012

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.177**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91041 - HGLSB30-13-1012

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.93**	**1.93**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91041 - HGLSB30-13-1012

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.61**	**3.61**	<0.125	mg/Kg	1	0.125	1	0.125172

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Sample: 91041 - HGLSB30-13-1012

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**4.15**	**4.15**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91041 - HGLSB30-13-1012

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**3570**	**3570**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91041 - HGLSB30-13-1012

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	J	**0.0336**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91041 - HGLSB30-13-1012

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**916**	**916**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91041 - HGLSB30-13-1012

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**2580**	**2580**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91041 - HGLSB30-13-1012

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**49.6**	**49.6**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91041 - HGLSB30-13-1012

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**863**	**863**	<0.820	mg/Kg	10	0.0820	50	0.082

Sample: 91041 - HGLSB30-13-1012

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**3.28**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91041 - HGLSB30-13-1012

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**5.71**	**5.71**	<0.650	mg/Kg	1	0.650	1	0.650424

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Sample: 91041 - HGLSB30-13-1012

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB		**0.0138**	**0.0138**	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)		**0.0138**	**0.0138**	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[2]	0.00660	mg/Kg	0.16	0.100	41	50.4 - 128.7

Sample: 91041 - HGLSB30-13-1012

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

[2]Surrogate out due to peak interference.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00450	mg/Kg	0.16	0.100	28	10 - 171
Deca chlorobiphenyl		0.00780	mg/Kg	0.16	0.100	49	10 - 179

Sample: 91041 - HGLSB30-13-1012

Analysis: Sb, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91041 - HGLSB30-13-1012

Analysis: Se, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91041 - HGLSB30-13-1012

Analysis: Semivolatiles
QC Batch: 27215
Prep Batch: 23718

Analytical Method: S 8270C
Date Analyzed: 2006-06-05
Sample Preparation: 2006-05-31

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392

continued . . .

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sample 91041 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584

continued ...

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sample 91041 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.01	mg/Kg	1	2.67	75	10 - 98.8
Phenol-d5		2.28	mg/Kg	1	2.67	85	10 - 105
Nitrobenzene-d5		2.16	mg/Kg	1	2.67	81	10 - 114
2-Fluorobiphenyl		2.29	mg/Kg	1	2.67	86	10 - 122
2,4,6-Tribromophenol		3.01	mg/Kg	1	2.67	113	10 - 117
Terphenyl-d14	[3]	4.01	mg/Kg	1	2.67	150	10 - 116

Sample: 91041 - HGLSB30-13-1012

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

[3]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91041 - HGLSB30-13-1012

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**12.8**	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		131	mg/Kg	1	150	87	62.8 - 115

Sample: 91041 - HGLSB30-13-1012

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.794	mg/Kg	10	0.100	79	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	10	0.100	113	71.9 - 123.7

Sample: 91041 - HGLSB30-13-1012

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**9.48**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91041 - HGLSB30-13-1012

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889

continued ...

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sample 91041 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~7.68~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~3.37~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048	

continued...

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sample 91041 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	JB	~~4.94~~	<50.0	7.58	µg/Kg	10	0.441	5	0.441 50.0 u
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		456	µg/Kg	10	50.0	91	42 - 129
Toluene-d8		499	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		514	µg/Kg	10	50.0	103	78 - 120

Sample: 91041 - HGLSB30-13-1012

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**21.9**	**21.9**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91042 - HGLSB30-12-0306

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26879	Date Analyzed:	2006-05-26	Analyzed By:	SM
Prep Batch:	23561	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	

continued . . .

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sample 91042 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
pH		6.05	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91042 - HGLSB30-12-0306

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG
		TCLP Extraction:	2006-05-26	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00370	mg/L	0.025	0.200	74	16.8 - 143
Deca chlorobiphenyl		0.00460	mg/L	0.025	0.200	92	35.8 - 155

Sample: 91042 - HGLSB30-12-0306

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	27149	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23542	Sample Preparation:	2006-05-24	Prepared By:	AG
		TCLP Extraction:	2006-05-23	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0738	mg/L	1	0.400	18	10 - 110.33
Phenol-d5		0.0539	mg/L	1	0.400	13	10 - 82.08
Nitrobenzene-d5		0.198	mg/L	1	0.400	50	26.72 - 155
2-Fluorobiphenyl		0.199	mg/L	1	0.400	50	35.89 - 150.5
2,4,6-Tribromophenol		0.170	mg/L	1	0.400	42	10 - 204.91
Terphenyl-d14		0.437	mg/L	1	0.400	109	33.98 - 168.85

Sample: 91042 - HGLSB30-12-0306

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**0.487**	**0.487**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91042 - HGLSB30-12-0306

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27056	Date Analyzed:	2006-06-02	Analyzed By:	JG

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Prep Batch: 23753 | Sample Preparation: 2006-05-31 | Prepared By: JG
TCLP Extraction: 2006-06-01 | Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.7	mg/L	1	50.0	97	70 - 130
Toluene-d8		48.5	mg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	mg/L	1	50.0	94	70 - 130

Sample: 91043 - HGLSB30-12-0709

Analysis: Ag, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26829 | Date Analyzed: 2006-05-25 | Analyzed By: RR
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.19**	**1.19**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91043 - HGLSB30-12-0709

Analysis: Al, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26829 | Date Analyzed: 2006-05-25 | Analyzed By: RR
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**2970**	**2970**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91043 - HGLSB30-12-0709

Analysis: As, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26829 | Date Analyzed: 2006-05-25 | Analyzed By: RR
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91043 - HGLSB30-12-0709

Analysis:	Ba, Total	Analytical Method:	S 6010B
QC Batch:	26829	Date Analyzed:	2006-05-25
Prep Batch:	23546	Sample Preparation:	2006-05-24
Prep Method:	S 3050B		
Analyzed By:	RR		
Prepared By:	DS		

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**25.2**	**25.2**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91043 - HGLSB30-12-0709

Analysis:	Be, Total	Analytical Method:	S 6010B
QC Batch:	26829	Date Analyzed:	2006-05-25
Prep Batch:	23546	Sample Preparation:	2006-05-24
Prep Method:	S 3050B		
Analyzed By:	RR		
Prepared By:	DS		

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.116**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91043 - HGLSB30-12-0709

Analysis:	Ca, Total	Analytical Method:	S 6010B
QC Batch:	26894	Date Analyzed:	2006-05-26
Prep Batch:	23546	Sample Preparation:	2006-05-24
Prep Method:	S 3050B		
Analyzed By:	TP		
Prepared By:	DS		

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**143000**	**143000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91043 - HGLSB30-12-0709

Analysis:	Cd, Total	Analytical Method:	S 6010B
QC Batch:	26829	Date Analyzed:	2006-05-25
Prep Batch:	23546	Sample Preparation:	2006-05-24
Prep Method:	S 3050B		
Analyzed By:	RR		
Prepared By:	DS		

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.131**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

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Sample: 91043 - HGLSB30-12-0709

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.20**	**1.20**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91043 - HGLSB30-12-0709

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.17**	**3.17**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91043 - HGLSB30-12-0709

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.78**	**2.78**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91043 - HGLSB30-12-0709

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**2990**	**2990**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91043 - HGLSB30-12-0709

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91043 - HGLSB30-12-0709

Analysis: K, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26894 | Date Analyzed: 2006-05-26 | Analyzed By: TP
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**915**	**915**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91043 - HGLSB30-12-0709

Analysis: Mg, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26894 | Date Analyzed: 2006-05-26 | Analyzed By: TP
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**2200**	**2200**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91043 - HGLSB30-12-0709

Analysis: Mn, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26829 | Date Analyzed: 2006-05-25 | Analyzed By: RR
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**50.9**	**50.9**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91043 - HGLSB30-12-0709

Analysis: Na, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26894 | Date Analyzed: 2006-05-26 | Analyzed By: TP
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**272**	**272**	<0.0820	mg/Kg	1	0.0820	50	0.082

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Sample: 91043 - HGLSB30-12-0709

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**2.20**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91043 - HGLSB30-12-0709

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91043 - HGLSB30-12-0709

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	4	0.00760	mg/Kg	0.16	0.100	48	50.4 - 128.7

Sample: 91043 - HGLSB30-12-0709

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

[4]Surrogate out due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00450	mg/Kg	0.16	0.100	28	10 - 171
Deca chlorobiphenyl		0.00680	mg/Kg	0.16	0.100	42	10 - 179

Sample: 91043 - HGLSB30-12-0709

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91043 - HGLSB30-12-0709

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

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Sample: 91043 - HGLSB30-12-0709

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

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sample 91043 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.26	mg/Kg	1	2.67	85	10 - 98.8
Phenol-d5		2.58	mg/Kg	1	2.67	97	10 - 105

continued ...

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sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		2.42	mg/Kg	1	2.67	91	10 - 114
2-Fluorobiphenyl		2.50	mg/Kg	1	2.67	94	10 - 122
2,4,6-Tribromophenol	[5]	3.24	mg/Kg	1	2.67	121	10 - 117
Terphenyl-d14	[6]	4.74	mg/Kg	1	2.67	178	10 - 116

Sample: 91043 - HGLSB30-12-0709

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91043 - HGLSB30-12-0709

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		131	mg/Kg	1	150	87	62.8 - 115

Sample: 91043 - HGLSB30-12-0709

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.919	mg/Kg	10	0.100	92	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[7]	1.27	mg/Kg	10	0.100	127	71.9 - 123.7

[5]High surrogate recovery. Sample non-detect, result bias high.
[6]High surrogate recovery. Sample non-detect, result bias high.
[7]High surrogate recovery due to peak interference.

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Sample: 91043 - HGLSB30-12-0709

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**9.09**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91043 - HGLSB30-12-0709

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.51~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561

continued . . .

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sample 91043 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Toluene	JB	~~2.88~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		450	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		492	µg/Kg	10	50.0	98	93 - 107
4-Bromofluorobenzene (4-BFB)		504	µg/Kg	10	50.0	101	78 - 120

Sample: 91043 - HGLSB30-12-0709

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**22.3**	**22.3**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91044 - HGLSB30-01-0809

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.16**	**1.16**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91044 - HGLSB30-01-0809

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**5420**	**5420**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91044 - HGLSB30-01-0809

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91044 - HGLSB30-01-0809

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**46.9**	**46.9**	<0.601	mg/Kg	1	0.601	1	0.600628

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Sample: 91044 - HGLSB30-01-0809

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.227**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91044 - HGLSB30-01-0809

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**131000**	**131000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91044 - HGLSB30-01-0809

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.301**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91044 - HGLSB30-01-0809

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**2.02**	**2.02**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91044 - HGLSB30-01-0809

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**5.72**	**5.72**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91044 - HGLSB30-01-0809

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.91**	**2.91**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91044 - HGLSB30-01-0809

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**4680**	**4680**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91044 - HGLSB30-01-0809

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91044 - HGLSB30-01-0809

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1550**	**1550**	<0.291	mg/Kg	1	0.291	50	0.291

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Sample: 91044 - HGLSB30-01-0809

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**3060**	**3060**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91044 - HGLSB30-01-0809

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**76.2**	**76.2**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91044 - HGLSB30-01-0809

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1280**	**1280**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91044 - HGLSB30-01-0809

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**3.97**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91044 - HGLSB30-01-0809

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**2.57**	**2.57**	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91044 - HGLSB30-01-0809

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[8]	0.00750	mg/Kg	0.16	0.100	47	50.4 - 128.7

Sample: 91044 - HGLSB30-01-0809

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029

continued . . .

[8]Surrogate out due to peak interference.

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sample 91044 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00520	mg/Kg	0.16	0.100	32	10 - 171
Deca chlorobiphenyl		0.00770	mg/Kg	0.16	0.100	48	10 - 179

Sample: 91044 - HGLSB30-01-0809

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91044 - HGLSB30-01-0809

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91044 - HGLSB30-01-0809

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199

continued ...

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sample 91044 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471

continued ...

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sample 91044 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.54	mg/Kg	1	2.67	95	10 - 98.8
Phenol-d5	9	2.82	mg/Kg	1	2.67	106	10 - 105
Nitrobenzene-d5		2.73	mg/Kg	1	2.67	102	10 - 114
2-Fluorobiphenyl		2.75	mg/Kg	1	2.67	103	10 - 122
2,4,6-Tribromophenol		3.13	mg/Kg	1	2.67	117	10 - 117
Terphenyl-d14	10	4.51	mg/Kg	1	2.67	169	10 - 116

[9]High surrogate recovery. Sample non-detect, result bias high.
[10]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91044 - HGLSB30-01-0809

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91044 - HGLSB30-01-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		149	mg/Kg	1	150	99	62.8 - 115

Sample: 91044 - HGLSB30-01-0809

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.812	mg/Kg	10	0.100	81	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	71.9 - 123.7

Sample: 91044 - HGLSB30-01-0809

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**16.7**	**16.7**	<0.126	mg/Kg	1	0.126	10	0.125985

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Sample: 91044 - HGLSB30-01-0809

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~7.81~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~2.79~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	

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sample 91044 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		448	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		491	µg/Kg	10	50.0	98	93 - 107
4-Bromofluorobenzene (4-BFB)		505	µg/Kg	10	50.0	101	78 - 120

Sample: 91044 - HGLSB30-01-0809

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**24.1**	**24.1**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91045 - HGLSB30-02-0305

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.422**	**0.422**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91045 - HGLSB30-02-0305

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**2310**	**2310**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91045 - HGLSB30-02-0305

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91045 - HGLSB30-02-0305

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**153**	**153**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91045 - HGLSB30-02-0305

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.967**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

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Sample: 91045 - HGLSB30-02-0305

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**85700**	**85700**	<6.83	mg/Kg	10	0.683	50	0.683

Sample: 91045 - HGLSB30-02-0305

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium		**1.63**	**1.63**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91045 - HGLSB30-02-0305

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**7.01**	**7.01**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91045 - HGLSB30-02-0305

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**18.3**	**18.3**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91045 - HGLSB30-02-0305

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**14.5**	**14.5**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91045 - HGLSB30-02-0305

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**1780**	**1780**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91045 - HGLSB30-02-0305

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27263	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91045 - HGLSB30-02-0305

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**6130**	**6130**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91045 - HGLSB30-02-0305

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**10200**	**10200**	<0.263	mg/Kg	1	0.263	5	0.263

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Sample: 91045 - HGLSB30-02-0305

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**357**	**357**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91045 - HGLSB30-02-0305

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**514**	**514**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91045 - HGLSB30-02-0305

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel		**14.9**	**14.9**	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91045 - HGLSB30-02-0305

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**18.6**	**18.6**	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91045 - HGLSB30-02-0305

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.0122	mg/Kg	0.16	0.100	76	50.4 - 128.7

Sample: 91045 - HGLSB30-02-0305

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT		**0.0131**	**0.0131**	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate		**0.0210**	**0.0210**	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor		**0.0177**	**0.0177**	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00770	mg/Kg	0.16	0.100	48	10 - 171
Deca chlorobiphenyl		0.0119	mg/Kg	0.16	0.100	74	10 - 179

Sample: 91045 - HGLSB30-02-0305

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Analysis: Sb, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26830 | Date Analyzed: 2006-05-25 | Analyzed By: RR
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91045 - HGLSB30-02-0305

Analysis: Se, Total | Analytical Method: S 6010B | Prep Method: S 3050B
QC Batch: 26830 | Date Analyzed: 2006-05-25 | Analyzed By: RR
Prep Batch: 23546 | Sample Preparation: 2006-05-24 | Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91045 - HGLSB30-02-0305

Analysis: Semivolatiles | Analytical Method: S 8270C | Prep Method: S 3550
QC Batch: 27215 | Date Analyzed: 2006-06-05 | Analyzed By: AG
Prep Batch: 23718 | Sample Preparation: 2006-05-31 | Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564

continued ...

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sample 91045 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456

continued ...

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sample 91045 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.40	mg/Kg	1	2.67	52	10 - 98.8
Phenol-d5		1.53	mg/Kg	1	2.67	57	10 - 105
Nitrobenzene-d5		1.53	mg/Kg	1	2.67	57	10 - 114
2-Fluorobiphenyl		1.45	mg/Kg	1	2.67	54	10 - 122
2,4,6-Tribromophenol		2.42	mg/Kg	1	2.67	91	10 - 117
Terphenyl-d14	[11]	4.64	mg/Kg	1	2.67	174	10 - 116

Sample: 91045 - HGLSB30-02-0305

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91045 - HGLSB30-02-0305

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

[11] High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	62.8 - 115

Sample: 91045 - HGLSB30-02-0305

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.679	mg/Kg	10	0.100	68	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	10	0.100	101	71.9 - 123.7

Sample: 91045 - HGLSB30-02-0305

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**30.6**	**30.6**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91045 - HGLSB30-02-0305

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306

continued . . .

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sample 91045 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~9.31~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~2.92~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048	
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421	
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21	
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041	
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535	
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387	

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sample 91045 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		449	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		494	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		498	µg/Kg	10	50.0	100	78 - 120

Sample: 91045 - HGLSB30-02-0305

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**70.0**	**70.0**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91046 - HGLSB30-08-0809

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.34**	**1.34**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91046 - HGLSB30-08-0809

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**3620**	**3620**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91046 - HGLSB30-08-0809

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91046 - HGLSB30-08-0809

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**29.9**	**29.9**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91046 - HGLSB30-08-0809

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.235**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91046 - HGLSB30-08-0809

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**154000**	**154000**	<13.7	mg/Kg	20	0.683	50	0.683

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Sample: 91046 - HGLSB30-08-0809

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.316**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91046 - HGLSB30-08-0809

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.59**	**1.59**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91046 - HGLSB30-08-0809

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.77**	**3.77**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91046 - HGLSB30-08-0809

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**3.83**	**3.83**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91046 - HGLSB30-08-0809

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**3880**	**3880**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91046 - HGLSB30-08-0809

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27263	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91046 - HGLSB30-08-0809

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1290**	**1290**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91046 - HGLSB30-08-0809

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**3960**	**3960**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91046 - HGLSB30-08-0809

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**60.1**	**60.1**	<0.295	mg/Kg	1	0.295	1	0.295

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Sample: 91046 - HGLSB30-08-0809

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1050**	**1050**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91046 - HGLSB30-08-0809

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**2.64**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91046 - HGLSB30-08-0809

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91046 - HGLSB30-08-0809

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[12]	0.00760	mg/Kg	0.16	0.100	48	50.4 - 128.7

Sample: 91046 - HGLSB30-08-0809

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27202	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00530	mg/Kg	0.16	0.100	33	10 - 171
Deca chlorobiphenyl		0.00820	mg/Kg	0.16	0.100	51	10 - 179

Sample: 91046 - HGLSB30-08-0809

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

[12] Surrogate out due to peak interference.

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Sample: 91046 - HGLSB30-08-0809

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91046 - HGLSB30-08-0809

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27214	Date Analyzed:	2006-06-03	Analyzed By:	AG
Prep Batch:	23719	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046

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sample 91046 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371

continued ...

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sample 91046 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.62	mg/Kg	1	2.67	61	10 - 98.8
Phenol-d5		1.77	mg/Kg	1	2.67	66	10 - 105
Nitrobenzene-d5		1.75	mg/Kg	1	2.67	66	10 - 114
2-Fluorobiphenyl		1.75	mg/Kg	1	2.67	66	10 - 122
2,4,6-Tribromophenol		2.25	mg/Kg	1	2.67	84	10 - 117
Terphenyl-d14		1.34	mg/Kg	1	2.67	50	10 - 116

Sample: 91046 - HGLSB30-08-0809

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91046 - HGLSB30-08-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	150	96	62.8 - 115

Sample: 91046 - HGLSB30-08-0809

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[13]	0.601	mg/Kg	10	0.100	60	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	10	0.100	85	71.9 - 123.7

Sample: 91046 - HGLSB30-08-0809

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**10.1**	**10.1**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91046 - HGLSB30-08-0809

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.57~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593

continued . . .

[13] TFT surrogate recovery outside normal limits. ICV/CCV and BFB surrogate recovery show the method to be in control.

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sample 91046 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~2.86~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	JB	~~5.10~~	<50.0	7.58	µg/Kg	10	0.441	5	0.441 50.0 U
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		448	µg/Kg	10	50.0	90	42 - 129

continued . . .

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		502	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		498	µg/Kg	10	50.0	100	78 - 120

Sample: 91046 - HGLSB30-08-0809

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**20.7**	**20.7**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91047 - HGLSB30-03-0203

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.65**	**1.65**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91047 - HGLSB30-03-0203

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**2750**	**2750**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91047 - HGLSB30-03-0203

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

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Sample: 91047 - HGLSB30-03-0203

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**40.3**	**40.3**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91047 - HGLSB30-03-0203

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.0910**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91047 - HGLSB30-03-0203

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**166000**	**166000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91047 - HGLSB30-03-0203

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91047 - HGLSB30-03-0203

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.21**	**1.21**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91047 - HGLSB30-03-0203

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**2.48**	**2.48**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91047 - HGLSB30-03-0203

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.83**	**2.83**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91047 - HGLSB30-03-0203

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**2280**	**2280**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91047 - HGLSB30-03-0203

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27263	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

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Sample: 91047 - HGLSB30-03-0203

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**900**	**900**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91047 - HGLSB30-03-0203

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**1680**	**1680**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91047 - HGLSB30-03-0203

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**32.5**	**32.5**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91047 - HGLSB30-03-0203

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**628**	**628**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91047 - HGLSB30-03-0203

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**2.21**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91047 - HGLSB30-03-0203

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91047 - HGLSB30-03-0203

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[14]	0.00570	mg/Kg	0.16	0.100	36	50.4 - 128.7

Sample: 91047 - HGLSB30-03-0203

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27202	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023

continued . . .

[14] Surrogate out due to peak interference.

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sample 91047 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00410	mg/Kg	0.16	0.100	26	10 - 171
Deca chlorobiphenyl		0.00620	mg/Kg	0.16	0.100	39	10 - 179

Sample: 91047 - HGLSB30-03-0203

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91047 - HGLSB30-03-0203

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

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Sample: 91047 - HGLSB30-03-0203

Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

continued . . .

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sample 91047 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.47	mg/Kg	1	2.67	92	10 - 98.8
Phenol-d5		2.79	mg/Kg	1	2.67	104	10 - 105

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		2.76	mg/Kg	1	2.67	103	10 - 114
2-Fluorobiphenyl		2.67	mg/Kg	1	2.67	100	10 - 122
2,4,6-Tribromophenol		2.68	mg/Kg	1	2.67	100	10 - 117
Terphenyl-d14		1.54	mg/Kg	1	2.67	58	10 - 116

Sample: 91047 - HGLSB30-03-0203

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91047 - HGLSB30-03-0203

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		147	mg/Kg	1	150	98	62.8 - 115

Sample: 91047 - HGLSB30-03-0203

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	10	0.100	104	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[15]	1.58	mg/Kg	10	0.100	158	71.9 - 123.7

[15] High surrogate recovery due to peak interference.

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Sample: 91047 - HGLSB30-03-0203

Analysis: V, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**5.61**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91047 - HGLSB30-03-0203

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.49~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561

continued . . .

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sample 91047 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Toluene	JB	~~2.89~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		447	µg/Kg	10	50.0	89	42 - 129
Toluene-d8		501	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		496	µg/Kg	10	50.0	99	78 - 120

Sample: 91047 - HGLSB30-03-0203

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**20.8**	**20.8**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91048 - HGLSB30-04-0204

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.62**	**1.62**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91048 - HGLSB30-04-0204

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**1820**	**1820**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91048 - HGLSB30-04-0204

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91048 - HGLSB30-04-0204

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**25.9**	**25.9**	<0.601	mg/Kg	1	0.601	1	0.600628

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Sample: 91048 - HGLSB30-04-0204

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.0450**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91048 - HGLSB30-04-0204

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**169000**	**169000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91048 - HGLSB30-04-0204

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91048 - HGLSB30-04-0204

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt	J	**0.858**	<1.00	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91048 - HGLSB30-04-0204

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**1.62**	**1.62**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91048 - HGLSB30-04-0204

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.67**	**2.67**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91048 - HGLSB30-04-0204

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**1600**	**1600**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91048 - HGLSB30-04-0204

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27263	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91048 - HGLSB30-04-0204

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**676**	**676**	<0.291	mg/Kg	1	0.291	50	0.291

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Sample: 91048 - HGLSB30-04-0204

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**1610**	**1610**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91048 - HGLSB30-04-0204

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**23.5**	**23.5**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91048 - HGLSB30-04-0204

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**758**	**758**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91048 - HGLSB30-04-0204

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**1.48**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91048 - HGLSB30-04-0204

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91048 - HGLSB30-04-0204

Analysis: PCB
QC Batch: 27165
Prep Batch: 23779

Analytical Method: S 8082
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[16]	0.00660	mg/Kg	0.16	0.100	41	50.4 - 128.7

Sample: 91048 - HGLSB30-04-0204

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE		**0.00170**	**0.00170**	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029

continued . . .

[16] Surrogate out due to peak interference.

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sample 91048 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Endrin aldehyde		**0.00250**	**0.00250**	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate		**0.00410**	**0.00410**	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone		**0.00210**	**0.00210**	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00390	mg/Kg	0.16	0.100	24	10 - 171
Deca chlorobiphenyl		0.00620	mg/Kg	0.16	0.100	39	10 - 179

Sample: 91048 - HGLSB30-04-0204

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91048 - HGLSB30-04-0204

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91048 - HGLSB30-04-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27214	Date Analyzed:	2006-06-03	Analyzed By:	AG
Prep Batch:	23719	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199

continued . . .

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sample 91048 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471

continued . . .

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sample 91048 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.92	mg/Kg	1	2.67	72	10 - 98.8
Phenol-d5		2.20	mg/Kg	1	2.67	82	10 - 105
Nitrobenzene-d5		2.16	mg/Kg	1	2.67	81	10 - 114
2-Fluorobiphenyl		2.12	mg/Kg	1	2.67	79	10 - 122
2,4,6-Tribromophenol		2.35	mg/Kg	1	2.67	88	10 - 117
Terphenyl-d14		1.48	mg/Kg	1	2.67	55	10 - 116

Sample: 91048 - HGLSB30-04-0204

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Analysis: Tl, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91048 - HGLSB30-04-0204

Analysis: TPH DRO
QC Batch: 26810
Prep Batch: 23545

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: N/A
Analyzed By: JL
Prepared By: JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	62.8 - 115

Sample: 91048 - HGLSB30-04-0204

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[17]	0.652	mg/Kg	10	0.100	65	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.981	mg/Kg	10	0.100	98	71.9 - 123.7

Sample: 91048 - HGLSB30-04-0204

Analysis: V, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**4.72**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

[17] TFT surrogate recovery outside normal limits. ICV/CCV and BFB surrogate recovery show the method to be in control.

Validated EPA Level 3 (Verification), Quality by Design, January 4, 2007

Sample: 91048 - HGLSB30-04-0204

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~8.13~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~2.85~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	

continued . . .

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sample 91048 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		444	µg/Kg	10	50.0	89	42 - 129
Toluene-d8		497	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		503	µg/Kg	10	50.0	101	78 - 120

Sample: 91048 - HGLSB30-04-0204

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**22.9**	**22.9**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91049 - HGLSB30-05-0709

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.37**	**1.37**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91049 - HGLSB30-05-0709

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**3920**	**3920**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91049 - HGLSB30-05-0709

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91049 - HGLSB30-05-0709

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**23.3**	**23.3**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91049 - HGLSB30-05-0709

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.146**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

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Sample: 91049 - HGLSB30-05-0709

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**155000**	**155000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91049 - HGLSB30-05-0709

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.164**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91049 - HGLSB30-05-0709

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.26**	**1.26**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91049 - HGLSB30-05-0709

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.92**	**3.92**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91049 - HGLSB30-05-0709

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.68**	**2.68**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91049 - HGLSB30-05-0709

Analysis: Fe, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjustcd)	MDL (Unadjusted)
Total Iron		**3320**	**3320**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91049 - HGLSB30-05-0709

Analysis: Hg, Total
QC Batch: 27263
Prep Batch: 23910

Analytical Method: S 7471A
Date Analyzed: 2006-06-12
Sample Preparation: 2006-06-10

Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91049 - HGLSB30-05-0709

Analysis: K, Total
QC Batch: 26895
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1050**	**1050**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91049 - HGLSB30-05-0709

Analysis: Mg, Total
QC Batch: 26895
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**3060**	**3060**	<0.263	mg/Kg	1	0.263	5	0.263

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Sample: 91049 - HGLSB30-05-0709

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**50.5**	**50.5**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91049 - HGLSB30-05-0709

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1020**	**1020**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91049 - HGLSB30-05-0709

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**2.53**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91049 - HGLSB30-05-0709

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91049 - HGLSB30-05-0709

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.00860	mg/Kg	0.16	0.100	54	50.4 - 128.7

Sample: 91049 - HGLSB30-05-0709

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT		**0.00100**	**0.00100**	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00620	mg/Kg	0.16	0.100	39	10 - 171
Deca chlorobiphenyl		0.0100	mg/Kg	0.16	0.100	62	10 - 179

Sample: 91049 - HGLSB30-05-0709

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Analysis: Sb, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91049 - HGLSB30-05-0709

Analysis: Se, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91049 - HGLSB30-05-0709

Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564

continued . . .

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sample 91049 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456

continued . . .

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sample 91049 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.33	mg/Kg	1	2.67	87	10 - 98.8
Phenol-d5		2.66	mg/Kg	1	2.67	100	10 - 105
Nitrobenzene-d5		2.62	mg/Kg	1	2.67	98	10 - 114
2-Fluorobiphenyl		2.51	mg/Kg	1	2.67	94	10 - 122
2,4,6-Tribromophenol		2.63	mg/Kg	1	2.67	98	10 - 117
Terphenyl-d14	[18]	3.73	mg/Kg	1	2.67	140	10 - 116

Sample: 91049 - HGLSB30-05-0709

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91049 - HGLSB30-05-0709

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

[18]High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		138	mg/Kg	1	150	92	62.8 - 115

Sample: 91049 - HGLSB30-05-0709

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.776	mg/Kg	10	0.100	78	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	10	0.100	111	71.9 - 123.7

Sample: 91049 - HGLSB30-05-0709

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**9.55**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91049 - HGLSB30-05-0709

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306

continued . . .

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sample 91049 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~8.55~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~2.82~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387

continued ...

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sample 91049 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		458	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		507	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		489	µg/Kg	10	50.0	98	78 - 120

Sample: 91049 - HGLSB30-05-0709

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**26.8**	**26.8**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91050 - HGLSB30-06-0809

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.20**	**1.20**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91050 - HGLSB30-06-0809

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**3300**	**3300**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91050 - HGLSB30-06-0809

Analysis: As, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91050 - HGLSB30-06-0809

Analysis: Ba, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**28.3**	**28.3**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91050 - HGLSB30-06-0809

Analysis: Be, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.137**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91050 - HGLSB30-06-0809

Analysis: Ca, Total
QC Batch: 26895
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**143000**	**143000**	<13.7	mg/Kg	20	0.683	50	0.683

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Sample: 91050 - HGLSB30-06-0809

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.147**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91050 - HGLSB30-06-0809

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.28**	**1.28**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91050 - HGLSB30-06-0809

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.62**	**3.62**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91050 - HGLSB30-06-0809

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.55**	**2.55**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91050 - HGLSB30-06-0809

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**3050**	**3050**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91050 - HGLSB30-06-0809

Analysis: Hg, Total
QC Batch: 27263
Prep Batch: 23910

Analytical Method: S 7471A
Date Analyzed: 2006-06-12
Sample Preparation: 2006-06-10

Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91050 - HGLSB30-06-0809

Analysis: K, Total
QC Batch: 26895
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**971**	**971**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91050 - HGLSB30-06-0809

Analysis: Mg, Total
QC Batch: 26895
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**3050**	**3050**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91050 - HGLSB30-06-0809

Analysis: Mn, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**34.8**	**34.8**	<0.295	mg/Kg	1	0.295	1	0.295

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Sample: 91050 - HGLSB30-06-0809

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**613**	**613**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91050 - HGLSB30-06-0809

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**2.45**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91050 - HGLSB30-06-0809

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	J	**0.670**	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91050 - HGLSB30-06-0809

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.0109	mg/Kg	0.16	0.100	68	50.4 - 128.7

Sample: 91050 - HGLSB30-06-0809

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27202	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT		**0.00220**	**0.00220**	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate		**0.00110**	**0.00110**	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor		**0.00160**	**0.00160**	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00910	mg/Kg	0.16	0.100	57	10 - 171
Deca chlorobiphenyl		0.0189	mg/Kg	0.16	0.100	118	10 - 179

Sample: 91050 - HGLSB30-06-0809

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

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Sample: 91050 - HGLSB30-06-0809

Analysis: Se, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91050 - HGLSB30-06-0809

Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046

continued ...

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sample 91050 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371

continued . . .

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sample 91050 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.77	mg/Kg	1	2.67	66	10 - 98.8
Phenol-d5		2.08	mg/Kg	1	2.67	78	10 - 105
Nitrobenzene-d5		2.04	mg/Kg	1	2.67	76	10 - 114
2-Fluorobiphenyl		2.09	mg/Kg	1	2.67	78	10 - 122
2,4,6-Tribromophenol		2.62	mg/Kg	1	2.67	98	10 - 117
Terphenyl-d14		2.19	mg/Kg	1	2.67	82	10 - 116

Sample: 91050 - HGLSB30-06-0809

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91050 - HGLSB30-06-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		156	mg/Kg	1	150	104	62.8 - 115

Sample: 91050 - HGLSB30-06-0809

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[19]	0.613	mg/Kg	10	0.100	61	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.846	mg/Kg	10	0.100	85	71.9 - 123.7

Sample: 91050 - HGLSB30-06-0809

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**14.4**	**14.4**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91050 - HGLSB30-06-0809

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.61~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 4
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593

continued . . .

[19]TFT surrogate recovery outside normal limits. ICV/CCV and BFB surrogate recovery show the method to be in control.

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sample 91050 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~2.93~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

10,0 U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		461	µg/Kg	10	50.0	92	42 - 129

continued . . .

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		508	µg/Kg	10	50.0	102	93 - 107
4-Bromofluorobenzene (4-BFB)		490	µg/Kg	10	50.0	98	78 - 120

Sample: 91050 - HGLSB30-06-0809

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**24.8**	**24.8**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91051 - HGLSB30-07-0304

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.68**	**1.68**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91051 - HGLSB30-07-0304

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum	J	**566**	<1000	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91051 - HGLSB30-07-0304

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

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Sample: 91051 - HGLSB30-07-0304

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**9.15**	**9.15**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91051 - HGLSB30-07-0304

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	U	<0.00800	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91051 - HGLSB30-07-0304

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**188000**	**188000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91051 - HGLSB30-07-0304

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91051 - HGLSB30-07-0304

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt	J	**0.348**	<1.00	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91051 - HGLSB30-07-0304

Analysis: Cr, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium	J	**0.278**	<1.00	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91051 - HGLSB30-07-0304

Analysis: Cu, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**1.69**	**1.69**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91051 - HGLSB30-07-0304

Analysis: Fe, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron	J	**459**	<1000	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91051 - HGLSB30-07-0304

Analysis: Hg, Total
QC Batch: 27263
Prep Batch: 23910

Analytical Method: S 7471A
Date Analyzed: 2006-06-12
Sample Preparation: 2006-06-10

Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

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Sample: 91051 - HGLSB30-07-0304

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1540**	**1540**	<2.91	mg/Kg	10	0.291	50	0.291

Sample: 91051 - HGLSB30-07-0304

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**643**	**643**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91051 - HGLSB30-07-0304

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**6.12**	**6.12**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91051 - HGLSB30-07-0304

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1140**	**1140**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91051 - HGLSB30-07-0304

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**0.591**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91051 - HGLSB30-07-0304

Analysis: Pb, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91051 - HGLSB30-07-0304

Analysis: PCB
QC Batch: 27165
Prep Batch: 23779

Analytical Method: S 8082
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.00970	mg/Kg	0.16	0.100	61	50.4 - 128.7

Sample: 91051 - HGLSB30-07-0304

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018

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sample 91051 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II		**0.00260**	**0.00260**	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate		**0.0231**	**0.0231**	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor		**0.0284**	**0.0284**	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00750	mg/Kg	0.16	0.100	47	10 - 171
Deca chlorobiphenyl		0.0107	mg/Kg	0.16	0.100	67	10 - 179

Sample: 91051 - HGLSB30-07-0304

Analysis: Sb, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91051 - HGLSB30-07-0304

Analysis: Se, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91051 - HGLSB30-07-0304

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Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461

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sample 91051 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.92	mg/Kg	1	2.67	72	10 - 98.8
Phenol-d5		2.28	mg/Kg	1	2.67	85	10 - 105
Nitrobenzene-d5		2.17	mg/Kg	1	2.67	81	10 - 114
2-Fluorobiphenyl		2.13	mg/Kg	1	2.67	80	10 - 122

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		2.55	mg/Kg	1	2.67	96	10 - 117
Terphenyl-d14		2.31	mg/Kg	1	2.67	86	10 - 116

Sample: 91051 - HGLSB30-07-0304

Analysis: Tl, Total
QC Batch: 26830
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91051 - HGLSB30-07-0304

Analysis: TPH DRO
QC Batch: 26810
Prep Batch: 23545

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: N/A
Analyzed By: JL
Prepared By: JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		148	mg/Kg	1	150	99	62.8 - 115

Sample: 91051 - HGLSB30-07-0304

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.781	mg/Kg	10	0.100	78	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.15	mg/Kg	10	0.100	115	71.9 - 123.7

Sample: 91051 - HGLSB30-07-0304

Analysis: V, Total

Analytical Method: S 6010B

Prep Method: S 3050B

Validated EPA Level 3 (Verification), Quality by Design, January 4, 2007

QC Batch: 26830
Prep Batch: 23546

Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**1.76**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91051 - HGLSB30-07-0304

Analysis: Volatiles
QC Batch: 26968
Prep Batch: 23673

Analytical Method: S 8260B
Date Analyzed: 2006-05-30
Sample Preparation: 2006-05-30

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~4.61~~	<50.0	4.72	µg/Kg	10	0.315	5	0.3154
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529 50.0 U
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086
Toluene	JB	~~2.72~~	<10.0	2.74	µg/Kg	10	0.135	1	0.1352 10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199

continued . . .

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sample 91051 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	**0.730**	<10.0	1.12	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	U	<1.75	<10.0	2.59	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	1.02	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	JB	**1.05**	<10.0	1.65	µg/Kg	10	0.105	1	0.1048	10.0U
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1007	
1,3,5-Trimethylbenzene	JB	**1.47**	<10.0	1.93	µg/Kg	10	0.104	1	0.1042	10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	JB	**1.68**	<10.0	2.23	µg/Kg	10	0.148	1	0.1482	10.0 U
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	U	<1.13	<10.0	<1.13	µg/Kg	10	0.113	1	0.1128	
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	JB	**8.49**	<50.0	14.2	µg/Kg	10	0.258	5	0.2585	50.0 U
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		440	µg/Kg	10	50.0	88	42 - 129
Toluene-d8		490	µg/Kg	10	50.0	98	93 - 107
4-Bromofluorobenzene (4-BFB)		482	µg/Kg	10	50.0	96	78 - 120

Sample: 91051 - HGLSB30-07-0304

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**17.4**	**17.4**	<0.124	mg/Kg	1	0.124	1	0.124

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Sample: 91052 - HGLSD39-01-0001

Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.258	<1.25	<0.258	mg/Kg	5	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.160	<1.25	<0.160	mg/Kg	5	0.0321	0.25	0.0321
2-Picoline	U	<0.0910	<1.25	<0.0910	mg/Kg	5	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0995	<1.25	<0.0995	mg/Kg	5	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.176	<1.25	<0.176	mg/Kg	5	0.0353	0.25	0.0353
Phenol	U	<0.154	<1.25	<0.154	mg/Kg	5	0.0308	0.25	0.0308
Aniline	U	<0.242	<1.25	<0.242	mg/Kg	5	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.164	<1.25	<0.164	mg/Kg	5	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.214	<1.25	<0.214	mg/Kg	5	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.189	<1.25	<0.189	mg/Kg	5	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.182	<1.25	<0.182	mg/Kg	5	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.170	<1.25	<0.170	mg/Kg	5	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.196	<1.25	<0.196	mg/Kg	5	0.0392	0.25	0.0392
Acetophenone		**2.68**	**2.68**	<0.202	mg/Kg	5	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.222	<1.25	<0.222	mg/Kg	5	0.0444	0.25	0.0444
Hexachloroethane	U	<0.186	<1.25	<0.186	mg/Kg	5	0.0372	0.25	0.0372
Nitrobenzene	U	<0.205	<1.25	<0.205	mg/Kg	5	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.158	<1.25	<0.158	mg/Kg	5	0.0316	0.25	0.0316
Isophorone	U	<0.276	<1.25	<0.276	mg/Kg	5	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.126	<1.25	<0.126	mg/Kg	5	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.282	<1.25	<0.282	mg/Kg	5	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.190	<1.25	<0.190	mg/Kg	5	0.0381	0.25	0.0381
Benzoic acid	U	<0.605	<1.25	<0.605	mg/Kg	5	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.187	<1.25	<0.187	mg/Kg	5	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.169	<1.25	<0.169	mg/Kg	5	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.188	<1.25	<0.188	mg/Kg	5	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.202	<1.25	<0.202	mg/Kg	5	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.176	<1.25	<0.176	mg/Kg	5	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.186	<1.25	<0.186	mg/Kg	5	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.201	<1.25	<0.201	mg/Kg	5	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.230	<1.25	<0.230	mg/Kg	5	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.238	<1.25	<0.238	mg/Kg	5	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.205	<1.25	<0.205	mg/Kg	5	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.170	<1.25	<0.170	mg/Kg	5	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.104	<1.25	<0.104	mg/Kg	5	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.202	<1.25	<0.202	mg/Kg	5	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.221	<1.25	<0.221	mg/Kg	5	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.205	<1.25	<0.205	mg/Kg	5	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.208	<1.25	<0.208	mg/Kg	5	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.206	<1.25	<0.206	mg/Kg	5	0.0411	0.25	0.0411
Dimethylphthalate	J	**1.12**	<1.25	<0.266	mg/Kg	5	0.0531	0.25	0.0531
Acenaphthylene	U	<0.232	<1.25	<0.232	mg/Kg	5	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.227	<1.25	<0.227	mg/Kg	5	0.0454	0.25	0.0454

continued...

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sample 91052 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.139	<1.25	<0.139	mg/Kg	5	0.0278	0.25	0.0278
Acenaphthene	U	<0.230	<1.25	<0.230	mg/Kg	5	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0565	<1.25	<0.0565	mg/Kg	5	0.0113	0.25	0.0113
Dibenzofuran	U	<0.240	<1.25	<0.240	mg/Kg	5	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.216	<1.25	<0.216	mg/Kg	5	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0830	<1.25	<0.0830	mg/Kg	5	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.214	<1.25	<0.214	mg/Kg	5	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.236	<1.25	<0.236	mg/Kg	5	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.180	<1.25	<0.180	mg/Kg	5	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.262	<1.25	<0.262	mg/Kg	5	0.0523	0.25	0.0523
Fluorene	U	<0.218	<1.25	<0.218	mg/Kg	5	0.0435	0.25	0.0435
Diethylphthalate	J	**0.932**	<1.25	<0.322	mg/Kg	5	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.233	<1.25	<0.233	mg/Kg	5	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.139	<1.25	<0.139	mg/Kg	5	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.335	<1.25	<0.335	mg/Kg	5	0.0670	0.25	0.067
Diphenylamine	U	<0.184	<1.25	<0.184	mg/Kg	5	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.278	<1.25	<0.278	mg/Kg	5	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.268	<1.25	<0.268	mg/Kg	5	0.0536	0.25	0.0536
Phenacetin	U	<0.176	<1.25	<0.176	mg/Kg	5	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.292	<1.25	<0.292	mg/Kg	5	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.174	<1.25	<0.174	mg/Kg	5	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.200	<1.25	<0.200	mg/Kg	5	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.266	<1.25	<0.266	mg/Kg	5	0.0532	0.25	0.0532
Pronamide	U	<0.184	<1.25	<0.184	mg/Kg	5	0.0368	0.25	0.0368
Phenanthrene	U	<0.219	<1.25	<0.219	mg/Kg	5	0.0438	0.25	0.0438
Anthracene	U	<0.282	<1.25	<0.282	mg/Kg	5	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.238	<1.25	<0.238	mg/Kg	5	0.0475	0.25	0.0475
Fluoranthene	U	<0.228	<1.25	<0.228	mg/Kg	5	0.0456	0.25	0.0456
Benzidine	U	<0.0890	<1.25	<0.0890	mg/Kg	5	0.0178	0.25	0.0178
Pyrene	U	<0.620	<1.25	<0.620	mg/Kg	5	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.204	<1.25	<0.204	mg/Kg	5	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.750	<1.25	<0.750	mg/Kg	5	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.269	<1.25	<0.269	mg/Kg	5	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.214	<1.25	<0.214	mg/Kg	5	0.0427	0.25	0.0427
Chrysene	U	<0.304	<1.25	<0.304	mg/Kg	5	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.955	<1.25	<0.955	mg/Kg	5	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.910	<1.25	<0.910	mg/Kg	5	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.356	<1.25	<0.356	mg/Kg	5	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.268	<1.25	<0.268	mg/Kg	5	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.262	<1.25	<0.262	mg/Kg	5	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.233	<1.25	<0.233	mg/Kg	5	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.200	<1.25	<0.200	mg/Kg	5	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.245	<1.25	<0.245	mg/Kg	5	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.266	<1.25	<0.266	mg/Kg	5	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.305	<1.25	<0.305	mg/Kg	5	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		7.69	mg/Kg	5	2.67	58	10 - 98.8
Phenol-d5		9.57	mg/Kg	5	2.67	72	10 - 105

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		12.1	mg/Kg	5	2.67	91	10 - 114
2-Fluorobiphenyl		12.4	mg/Kg	5	2.67	93	10 - 122
2,4,6-Tribromophenol	[20]	16.9	mg/Kg	5	2.67	126	10 - 117
Terphenyl-d14		10.3	mg/Kg	5	2.67	77	10 - 116

Sample: 91052 - HGLSD39-01-0001

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	J	**0.136**	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**168**	**168**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**7.31**	**7.31**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**43.2**	**43.2**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0516**	**0.0516**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**1430**	**1430**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91053 - HGLSB30-20-0708

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26879	Date Analyzed:	2006-05-26	Analyzed By:	SM
Prep Batch:	23561	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.83	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91053 - HGLSB30-20-0708

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG

[20] 8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.

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TCLP Extraction: 2006-05-26 Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00450	mg/L	0.025	0.200	90	16.8 - 143
Deca chlorobiphenyl		0.00510	mg/L	0.025	0.200	102	35.8 - 155

Sample: 91053 - HGLSB30-20-0708

Analysis: TCLP Semivolatiles
QC Batch: 27149
Prep Batch: 23542

Analytical Method: S 8270C
Date Analyzed: 2006-05-29
Sample Preparation: 2006-05-24
TCLP Extraction: 2006-05-23

Prep Method: TCLP 1311
Analyzed By: AG
Prepared By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596

continued ...

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sample 91053 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0692	mg/L	1	0.400	17	10 - 110.33
Phenol-d5		0.0514	mg/L	1	0.400	13	10 - 82.08
Nitrobenzene-d5		0.197	mg/L	1	0.400	49	26.72 - 155
2-Fluorobiphenyl		0.223	mg/L	1	0.400	56	35.89 - 150.5
2,4,6-Tribromophenol		0.218	mg/L	1	0.400	54	10 - 204.91
Terphenyl-d14		0.386	mg/L	1	0.400	96	33.98 - 168.85

Sample: 91053 - HGLSB30-20-0708

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**0.838**	**0.838**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91053 - HGLSB30-20-0708

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27056	Date Analyzed:	2006-06-02	Analyzed By:	JG
Prep Batch:	23753	Sample Preparation:	2006-05-31	Prepared By:	JG
		TCLP Extraction:	2006-06-01	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985

continued ...

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sample 91053 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.6	mg/L	1	50.0	97	70 - 130
Toluene-d8		48.6	mg/L	1	50.0	97	70 - 130
4-Bromofluorobenzene (4-BFB)		46.6	mg/L	1	50.0	93	70 - 130

Sample: 91054 - HGLSB30-20-0809

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.0736	<0.160	<0.0736	mg/Kg	16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.0736	<0.160	<0.0736	mg/Kg	16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.0736	<0.160	<0.0736	mg/Kg	16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.0736	<0.160	<0.0736	mg/Kg	16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.0269	<0.160	<0.0269	mg/Kg	16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.0736	<0.160	<0.0736	mg/Kg	16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.0101	<0.160	<0.0101	mg/Kg	16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.0108	<0.160	<0.0108	mg/Kg	16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[21]	0.0660	mg/Kg	16	0.00100	412	50.4 - 128.7

Sample: 91054 - HGLSB30-20-0809

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27202	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0120	<0.0400	<0.0120	mg/Kg	8	0.00150	0.005	0.0015

continued . . .

[21] Surrogate out due to peak interference.

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sample 91054 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
gamma-BHC (Lindane)	U	<0.0160	<0.0400	<0.0160	mg/Kg	8	0.00200	0.005	0.002
beta-BHC	U	<0.0184	<0.0400	<0.0184	mg/Kg	8	0.00230	0.005	0.0023
Heptachlor		**0.0411**	**0.0411**	<0.0120	mg/Kg	8	0.00150	0.005	0.0015
delta-BHC	U	<0.0144	<0.0400	<0.0144	mg/Kg	8	0.00180	0.005	0.0018
Aldrin	U	<0.0200	<0.0400	<0.0200	mg/Kg	8	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.0184	<0.0400	<0.0184	mg/Kg	8	0.00230	0.005	0.0023
gamma-Chlordane		**3.82**	**3.82**	<0.0168	mg/Kg	8	0.00210	0.005	0.0021
alpha-Chlordane		**3.14**	**3.14**	<0.0184	mg/Kg	8	0.00230	0.005	0.0023
Endosulfan I		**1.58**	**1.58**	<0.0160	mg/Kg	8	0.00200	0.005	0.002
p,p-DDE	U	<0.0128	<0.0400	<0.0128	mg/Kg	8	0.00160	0.005	0.0016
Dieldrin	U	<0.0168	<0.0400	<0.0168	mg/Kg	8	0.00210	0.005	0.0021
Endrin	U	<0.0192	<0.0400	<0.0192	mg/Kg	8	0.00240	0.005	0.0024
p,p-DDD		**0.682**	**0.682**	<0.0104	mg/Kg	8	0.00130	0.005	0.0013
Endosulfan II	U	<0.0168	<0.0400	<0.0168	mg/Kg	8	0.00210	0.005	0.0021
p,p-DDT	U	<0.0232	<0.0400	<0.0232	mg/Kg	8	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.0248	<0.0400	<0.0248	mg/Kg	8	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.0112	<0.0400	<0.0112	mg/Kg	8	0.00140	0.005	0.0014
Methoxychlor	U	<0.0160	<0.0400	<0.0160	mg/Kg	8	0.00200	0.005	0.002
Endrin Ketone	U	<0.0144	<0.0400	<0.0144	mg/Kg	8	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.0156	mg/Kg	8	0.00200	98	10 - 171
Deca chlorobiphenyl		0.0141	mg/Kg	8	0.00200	88	10 - 179

Sample: 91054 - HGLSB30-20-0809

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27214	Date Analyzed:	2006-06-03	Analyzed By:	AG
Prep Batch:	23719	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034

continued ...

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sample 91054 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536

continued ...

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sample 91054 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol	[22]	3.87	mg/Kg	1	2.67	145	10 - 98.8
Phenol-d5	[23]	4.54	mg/Kg	1	2.67	170	10 - 105
Nitrobenzene-d5	[24]	4.60	mg/Kg	1	2.67	172	10 - 114
2-Fluorobiphenyl	[25]	5.16	mg/Kg	1	2.67	193	10 - 122
2,4,6-Tribromophenol	[26]	6.41	mg/Kg	1	2.67	240	10 - 117
Terphenyl-d14	[27]	5.53	mg/Kg	1	2.67	207	10 - 116

Sample: 91054 - HGLSB30-20-0809

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A

[22]High surrogate recovery. Sample non-detect, result bias high.
[23]High surrogate recovery. Sample non-detect, result bias high.
[24]High surrogate recovery. Sample non-detect, result bias high.
[25]High surrogate recovery. Sample non-detect, result bias high.
[26]High surrogate recovery. Sample non-detect, result bias high.
[27]High surrogate recovery. Sample non-detect, result bias high.

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QC Batch: 27264
Prep Batch: 23910

Date Analyzed: 2006-06-12
Sample Preparation: 2006-06-10

Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**8000**	**8000**	<27.0	mg/Kg	100	0.270	10	0.27
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**183**	**183**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Beryllium	J	**0.439**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008
Total Cadmium		**0.769**	**0.769**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Calcium		**79000**	**79000**	<6.83	mg/Kg	10	0.683	50	0.683
Total Chromium		**9.81**	**9.81**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Cobalt		**3.03**	**3.03**	<0.164	mg/Kg	1	0.164	1	0.163974
Total Copper		**5.49**	**5.49**	<0.268	mg/Kg	1	0.268	0.5	0.26781
Total Iron		**8380**	**8380**	<20.8	mg/Kg	100	0.208	10	0.208
Total Lead		**8.83**	**8.83**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Magnesium		**5070**	**5070**	<0.263	mg/Kg	1	0.263	5	0.263
Total Manganese		**143**	**143**	<0.295	mg/Kg	1	0.295	1	0.295
Total Mercury	J	**0.0286**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Nickel	J	**7.17**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898
Total Potassium		**2030**	**2030**	<0.291	mg/Kg	1	0.291	50	0.291
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141
Total Silver		**0.555**	**0.555**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Sodium		**421**	**421**	<0.0820	mg/Kg	1	0.0820	50	0.082
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512
Total Vanadium		**19.1**	**19.1**	<0.126	mg/Kg	1	0.126	10	0.125985
Total Zinc		**40.2**	**40.2**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91054 - HGLSB30-20-0809

Analysis: TPH DRO
QC Batch: 26810
Prep Batch: 23545

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: N/A
Analyzed By: JL
Prepared By: JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**71.0**	**71.0**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		151	mg/Kg	1	150	101	62.8 - 115

Sample: 91054 - HGLSB30-20-0809

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	10	0.100	104	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[28]	1.47	mg/Kg	10	0.100	147	71.9 - 123.7

Sample: 91054 - HGLSB30-20-0809

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26968	Date Analyzed:	2006-05-30	Analyzed By:	JG
Prep Batch:	23673	Sample Preparation:	2006-05-30	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~4.92~~	<50.0	4.72	µg/Kg	10	0.315	5	0.3154 50.04
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119

continued . . .

[28] High surrogate recovery due to peak interference.

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sample 91054 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~2.97~~	<10.0	2.74	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~0.710~~	<10.0	1.12	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	U	<1.75	<10.0	2.59	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	1.02	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	1.65	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	J	**1.16**	<10.0	<1.01	µg/Kg	10	0.101	1	0.1007	J
1,3,5-Trimethylbenzene	JB	~~1.25~~	<10.0	1.93	µg/Kg	10	0.104	1	0.1042	10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	JB	~~1.51~~	<10.0	2.23	µg/Kg	10	0.148	1	0.1482	10.0 U
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	U	<1.13	<10.0	<1.13	µg/Kg	10	0.113	1	0.1128	
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	JB	~~7.84~~	<50.0	14.2	µg/Kg	10	0.258	5	0.2585	50.0 U
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		440	µg/Kg	10	50.0	88	42 - 129
Toluene-d8		496	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		489	µg/Kg	10	50.0	98	78 - 120

Sample: 91055 - HGLSB30-17-0607

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26879	Date Analyzed:	2006-05-26	Analyzed By:	SM
Prep Batch:	23561	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

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Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.19	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91055 - HGLSB30-17-0607

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG
		TCLP Extraction:	2006-05-26	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00470	mg/L	0.025	0.200	94	16.8 - 143
Deca chlorobiphenyl		0.00600	mg/L	0.025	0.200	120	35.8 - 155

Sample: 91055 - HGLSB30-17-0607

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	27149	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23542	Sample Preparation:	2006-05-24	Prepared By:	AG
		TCLP Extraction:	2006-05-23	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0700	mg/L	1	0.400	18	10 - 110.33
Phenol-d5		0.0481	mg/L	1	0.400	12	10 - 82.08
Nitrobenzene-d5		0.167	mg/L	1	0.400	42	26.72 - 155
2-Fluorobiphenyl		0.179	mg/L	1	0.400	45	35.89 - 150.5
2,4,6-Tribromophenol		0.140	mg/L	1	0.400	35	10 - 204.91
Terphenyl-d14		0.278	mg/L	1	0.400	70	33.98 - 168.85

Sample: 91055 - HGLSB30-17-0607

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**0.839**	**0.839**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	J	**0.0260**	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury		**0.000220**	**0.000220**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91055 - HGLSB30-17-0607

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27056	Date Analyzed:	2006-06-02	Analyzed By:	JG

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Prep Batch: 23753

Sample Preparation: 2006-05-31
TCLP Extraction: 2006-06-01

Prepared By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.4	mg/L	1	50.0	99	70 - 130
Toluene-d8		49.3	mg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	mg/L	1	50.0	94	70 - 130

Sample: 91056 - HGLSB30-17-0809

Analysis: PCB
QC Batch: 27165
Prep Batch: 23779

Analytical Method: S 8082
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.0147	mg/Kg	0.16	0.100	92	50.4 - 128.7

Sample: 91056 - HGLSB30-17-0809

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane		**0.00220**	**0.00220**	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane		**0.00250**	**0.00250**	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD		**0.00160**	**0.00160**	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT		**0.00160**	**0.00160**	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.0109	mg/Kg	0.16	0.100	68	10 - 171
Deca chlorobiphenyl		0.0163	mg/Kg	0.16	0.100	102	10 - 179

Sample: 91056 - HGLSB30-17-0809

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27214	Date Analyzed:	2006-06-03	Analyzed By:	AG
Prep Batch:	23719	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344

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sample 91056 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352

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sample 91056 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.46	mg/Kg	1	2.67	92	10 - 98.8
Phenol-d5	[29]	2.91	mg/Kg	1	2.67	109	10 - 105
Nitrobenzene-d5		2.82	mg/Kg	1	2.67	106	10 - 114
2-Fluorobiphenyl		2.76	mg/Kg	1	2.67	103	10 - 122
2,4,6-Tribromophenol		2.46	mg/Kg	1	2.67	92	10 - 117
Terphenyl-d14	[30]	3.12	mg/Kg	1	2.67	117	10 - 116

Sample: 91056 - HGLSB30-17-0809

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26830	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS
QC Batch:	26895	Date Analyzed:	2006-05-26	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

[29]High surrogate recovery. Sample non-detect, result bias high.
[30]High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Total Aluminum		**2950**	**2950**	<27.0	mg/Kg	100	0.270	10	0.27	
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536	
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774	
Total Barium		**37.6**	**37.6**	<0.601	mg/Kg	1	0.601	1	0.600628	
Total Beryllium	J	**0.116**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008	J
Total Cadmium	J	**0.0970**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491	J
Total Calcium		**150000**	**150000**	<13.7	mg/Kg	20	0.683	50	0.683	
Total Chromium		**2.92**	**2.92**	<0.125	mg/Kg	1	0.125	1	0.125172	
Total Cobalt		**1.23**	**1.23**	<0.164	mg/Kg	1	0.164	1	0.163974	
Total Copper		**3.51**	**3.51**	<0.268	mg/Kg	1	0.268	0.5	0.26781	
Total Iron		**2330**	**2330**	<20.8	mg/Kg	100	0.208	10	0.208	
Total Lead	J	**0.763**	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424	J
Total Magnesium		**7360**	**7360**	<0.263	mg/Kg	1	0.263	5	0.263	
Total Manganese		**42.3**	**42.3**	<0.295	mg/Kg	1	0.295	1	0.295	
Total Mercury	J	**0.0144**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088	J
Total Nickel	J	**2.35**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898	J
Total Potassium		**1870**	**1870**	<2.91	mg/Kg	10	0.291	50	0.291	
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141	
Total Silver		**1.35**	**1.35**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386	
Total Sodium		**308**	**308**	<0.0820	mg/Kg	1	0.0820	50	0.082	
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512	
Total Vanadium	J	**7.19**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985	J
Total Zinc		**26.7**	**26.7**	<0.124	mg/Kg	1	0.124	1	0.124	

Sample: 91056 - HGLSB30-17-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		140	mg/Kg	1	150	93	62.8 - 115

Sample: 91056 - HGLSB30-17-0809

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26855	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23578	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.715	mg/Kg	10	0.100	72	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.987	mg/Kg	10	0.100	99	71.9 - 123.7

Sample: 91056 - HGLSB30-17-0809

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26968	Date Analyzed:	2006-05-30	Analyzed By:	JG
Prep Batch:	23673	Sample Preparation:	2006-05-30	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	J	**9.44**	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	J
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~5.53~~	<50.0	4.72	µg/Kg	10	0.315	5	0.3154	50.04
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~2.55~~	<10.0	2.74	µg/Kg	10	0.135	1	0.1352	10.04
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	

continued . . .

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sample 91056 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	U	<0.599	<10.0	1.12	µg/Kg	10	0.0599	1	0.0599	
m,p-Xylene	U	<1.75	<10.0	2.59	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	1.02	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	1.65	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	J	**1.15**	<10.0	<1.01	µg/Kg	10	0.101	1	0.1007	4
1,3,5-Trimethylbenzene	JB	~~1.20~~	<10.0	1.93	µg/Kg	10	0.104	1	0.1042	10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	JB	~~1.58~~	<10.0	2.23	µg/Kg	10	0.148	1	0.1482	10.0 U
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	U	<1.13	<10.0	<1.13	µg/Kg	10	0.113	1	0.1128	
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	J	~~1.42~~	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	10.0 U
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	J	**2.23**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	4
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	JB	~~6.29~~	<50.0	14.2	µg/Kg	10	0.258	5	0.2585	50.0 U
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		447	µg/Kg	10	50.0	89	42 - 129
Toluene-d8		488	µg/Kg	10	50.0	98	93 - 107
4-Bromofluorobenzene (4-BFB)		485	µg/Kg	10	50.0	97	78 - 120

Sample: 91057 - HGLSBDUP07

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27165	Date Analyzed:	2006-06-07	Analyzed By:	AG
Prep Batch:	23779	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046

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sample 91057 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.0131	mg/Kg	0.16	0.100	82	50.4 - 128.7

Sample: 91057 - HGLSBDUP07

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane		**0.00410**	**0.00410**	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT		**0.00220**	**0.00220**	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate		**0.00150**	**0.00150**	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.0107	mg/Kg	0.16	0.100	67	10 - 171
Deca chlorobiphenyl		0.0141	mg/Kg	0.16	0.100	88	10 - 179

Sample: 91057 - HGLSBDUP07

Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166

continued . . .

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sample 91057 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.49	mg/Kg	1	2.67	93	10 - 98.8
Phenol-d5	[31]	2.85	mg/Kg	1	2.67	107	10 - 105
Nitrobenzene-d5		2.81	mg/Kg	1	2.67	105	10 - 114
2-Fluorobiphenyl		2.83	mg/Kg	1	2.67	106	10 - 122
2,4,6-Tribromophenol		2.56	mg/Kg	1	2.67	96	10 - 117
Terphenyl-d14	[32]	3.80	mg/Kg	1	2.67	142	10 - 116

[31] High surrogate recovery. Sample non-detect, result bias high.
[32] High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91057 - HGLSBDUP07

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
QC Batch:	26896	Date Analyzed:	2006-05-28	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**5390**	**5390**	<2.70	mg/Kg	10	0.270	10	0.27
Total Antimony	J	**1.49**	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**37.4**	**37.4**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Beryllium	U	<0.00800	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Calcium		**155000**	**155000**	<13.7	mg/Kg	20	0.683	50	0.683
Total Chromium		**2.83**	**2.83**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Cobalt		**1.14**	**1.14**	<0.164	mg/Kg	1	0.164	1	0.163974
Total Copper		**1.70**	**1.70**	<0.268	mg/Kg	1	0.268	0.5	0.26781
Total Iron		**2590**	**2590**	<2.08	mg/Kg	10	0.208	10	0.208
Total Lead		**10.4**	**10.4**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Magnesium		**6110**	**6110**	<0.263	mg/Kg	1	0.263	5	0.263
Total Manganese		**66.7**	**66.7**	<0.295	mg/Kg	1	0.295	1	0.295
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Nickel	J	**2.21**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898
Total Potassium		**709**	**709**	<0.291	mg/Kg	1	0.291	50	0.291
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Sodium		**297**	**297**	<0.0820	mg/Kg	1	0.0820	50	0.082
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512
Total Vanadium	J	**4.19**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985
Total Zinc		**8.12**	**8.12**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91057 - HGLSBDUP07

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	150	95	62.8 - 115

Sample: 91057 - HGLSBDUP07

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Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.681	mg/Kg	10	0.100	68	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.953	mg/Kg	10	0.100	95	71.9 - 123.7

Sample: 91057 - HGLSBDUP07

Analysis: Volatiles
QC Batch: 26968
Prep Batch: 23673

Analytical Method: S 8260B
Date Analyzed: 2006-05-30
Sample Preparation: 2006-05-30

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)		**18.6**	**18.6**	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~4.64~~	<50.0	4.72	µg/Kg	10	0.315	5	0.3154
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958

50.0 U

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sample 91057 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086
Toluene	JB	~~2.72~~	<10.0	2.74	µg/Kg	10	0.135	1	0.1352 10.04
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203
Ethylbenzene	U	<0.599	<10.0	1.12	µg/Kg	10	0.0599	1	0.0599
m,p-Xylene	U	<1.75	<10.0	2.59	µg/Kg	10	0.175	1	0.1754
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898
o-Xylene	U	<0.991	<10.0	1.02	µg/Kg	10	0.0991	1	0.0991
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935
Isopropylbenzene	U	<1.05	<10.0	1.65	µg/Kg	10	0.105	1	0.1048
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142
n-Propylbenzene	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.93	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	2.23	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	<1.13	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	J	**1.59**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	JB	~~5.87~~	<50.0	14.2	µg/Kg	10	0.258	5	0.2585 50.04
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		443	µg/Kg	10	50.0	89	42 - 129
Toluene-d8		491	µg/Kg	10	50.0	98	93 - 107
4-Bromofluorobenzene (4-BFB)		478	µg/Kg	10	50.0	96	78 - 120

Sample: 91058 - HGLSB30-18-0506

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26879	Date Analyzed:	2006-05-26	Analyzed By:	SM
Prep Batch:	23561	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A

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Analysis: RCI Analytical Method: ASTM D 5049-90/4978-95 Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.19	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91058 - HGLSB30-18-0506

Analysis: TCLP Pesticides
QC Batch: 27045
Prep Batch: 23720

Analytical Method: S 8081A
Date Analyzed: 2006-05-30
Sample Preparation: 2006-05-29
TCLP Extraction: 2006-05-26

Prep Method: TCLP 1311
Analyzed By: AG
Prepared By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00430	mg/L	0.025	0.200	86	16.8 - 143
Deca chlorobiphenyl		0.00570	mg/L	0.025	0.200	114	35.8 - 155

Sample: 91058 - HGLSB30-18-0506

Analysis: TCLP Semivolatiles
QC Batch: 27149
Prep Batch: 23542

Analytical Method: S 8270C
Date Analyzed: 2006-05-29
Sample Preparation: 2006-05-24

Prep Method: TCLP 1311
Analyzed By: AG
Prepared By: AG

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TCLP Extraction: 2006-05-23 Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0757	mg/L	1	0.400	19	10 - 110.33
Phenol-d5		0.0542	mg/L	1	0.400	14	10 - 82.08
Nitrobenzene-d5		0.187	mg/L	1	0.400	47	26.72 - 155
2-Fluorobiphenyl		0.207	mg/L	1	0.400	52	35.89 - 150.5
2,4,6-Tribromophenol		0.187	mg/L	1	0.400	47	10 - 204.91
Terphenyl-d14		0.310	mg/L	1	0.400	78	33.98 - 168.85

Sample: 91058 - HGLSB30-18-0506

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**1.37**	**1.37**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury		**0.000170**	**0.000170**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead		**0.183**	**0.183**	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91058 - HGLSB30-18-0506

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Analysis: TCLP Volatiles
QC Batch: 27056
Prep Batch: 23753

Analytical Method: S 8260B
Date Analyzed: 2006-06-02
Sample Preparation: 2006-05-31
TCLP Extraction: 2006-06-01

Prep Method: TCLP 1311
Analyzed By: JG
Prepared By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.7	mg/L	1	50.0	99	70 - 130
Toluene-d8		48.9	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		46.6	mg/L	1	50.0	93	70 - 130

Sample: 91059 - HGLSB30-18-0709

Analysis: PCB
QC Batch: 27165
Prep Batch: 23779

Analytical Method: S 8082
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.0175	mg/Kg	0.16	0.100	109	50.4 - 128.7

Sample: 91059 - HGLSB30-18-0709

Analysis: Pesticides
QC Batch: 27202
Prep Batch: 23779

Analytical Method: S 8081A
Date Analyzed: 2006-06-07
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II		**0.00200**	**0.00200**	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate		**0.0180**	**0.0180**	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor		**0.0119**	**0.0119**	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.0118	mg/Kg	0.16	0.100	74	10 - 171
Deca chlorobiphenyl		0.0150	mg/Kg	0.16	0.100	94	10 - 179

Sample: 91059 - HGLSB30-18-0709

Analysis: Semivolatiles
QC Batch: 27214
Prep Batch: 23719

Analytical Method: S 8270C
Date Analyzed: 2006-06-03
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344

continued . . .

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sample 91059 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352

continued . . .

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sample 91059 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.30	mg/Kg	1	2.67	86	10 - 98.8
Phenol-d5		2.68	mg/Kg	1	2.67	100	10 - 105
Nitrobenzene-d5		2.62	mg/Kg	1	2.67	98	10 - 114
2-Fluorobiphenyl		2.61	mg/Kg	1	2.67	98	10 - 122
2,4,6-Tribromophenol		2.31	mg/Kg	1	2.67	86	10 - 117
Terphenyl-d14	[33]	3.49	mg/Kg	1	2.67	131	10 - 116

Sample: 91059 - HGLSB30-18-0709

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
QC Batch:	26896	Date Analyzed:	2006-05-28	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

[33] High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**9130**	**9130**	<2.70	mg/Kg	10	0.270	10	0.27
Total Antimony	J	**4.51**	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536
Total Arsenic		**3.84**	**3.84**	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**76.2**	**76.2**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Beryllium	U	<0.00800	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Calcium		**32600**	**32600**	<6.83	mg/Kg	10	0.683	50	0.683
Total Chromium		**13.0**	**13.0**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Cobalt		**5.25**	**5.25**	<0.164	mg/Kg	1	0.164	1	0.163974
Total Copper		**10.3**	**10.3**	<0.268	mg/Kg	1	0.268	0.5	0.26781
Total Iron		**15700**	**15700**	<2.08	mg/Kg	10	0.208	10	0.208
Total Lead		**6.36**	**6.36**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Magnesium		**4640**	**4640**	<0.263	mg/Kg	1	0.263	5	0.263
Total Manganese		**250**	**250**	<0.295	mg/Kg	1	0.295	1	0.295
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Nickel		**10.6**	**10.6**	<0.222	mg/Kg	1	0.222	10	0.221898
Total Potassium		**2580**	**2580**	<0.291	mg/Kg	1	0.291	50	0.291
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Sodium		**472**	**472**	<0.0820	mg/Kg	1	0.0820	50	0.082
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512
Total Vanadium		**22.6**	**22.6**	<0.126	mg/Kg	1	0.126	10	0.125985
Total Zinc		**39.2**	**39.2**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91059 - HGLSB30-18-0709

Analysis: TPH DRO
QC Batch: 26810
Prep Batch: 23545

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: N/A
Analyzed By: JL
Prepared By: JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		138	mg/Kg	1	150	92	62.8 - 115

Sample: 91059 - HGLSB30-18-0709

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[34]	0.538	mg/Kg	10	0.100	54	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.784	mg/Kg	10	0.100	78	71.9 - 123.7

Sample: 91059 - HGLSB30-18-0709

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26968	Date Analyzed:	2006-05-30	Analyzed By:	JG
Prep Batch:	23673	Sample Preparation:	2006-05-30	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)		**13.7**	**13.7**	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~4.64~~	<50.0	4.72	µg/Kg	10	0.315	5	0.3154 50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086
Toluene	JB	~~2.71~~	<10.0	2.74	µg/Kg	10	0.135	1	0.1352 10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317

continued . . .

[34]TFT surrogate recovery outside normal limits. ICV/CCV and BFB surrogate recovery show the method to be in control.

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sample 91059 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203
Ethylbenzene	U	<0.599	<10.0	1.12	µg/Kg	10	0.0599	1	0.0599
m,p-Xylene	U	<1.75	<10.0	2.59	µg/Kg	10	0.175	1	0.1754
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898
o-Xylene	U	<0.991	<10.0	1.02	µg/Kg	10	0.0991	1	0.0991
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935
Isopropylbenzene	U	<1.05	<10.0	1.65	µg/Kg	10	0.105	1	0.1048
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142
n-Propylbenzene	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.93	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	2.23	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	<1.13	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	JB	~~4.71~~	<50.0	14.2	µg/Kg	10	0.258	5	0.2585 50.0 U
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		443	µg/Kg	10	50.0	89	42 - 129
Toluene-d8		492	µg/Kg	10	50.0	98	93 - 107
4-Bromofluorobenzene (4-BFB)		484	µg/Kg	10	50.0	97	78 - 120

Method Blank (1)

QC Batch: 26810
Prep Batch: 23545

Date Analyzed: 2006-05-24
QC Preparation: 2006-05-24

Analyzed By: JL
Prepared By: JL

Parameter	Flag	Result	Units	Reporting Limits
DRO		<7.28	mg/Kg	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	42.6 - 130

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Analytical Report

Sample: 91060 - HGLGW27-02-052006

Analysis:	Ag, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Silver	U	<0.000297	<0.00200	<0.000297	mg/L	1	0.000297	0.002	0.000297

Sample: 91060 - HGLGW27-02-052006

Analysis:	As, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Arsenic	U	<0.00255	<0.00500	<0.00255	mg/L	1	0.00255	0.005	0.002551

Sample: 91060 - HGLGW27-02-052006

Analysis:	Ba, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Barium		**0.0170**	**0.0170**	<0.00148	mg/L	1	0.00148	0.01	0.001475

Sample: 91060 - HGLGW27-02-052006

Analysis:	Cd, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Cadmium	U	<0.000595	<0.00100	<0.000595	mg/L	1	0.000595	0.001	0.000595

Sample: 91060 - HGLGW27-02-052006

Analysis:	Cr, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium	U	<0.000238	<0.00500	<0.000238	mg/L	1	0.000238	0.005	0.000238

Sample: 91060 - HGLGW27-02-052006

Analysis: Hg, Dissolved
QC Batch: 27000
Prep Batch: 23693

Analytical Method: S 7470A
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-31

Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 91060 - HGLGW27-02-052006

Analysis: Pb, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Lead	U	<0.00180	<0.00500	<0.00180	mg/L	1	0.00180	0.005	0.001796

Sample: 91060 - HGLGW27-02-052006

Analysis: Se, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Selenium		**0.289**	**0.289**	<0.00232	mg/L	1	0.00232	0.01	0.002318

Sample: 91061 - HGLRB07-052006-TU

Analysis: Ag, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Silver	U	<0.000297	<0.00200	<0.000297	mg/L	1	0.000297	0.002	0.000297

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Sample: 91061 - HGLRB07-052006-TU

Analysis:	As, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Arsenic	U	<0.00255	<0.00500	<0.00255	mg/L	1	0.00255	0.005	0.002551

Sample: 91061 - HGLRB07-052006-TU

Analysis:	Ba, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Barium	U	<0.00148	<0.0100	<0.00148	mg/L	1	0.00148	0.01	0.001475

Sample: 91061 - HGLRB07-052006-TU

Analysis:	Cd, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Cadmium	U	<0.000595	<0.00100	<0.000595	mg/L	1	0.000595	0.001	0.000595

Sample: 91061 - HGLRB07-052006-TU

Analysis:	Cr, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium	U	<0.000238	<0.00500	<0.000238	mg/L	1	0.000238	0.005	0.000238

Sample: 91061 - HGLRB07-052006-TU

Analysis:	Hg, Dissolved	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27000	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23693	Sample Preparation:	2006-05-31	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 91061 - HGLRB07-052006-TU

Analysis: Pb, Dissolved | Analytical Method: S 6010B | Prep Method: S 3005A
QC Batch: 26992 | Date Analyzed: 2006-06-01 | Analyzed By: RR
Prep Batch: 23648 | Sample Preparation: 2006-05-30 | Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Lead	U	<0.00180	<0.00500	<0.00180	mg/L	1	0.00180	0.005	0.001796

Sample: 91061 - HGLRB07-052006-TU

Analysis: Se, Dissolved | Analytical Method: S 6010B | Prep Method: S 3005A
QC Batch: 26992 | Date Analyzed: 2006-06-01 | Analyzed By: RR
Prep Batch: 23648 | Sample Preparation: 2006-05-30 | Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Selenium		**0.0970**	**0.0970**	<0.00232	mg/L	1	0.00232	0.01	0.002318

Sample: 91061 - HGLRB07-052006-TU

Analysis: Semivolatiles | Analytical Method: S 8270C | Prep Method: S 3510C
QC Batch: 27049 | Date Analyzed: 2006-05-29 | Analyzed By: AG
Prep Batch: 23541 | Sample Preparation: 2006-05-24 | Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488

continued . . .

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sample 91061 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571

continued...

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sample 91061 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0227	mg/L	1	0.0800	28	10 - 84.7
Phenol-d5		0.0157	mg/L	1	0.0800	20	10 - 54.9
Nitrobenzene-d5		0.0579	mg/L	1	0.0800	72	10 - 202
2-Fluorobiphenyl		0.0577	mg/L	1	0.0800	72	10 - 199
2,4,6-Tribromophenol		0.0590	mg/L	1	0.0800	74	10 - 141
Terphenyl-d14		0.111	mg/L	1	0.0800	139	10 - 160

Sample: 91061 - HGLRB07-052006-TU

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005

continued...

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sample 91061 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium	U	<0.00200	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 91061 - HGLRB07-052006-TU

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26809	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23544	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**0.330**	<5.00	<0.119	mg/L	0.1	1.19	50	1.19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.3	mg/L	0.1	150	82	66.6 - 111

Sample: 91061 - HGLRB07-052006-TU

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	26951	Date Analyzed:	2006-05-30	Analyzed By:	KB
Prep Batch:	23665	Sample Preparation:	2006-05-30	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.136	<0.500	<0.136	mg/L	5	0.0272	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.487	mg/L	5	0.100	97	80 - 120
4-Bromofluorobenzene (4-BFB)		0.438	mg/L	5	0.100	88	80 - 120

Sample: 91061 - HGLRB07-052006-TU

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26937	Date Analyzed:	2006-05-29	Analyzed By:	JG
Prep Batch:	23650	Sample Preparation:	2006-05-29	Prepared By:	JG

continued . . .

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sample 91061 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699	
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298	
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902	
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402	
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952	
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16	
Acetone	U	<0.854	<10.0	<0.854	µg/L	1	0.854	10	0.8536	
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119	
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764	
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837	
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941	
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484	
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975	
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207	
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888	
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	J	**0.0300**	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	J
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	J	**0.540**	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	J
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	~~**0.200**~~	<1.00	0.310	µg/L	1	0.0736	1	0.0736	1.00 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	JB	~~**0.0300**~~	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	1.00 U
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	U	<0.0566	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	
m,p-Xylene	JB	~~**0.0800**~~	<1.00	0.100	µg/L	1	0.0363	1	0.0363	1.00 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	

continued . . .

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sample 91061 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	JB	~~0.0500~~	<1.00	0.0600	µg/L	1	0.0283	1	0.0283	1.0 U
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	0.0500	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	J	~~0.0700~~	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	1.0 U
1,3,5-Trimethylbenzene	JB	~~0.0600~~	<1.00	0.0900	µg/L	1	0.0557	1	0.0557	1.0 U
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	~~0.0500~~	<1.00	0.0900	µg/L	1	0.0336	1	0.0336	1.0 U
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	~~0.0800~~	<1.00	0.130	µg/L	1	0.0439	1	0.0439	1.0 U
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	JB	~~0.0900~~	<1.00	0.120	µg/L	1	0.0513	1	0.0513	1.0 U
4-Chlorotoluene	JB	~~0.0500~~	<1.00	0.0800	µg/L	1	0.0460	1	0.046	1.0 U
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	J	**0.120**	<1.00	<0.0400	µg/L	1	0.0400	1	0.04	J
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.560	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.1	µg/L	1	50.0	96	70 - 130
Toluene-d8		50.0	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.4	µg/L	1	50.0	91	70 - 130

Sample: 91062 - HGLRB07-052006-AL

Analysis:	RCI (water)	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	27143	Date Analyzed:	2006-06-07	Analyzed By:	SM
Prep Batch:	23801	Sample Preparation:	2006-06-06	Prepared By:	SM
Analysis:	RCI (water)	Analytical Method:	S 1010	Prep Method:	N/A
Analysis:	RCI (water)	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/L	1	10
Hydrogen Cyanide	J	<2.50	mg/L	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.55	s.u.	1	
Flashpoint		0.00	°F	1	

Sample: 91062 - HGLRB07-052006-AL

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311

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QC Batch: 26900
Prep Batch: 23573

Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25
TCLP Extraction: 2006-05-25

Analyzed By: AG
Prepared By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000124	<0.00250	<0.000124	mg/L	0.025	0.00494	0.1	0.00494
gamma-BHC (Lindane)	U	<0.000102	<0.00250	<0.000102	mg/L	0.025	0.00408	0.1	0.00408
beta-BHC	U	<0.000132	<0.00250	<0.000132	mg/L	0.025	0.00530	0.1	0.0053
Heptachlor	U	<0.0000965	<0.00250	<0.0000965	mg/L	0.025	0.00386	0.1	0.00386
delta-BHC	U	<0.0000995	<0.00250	<0.0000995	mg/L	0.025	0.00398	0.1	0.00398
Aldrin	U	<0.0000955	<0.00250	<0.0000955	mg/L	0.025	0.00382	0.1	0.00382
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.00436
gamma-Chlordane	U	<0.0000960	<0.00250	<0.0000960	mg/L	0.025	0.00384	0.1	0.00384
alpha-Chlordane	U	<0.000106	<0.00250	<0.000106	mg/L	0.025	0.00426	0.1	0.00426
Endosulfan I	U	<0.000108	<0.00250	<0.000108	mg/L	0.025	0.00432	0.1	0.00432
p,p-DDE	U	<0.000105	<0.00250	<0.000105	mg/L	0.025	0.00420	0.1	0.0042
Dieldrin	U	<0.000114	<0.00250	<0.000114	mg/L	0.025	0.00456	0.1	0.00456
Endrin	U	<0.000117	<0.00250	<0.000117	mg/L	0.025	0.00468	0.1	0.00468
p,p-DDD	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.00436
Endosulfan II	U	<0.000116	<0.00250	<0.000116	mg/L	0.025	0.00462	0.1	0.00462
p,p-DDT	U	<0.000112	<0.00250	<0.000112	mg/L	0.025	0.00448	0.1	0.00448
Endrin aldehyde	U	<0.000110	<0.00250	<0.000110	mg/L	0.025	0.00440	0.1	0.0044
Endosulfan sulfate	U	<0.0000498	<0.00250	<0.0000498	mg/L	0.025	0.00199	0.1	0.00199
Methoxychlor	U	<0.000117	<0.00250	<0.000117	mg/L	0.025	0.00468	0.1	0.00468
Endrin Ketone	U	<0.000120	<0.00250	<0.000120	mg/L	0.025	0.00480	0.1	0.0048
Toxaphene	U	<0.00104	<0.00250	<0.00104	mg/L	0.025	0.0416	0.1	0.0416
Technical Chlordane	U	<0.00118	<0.00250	<0.00118	mg/L	0.025	0.0474	0.1	0.0474

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00370	mg/L	0.025	0.200	74	16.8 - 143
Deca chlorobiphenyl		0.00480	mg/L	0.025	0.200	96	40.1 - 155

Sample: 91062 - HGLRB07-052006-AL

Analysis: TCLP Semivolatiles
QC Batch: 27047
Prep Batch: 23539

Analytical Method: S 8270C
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-23
TCLP Extraction: 2006-05-23

Prep Method: TCLP 1311
Analyzed By: AG
Prepared By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	J	**0.0458**	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
1,4-Dichlorobenzene (para)	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
o-Cresol	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
m,p-Cresol	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
Hexachloroethane	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
Nitrobenzene	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
Hexachlorobutadiene	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
2,4,6-Trichlorophenol	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
2,4,5-Trichlorophenol	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
2,4-Dinitrotoluene	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01

continued ...

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sample 91062 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dichlorophenoxyacetic acid	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
Hexachlorobenzene	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
2,4,5-Trichlorophenoxyproprionic acid	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01
Pentachlorophenol	U	<0.0100	<0.0500	<0.0100	mg/L	1	0.0100	0.05	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.104	mg/L	1	0.400	26	10 - 110.33
Phenol-d5		0.0839	mg/L	1	0.400	21	10 - 82.08
Nitrobenzene-d5		0.253	mg/L	1	0.400	63	26.72 - 155
2-Fluorobiphenyl		0.261	mg/L	1	0.400	65	35.89 - 150.5
2,4,6-Tribromophenol		0.177	mg/L	1	0.400	44	10 - 204.91
Terphenyl-d14	[1]	0.764	mg/L	1	0.400	191	33.98 - 168.85

Sample: 91062 - HGLRB07-052006-AL

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27026	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23701	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:		Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27131	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**1.36**	**1.36**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00200	<0.0500	<0.00200	mg/L	1	0.00200	0.05	0.002
TCLP Chromium	U	<0.00600	<0.100	<0.00600	mg/L	1	0.00600	0.1	0.006
TCLP Mercury	U	<0.000102	<0.00100	<0.000102	mg/L	1	0.000102	0.001	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91062 - HGLRB07-052006-AL

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27054	Date Analyzed:	2006-06-02	Analyzed By:	JG
Prep Batch:	23751	Sample Preparation:	2006-06-02	Prepared By:	JG
		TCLP Extraction:	2006-06-02	Prepared By:	JG

[1] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00675	<0.0500	<0.00675	mg/L	50	0.000135	0.001	0.000135
1,1-Dichloroethene	U	<0.00680	<0.0500	<0.00680	mg/L	50	0.000136	0.001	0.000136
2-Butanone (MEK)	U	<0.0266	<0.500	<0.0266	mg/L	50	0.000531	0.01	0.000531
Chloroform	U	<0.00705	<0.0500	<0.00705	mg/L	50	0.000141	0.001	0.000141
1,2-Dichloroethane (EDC)	U	<0.00565	<0.0500	<0.00565	mg/L	50	0.000113	0.001	0.000113
Benzene	U	<0.00730	<0.0500	<0.00730	mg/L	50	0.000146	0.001	0.000146
Carbon Tetrachloride	U	<0.00395	<0.0500	<0.00395	mg/L	50	0.0000790	0.001	7.9e-05
Trichloroethene (TCE)	U	<0.00585	<0.0500	<0.00585	mg/L	50	0.000117	0.001	0.000117
Tetrachloroethene (PCE)	U	<0.0135	<0.0500	<0.0135	mg/L	50	0.000270	0.001	0.00027
Chlorobenzene	U	<0.00270	<0.0500	<0.00270	mg/L	50	0.0000540	0.001	5.4e-05
1,4-Dichlorobenzene (para)	U	<0.0108	<0.0500	<0.0108	mg/L	50	0.000217	0.001	0.000217

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.4	mg/L	1	50.0	95	70 - 130
Toluene-d8		48.9	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		47.0	mg/L	1	50.0	94	70 - 130

Sample: 91063 - TB-052006

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26937	Date Analyzed:	2006-05-29	Analyzed By:	JG
Prep Batch:	23650	Sample Preparation:	2006-05-29	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone		**39.3**	**39.3**	<0.854	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)		**5.30**	**5.30**	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	J	**2.03**	<5.00	<0.689	µg/L	1	0.689	5	0.6888
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557
Chloroform	J	**0.0500**	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846

continued ...

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sample 91063 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	**0.290**	<1.00	0.310	µg/L	1	0.0736	1	0.0736	J
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	U	<0.0566	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	
m,p-Xylene	JB	**0.110**	<1.00	0.100	µg/L	1	0.0363	1	0.0363	J
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	JB	**0.0300**	<1.00	0.0600	µg/L	1	0.0283	1	0.0283	J
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	0.0500	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	J	**0.0600**	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	J
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.0900	µg/L	1	0.0557	1	0.0557	
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	**0.0400**	<1.00	0.0900	µg/L	1	0.0336	1	0.0336	J
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	**0.0500**	<1.00	0.130	µg/L	1	0.0439	1	0.0439	J
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	JB	**0.0600**	<1.00	0.120	µg/L	1	0.0513	1	0.0513	J
4-Chlorotoluene	U	<0.0460	<1.00	0.0800	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	U	<0.0400	<1.00	<0.0400	µg/L	1	0.0400	1	0.04	
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.560	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.6	µg/L	1	50.0	97	70 - 130
Toluene-d8		49.6	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		45.5	µg/L	1	50.0	91	70 - 130

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EPA Level 3
DATA VALIDATION REPORT

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Project No. AFC002-037-VAL
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Dates of Sampling: May 15-16, 2006

Prepared for

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Reviewed and approved,

Thomas S. Davis, Principal — 1/16/07 Date

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Attachments

Attachment 1 Data Qualifier Flag Definitions
Attachment 2 Summary Table of Data Qualifier Flags
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A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; *"Functional Guidelines for Evaluating Inorganics Analyses,"* as revised, 2004; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer.
2. Because of laboratory deviation from the designated method.
3. Because the data may not meet the criteria listed in the reference above.
4. By the professional judgment of the reviewer.

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package consisting of a seven-page case narrative, a 158-page laboratory report and a 628-page analytical data package, from TraceAnalysis, Inc. of Lubbock, Texas, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

All results were acceptable, although some received qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 8260B	Method 8270C	TPH-GRO	TPH-DRO
HGLSP10-03-2022	90817	Soil	X	X	X	X
HGLSB10-04-0810	90818	Soil	X	X	X	X
HGLSB10-05-1011	90819	Soil	X	X	X	X
HGLSB10-06-1112	90820	Soil	X	X	X	X
HGLSB10-07-1011	90821	Soil	X	X	X	X
HGLSB10-07-1314	90822	Soil	X	X	X	X
SBDup01	90825	Soil	X	X	X	X
TB-001	90826	Water	X			
HGLSB27-03-1113	90827	Soil	X	X	X	X
HGLSB27-03-1618	90828	Soil	X	X	X	X
HGLSB27-02-0608	90829	Soil	X	X	X	X
HGLSB27-02-1113	90830	Soil	X	X	X	X
HGLSB27-01-0608	90831	Soil	X	X	X	X
HGLSB27-04-0810	90832	Soil	X	X	X	X
SBDup02	90833	Soil	X	X	X	X
SBDup03	90834	Soil				
HGLGW27-03-051606	90835	Water	X	X	X	X
HGLSD27-01-0002	90836	Soil	X	X	X	X
HGLGW27-02-051606	90837	Water	X	X	X	X
GWDup-01	90838	Water	X	X	X	X
RB05-1506	90839	Water	X	X	X	X
RB05-051606	90840	Water	X	X	X	X

Sample Identification	Laboratory Identification	Methods 6010B/7470/7471	Methods 900/901		
HGLSP10-03-2022	90817	X			
HGLSB10-04-0810	90818	X			
HGLSB10-05-1011	90819	X			
HGLSB10-06-1112	90820	X			
HGLSB10-07-1011	90821	X			
HGLSB10-07-1314	90822	X			
SBDup01	90825	X			
TB-001	90826				
HGLSB27-03-1113	90827	X	NR		
HGLSB27-03-1618	90828	X	NR		
HGLSB27-02-0608	90829	X	NR		

Sample Identification	Laboratory Identification	Methods 6010B/7470/7471	Methods 900/901		
HGLSB27-02-1113	90830	X	NR		
HGLSB27-01-0608	90831	X	NR		
HGLSB27-04-0810	90832	X	NR		
SBDup02	90833	X			
SBDup03	90834		NR		
HGLGW27-03-051606	90835	X	NR		
HGLSD27-01-0002	90836	X			
HGLGW27-02-051606	90837	X	NR		
GWDup-01	90838	X	NR		
RB05-1506	90839	X			
RB05-051606	90840	X			

Key:

Method 8260B	=	Volatile organics by GC/MS
Method 8270C	=	Semivolatile organics by GC/MS (Aniline only)
TPH-GRO	=	Total Petroleum Hydrocarbons-Gasoline Range Organics by GC
TPH-DRO	=	Total Petroleum Hydrocarbons-Diesel Range Organics by GC
Methods 6010B/7470/7471	=	Metals by ICP/CVAA
Methods 900/901	=	Radiochemistry
NR	=	Not reported – Requested on COC, lab reported and QBD validated under separate cover

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
Method 8260B	6051928	Debbie Copsey	Thomas Davis
Method 8270C	6051928	Debbie Copsey	Thomas Davis
TPH-GRO	6051928	Debbie Copsey	Thomas Davis
TPH-DRO	6051928	Debbie Copsey	Thomas Davis
Methods 6010B/7470/7471	6051928	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The date and time relinquished and the date and time received by the laboratory do not match on the COC form. However, the shipping waybill was referenced and appropriate physical custody could be documented by obtaining shipping information from the courier service, so no data qualifier flags are recommended.

The COC contained several corrections that were not dated and initialed. No data qualifier flags are recommended, however, GLP stipulate that all corrections be dated and initialed.

E. Review of Volatile Organic Analyses by GC/MS

EPA Method 8260B

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment, field, and trip blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Several target analytes were detected in the six method blanks and the trip blank associated with all samples:

QC Batch No.	No. Analytes Detected	Common Lab Contaminants Found
26749	9	Acetone, Methylene Chloride, Toluene
26777	3	Toluene
26796	6	Methylene Chloride, Toluene
26849	9	Toluene
26929	4	Methylene Chloride, Toluene
27108	7	Toluene
Trip Blank	7	Methylene Chloride, Toluene

The analytes that were not common laboratory contaminants were evaluated in accordance with this decision tree, with any data qualifier flags listed in Table 3:

- If the sample result was less than five times (5X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 5X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.
- If the sample result was greater than 5X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

The common laboratory contaminants were evaluated in accordance with the following decision tree, with any data qualifier flags also listed in Table 3:

- If the sample result was less than ten times (10X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 10X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.
- If the sample result was greater than 10X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSP10-03-2022	Toluene	Method blank Trip blank	MB=3.76 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-04-0810	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-04-0810	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-04-0810	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB10-04-0810	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSB10-05-1011	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-05-1011	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-06-1112	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-06-1112	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB10-06-1112	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB10-07-1011	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-07-1011	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-07-1011	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB10-07-1314	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-07-1314	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-07-1314	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
SBDup01	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
SBDup01	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB27-03-1618	Methylene chloride	Method blank Trip blank	MB=7.48 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB27-03-1618	Toluene	Method blank Trip blank	MB=3.11 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB27-03-1618	n-Butylbenzene	Method blank	MB=2.24	MB=ND	10.0	U
HGLSB27-03-1618	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB27-02-0608	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSB27-02-0608	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB27-02-0608	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB27-02-0608	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB27-02-0608	n-Propylbenzene	Method blank	MB=1.46	MB=ND	10.0	U
HGLSB27-02-0608	1,3,5-Trimethylbenzene	Method blank	MB=1.36	MB=ND	10.0	U
HGLSB27-04-0810	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB27-04-0810	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB27-04-0810	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB27-04-0810	n-Propylbenzene	Method blank	MB=1.46	MB=ND	10.0	U
HGLSB27-04-0810	1,3,5-Trimethylbenzene	Method blank	MB=1.36	MB=ND	10.0	U
HGLSB27-04-0810	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSD27-01-0002	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSD27-01-0002	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	13.0	U
HGLSD27-01-0002	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSD27-01-0002	n-Propylbenzene	Method blank	MB=1.46	MB=ND	10.0	U
HGLSD27-01-0002	1,3,5-Trimethylbenzene	Method blank	MB=1.36	MB=ND	10.0	U
HGLSD27-01-0002	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
RB05-1506	Toluene	Trip blank	TB=3.76	TB=ND	1.00	U
RB05-1506	Ethylbenzene	Trip blank	TB=0.370	TB=ND	1.00	U
RB05-1506	m,p-Xylene	Trip blank	TB=0.450	TB=ND	1.00	U
RB05-051606	Benzene	Trip blank	TB=3.78	TB=ND	1.00	U
RB05-051606	Toluene	Trip blank	TB=3.76	TB=ND	1.00	U
RB05-051606	Ethylbenzene	Trip blank	TB=0.370	TB=ND	1.00	U
RB05-051606	m,p-Xylene	Trip blank	TB=0.450	TB=ND	1.00	U
HGLSP10-03-2022	Benzene	Trip blank	TB=3.78	TB=ND	10.0	U
HGLSP10-03-2022	Ethylbenzene	Trip blank	TB=0.370	TB=ND	10.0	U
HGLSP10-03-2022	m,p-Xylene	Trip blank	TB=0.450	TB=ND	10.0	U
HGLSB10-04-0810	m,p-Xylene	Trip blank	TB=0.450	TB=ND	10.0	U
HGLSB27-03-1618	Ethylbenzene	Trip blank	TB=0.370	TB=ND	10.0	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 4, these results have been flagged "J" to indicate an estimated value.

Sample HGLSB27-03-1113 contained target analytes that were reported at concentrations greater than the highest calibration standard. These results have been flagged "J" to indicate an estimated value in Table 4.

Table 4. VOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB10-04-0810	Naphthalene	Value < RL	Value=6.76	RL=50.0	6.76	J
HGLSB10-05-1011	p-Isopropylbenzene	Value < RL	Value=1.21	RL=10.0	1.21	J
HGLSB10-05-1011	n-Butylbenzene	Value < RL	Value=1.80	RL=10.0	1.80	J
HGLSB10-05-1011	Naphthalene	Value < RL	Value=4.76	RL=50.0	4.76	J
HGLSB10-06-1112	n-Butylbenzene	Value < RL	Value=1.45	RL=10.0	1.45	J
HGLSB10-06-1112	Naphthalene	Value < RL	Value=3.77	RL=50.0	3.77	J
HGLSB10-07-1011	Naphthalene	Value < RL	Value=3.16	RL=50.0	3.16	J
HGLSB10-07-1314	Naphthalene	Value < RL	Value=2.78	RL=50.0	2.78	J
SBDup01	Naphthalene	Value < RL	Value=4.55	RL=50.0	4.55	J
TB-001	Methylene chloride	Value < RL	Value=2.18	RL=5.00	2.18	J
TB-001	Ethylbenzene	Value < RL	Value=0.370	RL=1.00	0.370	J
TB-001	m,p-Xylene	Value < RL	Value=0.450	RL=1.00	0.450	J
HGLSB27-03-1113	Ethylbenzene	Value over calibration range	NA	NA	3490	J
HGLSB27-03-1113	m,p-Xylene	Value over calibration range	NA	NA	5170	J
HGLSB27-03-1113	o-Xylene	Value over calibration range	NA	NA	2480	J

Table 4. VOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB27-03-1113	n-Propylbenzene	Value over calibration range	NA	NA	1410	J
HGLSB27-03-1113	1,3,5-Trimethylbenzene	Value over calibration range	NA	NA	2450	J
HGLSB27-03-1113	1,2,4-Trimethylbenzene	Value over calibration range	NA	NA	2310	J
HGLSB27-03-1618	n-Propylbenzene	Value < RL	Value=1.08	RL=10.0	1.08	J
HGLSB27-03-1618	1,2,4-Trimethylbenzene	Value < RL	Value=2.67	RL=10.0	2.67	J
HGLSB27-03-1618	sec-Butylbenzene	Value < RL	Value=2.53	RL=10.0	2.53	J
HGLSB27-03-1618	p-Isopropyltoluene	Value < RL	Value=2.60	RL=10.0	2.60	J
HGLSB27-02-0608	o-Xylene	Value < RL	Value=4.44	RL=10.0	4.44	J
HGLSB27-02-0608	Isopropylbenzene	Value < RL	Value=2.62	RL=10.0	2.62	J
HGLSB27-02-0608	p-Isopropyltoluene	Value < RL	Value=3.92	RL=10.0	3.92	J
HGLSB27-02-0608	n-Butylbenzene	Value < RL	Value=6.37	RL=10.0	6.37	J
HGLSB27-02-0608	Naphthalene	Value < RL	Value=32.6	RL=50.0	32.6	J
HGLSB27-01-0608	m,p-Xylene	Value < RL	Value=3.12	RL=10.0	3.12	J
HGLSB27-01-0608	o-Xylene	Value < RL	Value=1.62	RL=10.0	1.62	J
HGLSB27-01-0608	Isopropylbenzene	Value < RL	Value=2.35	RL=10.0	2.35	J
HGLSB27-01-0608	1,2,4-Trimethylbenzene	Value < RL	Value=5.95	RL=10.0	5.95	J
HGLSB27-01-0608	Naphthalene	Value < RL	Value=14.1	RL=50.0	14.1	J
HGLSB27-04-0810	m,p-Xylene	Value < RL	Value=2.43	RL=10.0	2.43	J
HGLSB27-04-0810	o-Xylene	Value < RL	Value=1.76	RL=10.0	1.76	J
HGLSB27-04-0810	1,2,4-Trimethylbenzene	Value < RL	Value=4.16	RL=10.0	4.16	J
HGLSB27-04-0810	p-Isopropylbenzene	Value < RL	Value=1.48	RL=10.0	1.48	J
HGLSB27-04-0810	n-Butylbenzene	Value < RL	Value=1.83	RL=10.0	1.83	J
HGLSB27-04-0810	Naphthalene	Value < RL	Value=8.71	RL=50.0	8.71	J
SBDup02	Methylene chloride	Value < RL	Value=50.6	RL=500	50.6	J
SBDup02	Benzene	Value < RL	Value=42.8	RL=50.0	42.8	J
HGLGW27-03-051606	1,2-Dichloroethane	Value < RL	Value=52.4	RL=100	52.4	J
HGLGW27-03-051606	sec-Butylbenzene	Value < RL	Value=51.6	RL=100	51.6	J
HGLGW27-03-051606	p-Isopropyltoluene	Value < RL	Value=39.8	RL=100	39.8	J
HGLGW27-03-051606	n-Butylbenzene	Value < RL	Value=44.8	RL=100	44.8	J
HGLGW27-03-051606	Naphthalene	Value < RL	Value=163	RL=500	163	J

Table 4. VOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSD27-01-0002	Chloroform	Value < RL	Value=0.580	RL=10.0	0.580	J
HGLSD27-01-0002	Benzene	Value < RL	Value=5.42	RL=10.0	5.42	J
HGLSD27-01-0002	m,p-Xylene	Value < RL	Value=4.78	RL=10.0	4.78	J
HGLSD27-01-0002	o-Xylene	Value < RL	Value=2.28	RL=10.0	2.28	J
HGLSD27-01-0002	1,2,4-Trimethylbenzene	Value < RL	Value=3.68	RL=10.0	3.68	J
HGLSD27-01-0002	p-Isopropyltoluene	Value < RL	Value=1.66	RL=10.0	1.66	J
HGLSD27-01-0002	n-Butylbenzene	Value < RL	Value=2.10	RL=10.0	2.10	J
HGLSD27-01-0002	Naphthalene	Value < RL	Value=7.39	RL=50.0	7.39	J
HGLGW27-02-051606	Isopropylbenzene	Value < RL	Value=82.0	RL=100	82.0	J
HGLGW27-02-051606	sec-Butylbenzene	Value < RL	Value=28.0	RL=100	28.0	J
HGLGW27-02-051606	p-Isopropyltoluene	Value < RL	Value=20.2	RL=100	20.2	J
HGLGW27-02-051606	n-Butylbenzene	Value < RL	Value=33.2	RL=100	33.2	J
HGLGW27-02-051606	Naphthalene	Value < RL	Value=133	RL=500	133	J
GWDup-01	Acetone	Value < RL	Value=850	RL=1000	850	J
GWDup-01	p-Isopropyltoluene	Value < RL	Value=75.6	RL=100	75.6	J
GWDup-01	n-Butylbenzene	Value < RL	Value=95.6	RL=100	95.6	J
GWDup-01	Naphthalene	Value < RL	Value=232	RL=500	232	J
RB05-1506	Chloroform	Value < RL	Value=0.660	RL=1.00	0.660	J
RB05-1506	n-Butylbenzene	Value < RL	Value=0.0500	RL=1.00	0.0500	J
RB05-051606	n-Butylbenzene	Value < RL	Value=0.0500	RL=1.00	0.0500	J

8. Field Duplicates

Three sets of field duplicates were collected:

- Sample SBDup01 is a duplicate of Sample HGLSP10-03-2022,
- Sample SBDup02 is a duplicate of Sample HGLSB27-03-1113, and
- Sample GWDup-01 is a duplicate of Sample HGLGW27-03-051606.

All analytes, except those listed in Table 5, were reported as not detected.

Table 5. VOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSP10-03-2022	SBDup01	
Naphthalene	ND	4.55	NC

Compound	Sample Result	Duplicate Result	RPD
	HGLSB27-03-1113	SBDup02	
Methylene chloride	ND	50.6	NC
Benzene	34.4	42.8	21.8
Toluene	1500	1100	30.8
Ethylbenzene	3490	2880	19.2
m,p-Xylene	5170	5340	3.2
o-Xylene	2480	2320	6.7
Isopropylbenzene	1410	1080	26.5
n-Propylbenzene	2450	1740	33.9
1,3,5-Trimethylbenzene	2310	1910	19.0
1,2,4-Trimethylbenzene	5850	5950	1.7
sec-Butylbenzene	1330	874	41.4
p-Isopropyltoluene	1070	730	37.8
n-Butylbenzene	1210	932	26.0
Naphthalene	1050	1130	7.3

Compound	Sample Result	Duplicate Result	RPD
	HGLGW27-03-051606	GWDup-01	
Acetone	ND	850	NC
1,2-Dichloroethane	52.4	ND	NC
Benzene	2360	2800	17.1
Toluene	1940	2430	22.4
Ethylbenzene	2330	3080	27.7
m,p-Xylene	1460	1930	27.7
o-Xylene	1020	1390	30.7
Isopropylbenzene	230	374	47.7
n-Propyltoluene	264	443	50.6
1,3,5-Trimethylbenzene	266	427	46.5
1,2,4-Trimethylbenzene	940	1460	43.3
sec-Butylbenzene	51.6	105	68.2
p-Isopropyltoluene	39.8	75.6	62.0
n-Butylbenzene	44.8	95.6	72.4

Compound	Sample Result	Duplicate Result	RPD
	HGLGW27-03-051606	GWDup-01	
Naphthalene	163	232	34.9

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

F. Review of Semivolatile Organic Analyses by GC/MS

EPA Method 8270C

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: A single surrogate was out of criteria in the base/neutral fraction of Samples SBDup01, HGLSB27-03-1618, HGLSB27-02-0608, HGLSB27-02-1113, HGLSB27-04-0810, HGLSD27-01-0002, and HGLSB27-03-1113. *Functional Guidelines* states that "data are not qualified . . . unless two or more semivolatile surrogates, within the same fraction . . . are out of specification". No data qualifier flags are recommended because the other surrogates were in criteria.

The percent recoveries for two surrogates in a fraction were out of the criteria in Sample HGLSB27-03-1113, SBDup02, and HGLSB27-02-0608. Since the recoveries indicated a high bias and all sample results in the fraction were not detected, no data qualifier flags are recommended.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 6, these results have been flagged "J" to indicate an estimated value.

Table 6. SVOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB10-07-1011	Fluoranthene	Value < RL	Value=0.116	RL=0.250	0.116	J
HGLGW27-03-051606	4-Methylphenol/3-Methylphenol	Value < RL	Value=0.00240	RL=0.0050	0.00240	J
HGLSD27-01-0002	Naphthalene	Value < RL	Value=0.0570	RL=0.250	0.0570	J
HGLSD27-01-0002	Acenaphthene	Value < RL	Value=0.124	RL=0.250	0.124	J
HGLSD27-01-0002	4-Nitrophenol	Value < RL	Value=0.0530	RL=0.250	0.0530	J

8. Field Duplicates

Three sets of field duplicates were collected:

- Sample SBDup01 is a duplicate of Sample HGLSP10-03-2022,
- Sample SBDup02 is a duplicate of Sample HGLSB27-03-1113, and
- Sample GWDup-01 is a duplicate of Sample HGLGW27-03-051606.

Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 7, were reported as not detected.

Table 7. SVOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSP10-03-2022	SBDup01	
	All ND	All ND	

Compound	Sample Result	Duplicate Result	RPD
	HGLSB27-03-1113	SBDup02	
Naphthalene	0.747	0.750	0.4
1-Methylnaphthalene	1.42	1.58	10.7
2-Methylnaphthalene	1.44	1.60	10.5

Compound	Sample Result	Duplicate Result	RPD
	HGLGW27-03-051606	GWDup-01	
4-Methylphenol/3-Methylphenol	0.00240	ND	NC
Acetophenone	0.0178	0.0228	24.6
Naphthalene	0.0421	0.0557	27.8
1-Methylnaphthalene	0.0232	0.0298	24.9
2-Methylnaphthalene	0.0153	0.0211	31.9

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

G. Review of Gasoline Range Organics (GRO) by GC

EPA Method 8015 Modified

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Gasoline range organics were detected in three of the method blanks associated with all samples, at levels of 0.341 in QC Batch No. 26698, 0.171 in QC Batch No. 26781, and 2.50 in QC Batch No. 26822. If the sample result was less than five times (5X) the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value and listed in Table 8. If the sample result was greater than 5X the blank concentration or was reported as not detected, no data qualifier flags are recommended.

Table 8. TPH-GRO Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSD27-01-0002	GRO	Method blank	MB=2.50	MB=ND	2.89	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: The percent recoveries for one or both surrogates were out of the criteria in Samples HGLSB10-07-1314, HGLSB27-03-1113, HGLSB27-02-1113, HGLSB27-02-0608, SBDup02, HGLGW27-02-051606, RB05-1506, RB05-051606, and SBDup01 due to large dilutions. Since all other QC checks were in criteria, no data qualifier flags are recommended.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: A single matrix spike for GRO in QC Batch No. 26698 was out of the criteria of 56 to 143 percent at 268 percent. Since all other accuracy measurements (e.g., the other matrix spike, the SSCV, and calibration verifications) were acceptable, no data qualifier flags are recommended.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Four sets of field duplicates were collected:

- Sample SBDup01 is a duplicate of Sample HGLSP10-03-2022,
- Sample SBDup02 is a duplicate of Sample HGLSB27-03-1113, and
- Sample GWDup-01 is a duplicate of Sample HGLGW27-03-051606.

Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 9, were reported as not detected.

Table 9. TPH-GRO Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSP10-03-2022	SBDup01	
GRO	ND	ND	NC

Compound	Sample Result	Duplicate Result	RPD
	HGLSB27-03-1113	SBDup02	
GRO	419	282	39.1

Compound	Sample Result	Duplicate Result	RPD
	HGLGW27-03-051606	GWDup-01	
GRO	24.2	23.6	2.5

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

H. Review of Diesel Range Organics (DRO) Analyses by GC

EPA Method 8015 Modified

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Diesel range organics were detected in the method blank associated with Sample RB05-1506. If the sample result was less than five times (5X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit, as listed in Table 10. If the sample result was greater than 5X the blank concentration or was reported as not detected, no data qualifier flags are recommended.

Table 10. TPH-DRO Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
RB05-1506	DRO	Method blank	MB=0.510	MB=ND	5.00	U
RB05-051606	DRO	Method blank	MB=0.510	MB=ND	5.00	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: The percent recovery for the surrogate n-triacontane was out of the criteria of62.8 to 115 percent at 121 percent in Sample HGLSD27-01-0002 due to a large concentration of analyte. Since all other QC checks were in criteria, no data qualifier flags are recommended.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 11, these results have been flagged "J" to indicate an estimated value.

Table 11. TPH-DRO Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB10-07-1011	DRO	Value < RL	Value=12.8	RL=50.0	12.8	J
HGLSB10-07-1314	DRO	Value < RL	Value=9.48	RL=50.0	9.48	J
SBDup01	DRO	Value < RL	Value=12.8	RL=50.0	12.8	J
HGLGW27-02-051606	DRO	Value < RL	Value=4.17	RL=5.00	4.17	J

8. Field Duplicates

Three sets of field duplicates were collected:

- Sample SBDup01 is a duplicate of Sample HGLSP10-03-2022,
- Sample SBDup02 is a duplicate of Sample HGLSB27-03-1113, and
- Sample GWDup-01 is a duplicate of Sample HGLGW27-03-051606.

Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 12, were reported as not detected.

Table 12. TPH-DRO Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSP10-03-2022	SBDup01	
DRO	ND	12.8	NC

Compound	Sample Result	Duplicate Result	RPD
	HGLSB27-03-1113	SBDup02	
DRO	435	288	40.7

Compound	Sample Result	Duplicate Result	RPD
	HGLGW27-03-051606	GWDup-01	
DRO	29.1	60.2	69.7

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

I. Review of Metals Analyses by ICP and AA

EPA Method 6000 Series and 7471

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that the proper number of standards were used and the correlation coefficient criteria was met All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

5. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

6. Sample Duplicates

Sample duplicates were analyzed as required by the referenced method and all RPDs were within acceptable criteria.

7. CVAA Special Requirements

All special criteria for cold vapor atomic absorption analysis were performed at a frequency required by the referenced method and were within acceptable criteria.

8. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and digestion procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 13, these results have been flagged "J" to indicate an estimated value.

Table 13. Metals Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB10-05-1011	Mercury	Value < RL	Value=0.0120	RL=0.0400	0.0120	J
HGLSB10-07-1314	Arsenic	Value < RL	Value=1.34	RL=2.00	1.34	J
SBDup01	Mercury	Value < RL	Value=0.0270	RL=0.0400	0.0270	J
HGLSB27-04-0810	Lead	Value < RL	Value=0.886	RL=1.00	0.886	J
HGLGW27-02-051606	Chromium	Value < RL	Value=0.0030	RL=0.0100	0.0030	J
RB05-1506	Barium	Value < RL	Value=0.0020	RL=0.0100	0.0020	J

9. Field Duplicates

Three sets of field duplicates were collected:

- Sample SBDup01 is a duplicate of Sample HGLSP10-03-2022,
- Sample SBDup02 is a duplicate of Sample HGLSB27-03-1113, and
- Sample GWDup-01 is a duplicate of Sample HGLGW27-03-051606.

Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 14, were reported as not detected.

Table 14. Metals Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSP10-03-2022	SBDup01	
Arsenic	1.73	3.36	64.0
Barium	43.8	46.3	5.5
Chromium	7.73	9.77	23.3
Mercury	0.0460	0.0270	52.1
Lead	22.23	47.1	71.7

Compound	Sample Result	Duplicate Result	RPD
	HGLSB27-03-1113	SBDup02	
Barium	60.2	49.9	18.7
Chromium	4.76	3.72	24.5
Lead	6.26	4.46	33.6

Compound	Sample Result	Duplicate Result	RPD
	HGLGW27-03-051606	GWDup-01	
Barium, Dissolved	0.0220	0.0230	4.4
Barium, Total	0.0110	0.0360	106
Selenium, Dissolved	0.0970	0.0810	18.0
Silver, Total	0.0220	0.0140	44.4

Key: ND = Not detected
NC = Not calculable

10. Laboratory Contact

There was no verbal or written communication with the laboratory.

11. Other Comments

None.

12. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Inorganics

U = The analyte was analyzed for but not detected above the numerical quantitation limit. The numerical value may be either a detection limit or a quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils and Waters
Dates of Sampling: May 15-16, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSP10-03-2022	Benzene	Trip blank	TB=3.78	TB=ND	10.0	U
HGLSP10-03-2022	Ethylbenzene	Trip blank	TB=0.370	TB=ND	10.0	U
HGLSP10-03-2022	m,p-Xylene	Trip blank	TB=0.450	TB=ND	10.0	U
HGLSP10-03-2022	Toluene	Method blank Trip blank	MB=3.76 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-04-0810	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB10-04-0810	m,p-Xylene	Trip blank	TB=0.450	TB=ND	10.0	U
HGLSB10-04-0810	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-04-0810	Naphthalene	Value < RL	Value=6.76	RL=50.0	6.76	J
HGLSB10-04-0810	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSB10-04-0810	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-05-1011	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-05-1011	Naphthalene	Value < RL	Value=4.76	RL=50.0	4.76	J
HGLSB10-05-1011	n-Butylbenzene	Value < RL	Value=1.80	RL=10.0	1.80	J
HGLSB10-05-1011	p-Isopropylbenzene	Value < RL	Value=1.21	RL=10.0	1.21	J
HGLSB10-05-1011	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-06-1112	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB10-06-1112	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-06-1112	Naphthalene	Value < RL	Value=3.77	RL=50.0	3.77	J
HGLSB10-06-1112	n-Butylbenzene	Value < RL	Value=1.45	RL=10.0	1.45	J
HGLSB10-06-1112	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-07-1011	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB10-07-1011	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-07-1011	Naphthalene	Value < RL	Value=3.16	RL=50.0	3.16	J
HGLSB10-07-1011	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB10-07-1314	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB10-07-1314	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB10-07-1314	Naphthalene	Value < RL	Value=2.78	RL=50.0	2.78	J
HGLSB10-07-1314	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
SBDup01	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
SBDup01	Naphthalene	Value < RL	Value=4.55	RL=50.0	4.55	J
SBDup01	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
TB-001	Ethylbenzene	Value < RL	Value=0.370	RL=1.00	0.370	J
TB-001	m,p-Xylene	Value < RL	Value=0.450	RL=1.00	0.450	J
TB-001	Methylene chloride	Value < RL	Value=2.18	RL=5.00	2.18	J
HGLSB27-03-1113	Ethylbenzene	Value over calibration range	NA	NA	3490	J
HGLSB27-03-1113	m,p-Xylene	Value over calibration range	NA	NA	5170	J
HGLSB27-03-1113	o-Xylene	Value over calibration range	NA	NA	2480	J
HGLSB27-03-1113	n-Propylbenzene	Value over calibration range	NA	NA	1410	J
HGLSB27-03-1113	1,3,5-Trimethylbenzene	Value over calibration range	NA	NA	2450	J
HGLSB27-03-1113	1,2,4-Trimethylbenzene	Value over calibration range	NA	NA	2310	J
HGLSB27-03-1618	1,2,4-Trimethylbenzene	Value < RL	Value=2 67	RL=10.0	2.67	J
HGLSB27-03-1618	Ethylbenzene	Trip blank	TB=0.370	TB=ND	10.0	U
HGLSB27-03-1618	Methylene chloride	Method blank Trip blank	MB=7.48 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB27-03-1618	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB27-03-1618	n-Butylbenzene	Method blank	MB=2.24	MB=ND	10.0	U
HGLSB27-03-1618	n-Propylbenzene	Value < RL	Value=1.08	RL=10.0	1.08	J
HGLSB27-03-1618	p-Isopropyltoluene	Value < RL	Value=2.60	RL=10.0	2.60	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB27-03-1618	sec-Butylbenzene	Value < RL	Value=2.53	RL=10.0	2.53	J
HGLSB27-03-1618	Toluene	Method blank Trip blank	MB=3.11 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB27-02-0608	1,3,5-Trimethylbenzene	Method blank	MB=1.36	MB=ND	10.0	U
HGLSB27-02-0608	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB27-02-0608	Isopropylbenzene	Value < RL	Value=2.62	RL=10.0	2.62	J
HGLSB27-02-0608	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB27-02-0608	Naphthalene	Value < RL	Value=32.6	RL=50.0	32.6	J
HGLSB27-02-0608	n-Butylbenzene	Value < RL	Value=6.37	RL=10.0	6.37	J
HGLSB27-02-0608	n-Propylbenzene	Method blank	MB=1.46	MB=ND	10.0	U
HGLSB27-02-0608	o-Xylene	Value < RL	Value=4.44	RL=10.0	4.44	J
HGLSB27-02-0608	p-Isopropyltoluene	Value < RL	Value=3.92	RL=10.0	3.92	J
HGLSB27-02-0608	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSB27-02-0608	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
HGLSB27-01-0608	1,2,4-Trimethylbenzene	Value < RL	Value=5.95	RL=10.0	5.95	J
HGLSB27-01-0608	Isopropylbenzene	Value < RL	Value=2.35	RL=10.0	2.35	J
HGLSB27-01-0608	m,p-Xylene	Value < RL	Value=3.12	RL=10.0	3.12	J
HGLSB27-01-0608	Naphthalene	Value < RL	Value=14.1	RL=50.0	14.1	J
HGLSB27-01-0608	o-Xylene	Value < RL	Value=1.62	RL=10.0	1.62	J
HGLSB27-04-0810	1,2,4-Trimethylbenzene	Value < RL	Value=4.16	RL=10.0	4.16	J
HGLSB27-04-0810	1,3,5-Trimethylbenzene	Method blank	MB=1.36	MB=ND	10.0	U
HGLSB27-04-0810	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSB27-04-0810	m,p-Xylene	Value < RL	Value=2.43	RL=10.0	2.43	J
HGLSB27-04-0810	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSB27-04-0810	Naphthalene	Value < RL	Value=8.71	RL=50.0	8.71	J
HGLSB27-04-0810	n-Butylbenzene	Value < RL	Value=1.83	RL=10.0	1.83	J
HGLSB27-04-0810	n-Propylbenzene	Method blank	MB=1.46	MB=ND	10.0	U
HGLSB27-04-0810	o-Xylene	Value < RL	Value=1.76	RL=10.0	1.76	J
HGLSB27-04-0810	p-Isopropylbenzene	Value < RL	Value=1.48	RL=10.0	1.48	J
HGLSB27-04-0810	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSB27-04-0810	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	10.0	U
SBDup02	Benzene	Value < RL	Value=42.8	RL=50.0	42.8	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
SBDup02	Methylene chloride	Value < RL	Value=50.6	RL=500	50.6	J
HGLGW27-03-051606	1,2-Dichloroethane	Value < RL	Value=52.4	RL=100	52.4	J
HGLGW27-03-051606	Naphthalene	Value < RL	Value=163	RL=500	163	J
HGLGW27-03-051606	n-Butylbenzene	Value < RL	Value=44.8	RL=100	44.8	J
HGLGW27-03-051606	p-Isopropyltoluene	Value < RL	Value=39.8	RL=100	39.8	J
HGLGW27-03-051606	sec-Butylbenzene	Value < RL	Value=51.6	RL=100	51.6	J
HGLSD27-01-0002	1,2,4-Trimethylbenzene	Value < RL	Value=3.68	RL=10.0	3.68	J
HGLSD27-01-0002	1,3,5-Trimethylbenzene	Method blank	MB=1.36	MB=ND	10.0	U
HGLSD27-01-0002	Benzene	Value < RL	Value=5.42	RL=10.0	5.42	J
HGLSD27-01-0002	Chloroform	Value < RL	Value=0.580	RL=10.0	0.580	J
HGLSD27-01-0002	Ethylbenzene	Method blank Trip blank	MB=0.870 TB=0.370	MB=ND TB=ND	10.0	U
HGLSD27-01-0002	m,p-Xylene	Value < RL	Value=4.78	RL=10.0	4.78	J
HGLSD27-01-0002	Methylene chloride	Method blank Trip blank	MB=5.51 TB=2.18	MB=ND TB=ND	50.0	U
HGLSD27-01-0002	Naphthalene	Value < RL	Value=7.39	RL=50.0	7.39	J
HGLSD27-01-0002	n-Butylbenzene	Value < RL	Value=2.10	RL=10.0	2.10	J
HGLSD27-01-0002	n-Propylbenzene	Method blank	MB=1.46	MB=ND	10.0	U
HGLSD27-01-0002	o-Xylene	Value < RL	Value=2.28	RL=10.0	2.28	J
HGLSD27-01-0002	p-Isopropyltoluene	Value < RL	Value=1.66	RL=10.0	1.66	J
HGLSD27-01-0002	sec-Butylbenzene	Method blank	MB=2.54	MB=ND	10.0	U
HGLSD27-01-0002	Toluene	Method blank Trip blank	MB=3.75 TB=3.76	MB=ND TB=ND	13.0	U
HGLGW27-02-051606	Isopropylbenzene	Value < RL	Value=82.0	RL=100	82.0	J
HGLGW27-02-051606	Naphthalene	Value < RL	Value=133	RL=500	133	J
HGLGW27-02-051606	n-Butylbenzene	Value < RL	Value=33.2	RL=100	33.2	J
HGLGW27-02-051606	p-Isopropyltoluene	Value < RL	Value=20.2	RL=100	20.2	J
HGLGW27-02-051606	sec-Butylbenzene	Value < RL	Value=28.0	RL=100	28.0	J
GWDup-01	Acetone	Value < RL	Value=850	RL=1000	850	J
GWDup-01	Naphthalene	Value < RL	Value=232	RL=500	232	J
GWDup-01	n-Butylbenzene	Value < RL	Value=95.6	RL=100	95.6	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
GWDup-01	p-Isopropyltoluene	Value < RL	Value=75.6	RL=100	75.6	J
RB05-1506	Chloroform	Value < RL	Value=0.660	RL=1.00	0.660	J
RB05-1506	Ethylbenzene	Trip blank	TB=0.370	TB=ND	1.00	U
RB05-1506	m,p-Xylene	Trip blank	TB=0.450	TB=ND	1.00	U
RB05-1506	n-Butylbenzene	Value < RL	Value=0.0500	RL=1.00	0.0500	J
RB05-1506	Toluene	Trip blank	TB=3.76	TB=ND	1.00	U
RB05-051606	Benzene	Trip blank	TB=3.78	TB=ND	1.00	U
RB05-051606	Ethylbenzene	Trip blank	TB=0.370	TB=ND	1.00	U
RB05-051606	m,p-Xylene	Trip blank	TB=0.450	TB=ND	1.00	U
RB05-051606	n-Butylbenzene	Value < RL	Value=0.0500	RL=1.00	0.0500	J
RB05-051606	Toluene	Trip blank	TB=3.76	TB=ND	1.00	U
SVOC Data Qualifiers						
HGLSB10-07-1011	Fluoranthene	Value < RL	Value=0.116	RL=0.250	0.116	J
HGLGW27-03-051606	4-Methylphenol/3-Methylphenol	Value < RL	Value=0.00240	RL=0.0050	0.00240	J
HGLSD27-01-0002	Naphthalene	Value < RL	Value=0.0570	RL=0.250	0.0570	J
HGLSD27-01-0002	Acenaphthene	Value < RL	Value=0.124	RL=0.250	0.124	J
HGLSD27-01-0002	4-Nitrophenol	Value < RL	Value=0.0530	RL=0.250	0.0530	J
TPH-GRO Data Qualifiers						
HGLSD27-01-0002	GRO	Method blank	MB=2.50	MB=ND	2.89	U
TPH-DRO Data Qualifiers						
HGLSB10-07-1011	DRO	Value < RL	Value=12.8	RL=50.0	12.8	J
HGLSB10-07-1314	DRO	Value < RL	Value=9.48	RL=50.0	9.48	J
SBDup01	DRO	Value < RL	Value=12.8	RL=50.0	12.8	J
HGLGW27-02-051606	DRO	Value < RL	Value=4.17	RL=5.00	4.17	J
RB05-1506	DRO	Method blank	MB=0.510	MB=ND	5.00	U
RB05-051606	DRO	Method blank	MB=0.510	MB=ND	5.00	U
Metals Data Qualifiers						
HGLSB10-05-1011	Mercury	Value < RL	Value=0.0120	RL=0.0400	0.0120	J
HGLSB10-07-1314	Arsenic	Value < RL	Value=1.34	RL=2.00	1.34	J
SBDup01	Mercury	Value < RL	Value=0.0270	RL=0.0400	0.0270	J
HGLSB27-04-0810	Lead	Value < RL	Value=0.886	RL=1.00	0.886	J
HGLGW27-02-051606	Chromium	Value < RL	Value=0.0030	RL=0.0100	0.0030	J
RB05-1506	Barium	Value < RL	Value=0.0020	RL=0.0100	0.0020	J

Attachment 3 Reviewed/Revised Laboratory Forms

Analytical Report

Sample: 90817 - HGLSB10-03-2022

Analysis: Semivolatiles
QC Batch: 27046
Prep Batch: 23470

Analytical Method: S 8270C
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-22

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531

continued ...

Validated EPA Level 3 (Verification), Quality by Design, January 17, 2007

sample 90817 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.40	mg/Kg	1	2.67	52	10 - 98.8
Phenol-d5		1.45	mg/Kg	1	2.67	54	10 - 105
Nitrobenzene-d5		1.56	mg/Kg	1	2.67	58	10 - 114
2-Fluorobiphenyl		1.66	mg/Kg	1	2.67	62	10 - 122
2,4,6-Tribromophenol		2.75	mg/Kg	1	2.67	103	10 - 117
Terphenyl-d14		1.58	mg/Kg	1	2.67	59	10 - 116

Sample: 90817 - HGLSB10-03-2022

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic		**1.73**	**1.73**	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**43.8**	**43.8**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**7.73**	**7.73**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0460**	**0.0460**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**22.2**	**22.2**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 90817 - HGLSB10-03-2022

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	150	94	62.8 - 115

Sample: 90817 - HGLSB10-03-2022

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.697	mg/Kg	10	0.100	70	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.826	mg/Kg	10	0.100	83	71.9 - 123.7

Sample: 90817 - HGLSB10-03-2022

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26777	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23508	Sample Preparation:	2006-05-23	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	U	<3.15	<50.0	<3.15	µg/Kg	10	0.315	5	0.3154	
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	J	~~4.84~~	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	10.0 U
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~9.38~~	<10.0	3.76	µg/Kg	10	0.135	1	0.1352	10.0 U

continued . . .

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sample 90817 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203
Ethylbenzene	J	~~1.63~~	<10.0	<0.599	µg/Kg	10	0.0599	1	0.0599 10.04
m,p-Xylene	J	~~2.10~~	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754 10.04
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142
n-Propylbenzene	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.54	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	1.53	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	<1.13	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	U	<2.58	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		484	µg/Kg	10	50.0	97	42 - 129
Toluene-d8		508	µg/Kg	10	50.0	102	93 - 107
4-Bromofluorobenzene (4-BFB)		498	µg/Kg	10	50.0	100	78 - 120

Sample: 90818 - HGLSB10-04-0810

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517

continued . . .

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sample 90818 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431

continued ...

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sample 90818 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.93	mg/Kg	1	2.67	72	10 - 98.8
Phenol-d5		2.21	mg/Kg	1	2.67	83	10 - 105
Nitrobenzene-d5		2.26	mg/Kg	1	2.67	85	10 - 114
2-Fluorobiphenyl		2.38	mg/Kg	1	2.67	89	10 - 122
2,4,6-Tribromophenol		2.70	mg/Kg	1	2.67	101	10 - 117
Terphenyl-d14		1.61	mg/Kg	1	2.67	60	10 - 116

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Sample: 90818 - HGLSB10-04-0810

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26990	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**24.7**	**24.7**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**2.73**	**2.73**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0680**	**0.0680**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**3.50**	**3.50**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 90818 - HGLSB10-04-0810

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	150	95	62.8 - 115

Sample: 90818 - HGLSB10-04-0810

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.714	mg/Kg	10	0.100	71	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.854	mg/Kg	10	0.100	85	71.9 - 123.7

Sample: 90818 - HGLSB10-04-0810

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Analysis: Volatiles | Analytical Method: S 8260B | Prep Method: S 5030B
QC Batch: 26796 | Date Analyzed: 2006-05-23 | Analyzed By: JG
Prep Batch: 23529 | Sample Preparation: 2006-05-23 | Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~5.17~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~5.84~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~1.28~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	J	~~2.08~~	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	10.0 U
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	

continued . . .

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sample 90818 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142
n-Propylbenzene	U	<1.01	<10.0	1.46	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.36	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	JB	~~1.43~~	<10.0	2.54	µg/Kg	10	0.113	1	0.1128 10.04
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	J	**6.76**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585 J
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		462	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		506	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		490	µg/Kg	10	50.0	98	78 - 120

Sample: 90819 - HGLSB10-05-1011

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034

continued ...

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sample 90819 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536

continued ...

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sample 90819 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.07	mg/Kg	1	2.67	78	10 - 98.8
Phenol-d5		2.09	mg/Kg	1	2.67	78	10 - 105
Nitrobenzene-d5		2.23	mg/Kg	1	2.67	84	10 - 114
2-Fluorobiphenyl		2.32	mg/Kg	1	2.67	87	10 - 122
2,4,6-Tribromophenol		2.79	mg/Kg	1	2.67	104	10 - 117
Terphenyl-d14		1.80	mg/Kg	1	2.67	67	10 - 116

Sample: 90819 - HGLSB10-05-1011

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic		**3.07**	**3.07**	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**23.0**	**23.0**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**5.71**	**5.71**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	J	**0.0120**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**8.52**	**8.52**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 90819 - HGLSB10-05-1011

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		146	mg/Kg	1	150	98	62.8 - 115

Sample: 90819 - HGLSB10-05-1011

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.687	mg/Kg	10	0.100	69	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.782	mg/Kg	10	0.100	78	71.9 - 123.7

Sample: 90819 - HGLSB10-05-1011

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

continued . . .

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sample 90819 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~5.27~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~3.70~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	U	<0.599	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	
m,p-Xylene	U	<1.75	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	

continued ...

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sample 90819 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	U	<1.01	<10.0	1.46	µg/Kg	10	0.101	1	0.1007	
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.36	µg/Kg	10	0.104	1	0.1042	
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482	
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	U	<1.13	<10.0	2.54	µg/Kg	10	0.113	1	0.1128	
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	J	**1.21**	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	J
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	J	**1.80**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	J
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	J	**4.76**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585	J
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		464	µg/Kg	10	50.0	93	42 - 129
Toluene-d8		506	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		490	µg/Kg	10	50.0	98	78 - 120

Sample: 90820 - HGLSB10-06-1112

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued . . .

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sample 90820 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

continued . . .

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sample 90820 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.34	mg/Kg	1	2.67	88	10 - 98.8
Phenol-d5		2.42	mg/Kg	1	2.67	91	10 - 105
Nitrobenzene-d5		2.42	mg/Kg	1	2.67	91	10 - 114
2-Fluorobiphenyl		2.55	mg/Kg	1	2.67	96	10 - 122
2,4,6-Tribromophenol		2.90	mg/Kg	1	2.67	109	10 - 117
Terphenyl-d14		1.78	mg/Kg	1	2.67	67	10 - 116

Sample: 90820 - HGLSB10-06-1112

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**23.3**	**23.3**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**2.05**	**2.05**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**3.53**	**3.53**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 90820 - HGLSB10-06-1112

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		158	mg/Kg	1	150	106	62.8 - 115

Sample: 90820 - HGLSB10-06-1112

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.619	mg/Kg	10	0.100	62	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.735	mg/Kg	10	0.100	74	71.9 - 123.7

Sample: 90820 - HGLSB10-06-1112

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

[1] Surrogate TFT out due to matrix interference. Sample was reran on 5/24/06 to confirm matrix interference results.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~6.50~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~4.08~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~0.670~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	U	<1.75	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	

continued . . .

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sample 90820 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	U	<1.01	<10.0	1.46	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.36	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	2.54	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	J	**1.45**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	J	**3.77**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		462	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		501	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		487	µg/Kg	10	50.0	97	78 - 120

Sample: 90821 - HGLSB10-07-1011

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444

continued ...

Validated EPA Level 3 (Verification), Quality by Design, January 17, 2007

sample 90821 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04

continued . . .

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sample 90821 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	J	**0.116**	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.41	mg/Kg	1	2.67	53	10 - 98.8
Phenol-d5		1.38	mg/Kg	1	2.67	52	10 - 105
Nitrobenzene-d5		1.40	mg/Kg	1	2.67	52	10 - 114
2-Fluorobiphenyl		1.45	mg/Kg	1	2.67	54	10 - 122
2,4,6-Tribromophenol		2.52	mg/Kg	1	2.67	94	10 - 117
Terphenyl-d14		1.92	mg/Kg	1	2.67	72	10 - 116

Sample: 90821 - HGLSB10-07-1011

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**17.8**	**17.8**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

continued . . .

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sample 90821 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**1.97**	**1.97**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**2.25**	**2.25**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 90821 - HGLSB10-07-1011

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**12.8**	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		161	mg/Kg	1	150	107	62.8 - 115

Sample: 90821 - HGLSB10-07-1011

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[2]	0.637	mg/Kg	10	0.100	64	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[3]	0.701	mg/Kg	10	0.100	70	71.9 - 123.7

Sample: 90821 - HGLSB10-07-1011

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

[2]Surrogate TFT out due to matrix interference. Sample was reran on 5/24/06 to confirm matrix interference results.
[3]Surrogate BFB out due to matrix interference. Sample was reran on 5/24/06 to confirm matrix interference results.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~4.68~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~4.39~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~0.600~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0U
m,p-Xylene	U	<1.75	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	

continued . . .

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sample 90821 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	U	<1.01	<10.0	1.46	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.36	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	2.54	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	J	**3.16**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		467	µg/Kg	10	50.0	93	42 - 129
Toluene-d8		513	µg/Kg	10	50.0	103	93 - 107
4-Bromofluorobenzene (4-BFB)		497	µg/Kg	10	50.0	99	78 - 120

Sample: 90822 - HGLSB10-07-1314

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444

continued . . .

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sample 90822 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04

continued ...

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sample 90822 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.35	mg/Kg	1	2.67	50	10 - 98.8
Phenol-d5		1.72	mg/Kg	1	2.67	64	10 - 105
Nitrobenzene-d5		1.66	mg/Kg	1	2.67	62	10 - 114
2-Fluorobiphenyl		1.70	mg/Kg	1	2.67	64	10 - 122
2,4,6-Tribromophenol		2.33	mg/Kg	1	2.67	87	10 - 117
Terphenyl-d14		2.07	mg/Kg	1	2.67	78	10 - 116

Sample: 90822 - HGLSB10-07-1314

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	J	**1.34**	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**27.7**	**27.7**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794

continued ...

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sample 90822 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.82**	**3.82**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**4.36**	**4.36**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90822 - HGLSB10-07-1314

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**9.48**	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		160	mg/Kg	1	150	106	62.8 - 115

Sample: 90822 - HGLSB10-07-1314

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[4]	0.627	mg/Kg	10	0.100	63	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.737	mg/Kg	10	0.100	74	71.9 - 123.7

Sample: 90822 - HGLSB10-07-1314

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414

continued . . .

[4]Surrogate TFT out due to matrix interference. Sample was reran on 5/24/06 to confirm matrix interference results.

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sample 90822 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~<4.57~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~5.23~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~0.860~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	U	<1.75	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	

continued . . .

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sample 90822 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142
n-Propylbenzene	U	<1.01	<10.0	1.46	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.36	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	2.54	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	J	**2.78**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		460	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		508	µg/Kg	10	50.0	102	93 - 107
4-Bromofluorobenzene (4-BFB)		491	µg/Kg	10	50.0	98	78 - 120

Sample: 90825 - SBDUP01

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403

continued . . .

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sample 90825 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349

continued . . .

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sample 90825 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.68	mg/Kg	1	2.67	63	10 - 98.8
Phenol-d5		1.72	mg/Kg	1	2.67	64	10 - 105
Nitrobenzene-d5		1.85	mg/Kg	1	2.67	69	10 - 114
2-Fluorobiphenyl		1.88	mg/Kg	1	2.67	70	10 - 122
2,4,6-Tribromophenol		3.11	mg/Kg	1	2.67	116	10 - 117
Terphenyl-d14	[5]	3.26	mg/Kg	1	2.67	122	10 - 116

Sample: 90825 - SBDUP01

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26873	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

continued . . .

[5]High surrogate recovery. Sample non-detect, result bias high.

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sample 90825 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic		**3.36**	**3.36**	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**46.3**	**46.3**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**9.77**	**9.77**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	J	**0.0270**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**47.1**	**47.1**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 90825 - SBDUP01

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**12.8**	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		131	mg/Kg	1	150	88	62.8 - 115

Sample: 90825 - SBDUP01

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[6]	0.611	mg/Kg	10	0.100	61	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.754	mg/Kg	10	0.100	75	71.9 - 123.7

Sample: 90825 - SBDUP01

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

[6]Surrogate TFT out due to matrix interference. Sample was reran on 5/24/06 to confirm matrix interference results.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~5.19~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~3.64~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	U	<0.599	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	
m,p-Xylene	U	<1.75	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	U	<0.991	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	

continued . . .

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sample 90825 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	U	<1.01	<10.0	1.46	µg/Kg	10	0.101	1	0.1007
1,3,5-Trimethylbenzene	U	<1.04	<10.0	1.36	µg/Kg	10	0.104	1	0.1042
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene	U	<1.13	<10.0	2.54	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	J	**4.55**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		468	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		505	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		493	µg/Kg	10	50.0	99	78 - 120

Sample: 90826 - TB-001

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26749	Date Analyzed:	2006-05-22	Analyzed By:	JG
Prep Batch:	23488	Sample Preparation:	2006-05-22	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	2.32	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	JB	**2.18**	<5.00	2.41	µg/L	1	0.689	5	0.6888
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504

continued ...

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sample 90826 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene		**3.78**	**3.78**	<0.0495	µg/L	1	0.0495	1	0.0495	
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	J	**0.0500**	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	J
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene		**3.76**	**3.76**	0.370	µg/L	1	0.0736	1	0.0736	
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0300	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	JB	**0.370**	<1.00	0.0600	µg/L	1	0.0566	1	0.0566	J
m,p-Xylene	JB	**0.450**	<1.00	0.0900	µg/L	1	0.0363	1	0.0363	J
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	J	**0.110**	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	0.0600	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	<0.0406	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.0600	µg/L	1	0.0557	1	0.0557	
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	U	<0.0336	<1.00	<0.0336	µg/L	1	0.0336	1	0.0336	
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	U	<0.0439	<1.00	<0.0439	µg/L	1	0.0439	1	0.0439	
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	U	<0.0513	<1.00	<0.0513	µg/L	1	0.0513	1	0.0513	
4-Chlorotoluene	U	<0.0460	<1.00	0.0500	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	U	<0.0400	<1.00	<0.0400	µg/L	1	0.0400	1	0.04	
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	<0.417	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758	

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.0	µg/L	1	50.0	106	70 - 130
Toluene-d8		51.3	µg/L	1	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		47.0	µg/L	1	50.0	94	70 - 130

Sample: 90827 - HGLSB27-03-1113

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene		**0.747**	**0.747**	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene		**1.42**	**1.42**	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene		**1.44**	**1.44**	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403

continued . . .

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sample 90827 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049

continued . . .

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sample 90827 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.10	mg/Kg	1	2.67	79	10 - 98.8
Phenol-d5		2.25	mg/Kg	1	2.67	84	10 - 105
Nitrobenzene-d5		3.02	mg/Kg	1	2.67	113	10 - 114
2-Fluorobiphenyl		2.44	mg/Kg	1	2.67	91	10 - 122
2,4,6-Tribromophenol		2.55	mg/Kg	1	2.67	96	10 - 117
Terphenyl-d14	[7]	3.17	mg/Kg	1	2.67	119	10 - 116

Sample: 90827 - HGLSB27-03-1113

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**60.2**	**60.2**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**4.76**	**4.76**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**6.26**	**6.26**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90827 - HGLSB27-03-1113

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**435**	**435**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	mg/Kg	1	150	82	62.8 - 115

[7]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

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Sample: 90827 - HGLSB27-03-1113

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**419**	**419**	<2.42	mg/Kg	20	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.696	mg/Kg	20	0.0500	70	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[8]	12.6	mg/Kg	20	0.0500	1260	71.9 - 123.7

Sample: 90827 - HGLSB27-03-1113

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~10.3~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154 50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599
Benzene		**34.4**	**34.4**	<2.36	µg/Kg	10	0.236	1	0.2365
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009

continued . . .

[8]High surrogate recovery due to peak interference.

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sample 90827 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene		**1500**	**1500**	3.75	µg/Kg	10	0.135	1	0.1352	
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	[9]	**3490**	**3490**	0.870	µg/Kg	10	0.0599	1	0.0599	J
m,p-Xylene	[10]	**5170**	**5170**	<1.75	µg/Kg	10	0.175	1	0.1754	J
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	[11]	**2480**	**2480**	<0.991	µg/Kg	10	0.0991	1	0.0991	J
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene		**1410**	**1410**	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	[12]	**2450**	**2450**	1.46	µg/Kg	10	0.101	1	0.1007	J
1,3,5-Trimethylbenzene	[13]	**2310**	**2310**	1.36	µg/Kg	10	0.104	1	0.1042	J
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	[14]	**5850**	**5850**	<1.48	µg/Kg	10	0.148	1	0.1482	J
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene		**1330**	**1330**	2.54	µg/Kg	10	0.113	1	0.1128	
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene		**1070**	**1070**	<1.05	µg/Kg	10	0.105	1	0.1046	
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene		**1210**	**1210**	<1.16	µg/Kg	10	0.116	1	0.1156	
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene		**1050**	**1050**	<2.58	µg/Kg	10	0.258	5	0.2585	
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		468	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		529	µg/Kg	10	50.0	106	93 - 107
4-Bromofluorobenzene (4-BFB)		484	µg/Kg	10	50.0	97	78 - 120

[9]Estimated concentration value greater than standard range.
[10]Estimated concentration value greater than standard range.
[11]Estimated concentration value greater than standard range.
[12]Estimated concentration value greater than standard range.
[13]Estimated concentration value greater than standard range.
[14]Estimated concentration value greater than standard range.

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Sample: 90828 - HGLSB27-03-1618

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

continued . . .

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sample 90828 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.40	mg/Kg	1	2.67	90	10 - 98.8
Phenol-d5		2.81	mg/Kg	1	2.67	105	10 - 105

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		3.03	mg/Kg	1	2.67	113	10 - 114
2-Fluorobiphenyl		3.06	mg/Kg	1	2.67	115	10 - 122
2,4,6-Tribromophenol	[15]	3.61	mg/Kg	1	2.67	135	10 - 117
Terphenyl-d14		2.96	mg/Kg	1	2.67	111	10 - 116

Sample: 90828 - HGLSB27-03-1618

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**38.4**	**38.4**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**5.75**	**5.75**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**7.80**	**7.80**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90828 - HGLSB27-03-1618

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	88	62.8 - 115

Sample: 90828 - HGLSB27-03-1618

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

[15]High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.692	mg/Kg	10	0.100	69	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.847	mg/Kg	10	0.100	85	71.9 - 123.7

Sample: 90828 - HGLSB27-03-1618

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26929	Date Analyzed:	2006-05-25	Analyzed By:	JG
Prep Batch:	23645	Sample Preparation:	2006-05-25	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.39~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~3.22~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U

continued...

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sample 90828 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	J	~~0.700~~	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376 10.0 U
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	J	**1.08**	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421 J
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	J	**2.67**	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535 J
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	J	**2.53**	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632 J
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	J	**2.60**	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679 J
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	JB	~~4.34~~	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979 10.0 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	JB	~~8.44~~	<50.0	7.58	µg/Kg	10	0.441	5	0.441 10.0 U
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		456	µg/Kg	10	50.0	91	42 - 129
Toluene-d8		507	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		503	µg/Kg	10	50.0	101	78 - 120

Sample: 90829 - HGLSB27-02-0608

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517

continued ...

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sample 90829 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431

continued . . .

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sample 90829 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.57	mg/Kg	1	2.67	96	10 - 98.8
Phenol-d5		2.69	mg/Kg	1	2.67	101	10 - 105
Nitrobenzene-d5		2.66	mg/Kg	1	2.67	100	10 - 114
2-Fluorobiphenyl		2.84	mg/Kg	1	2.67	106	10 - 122
2,4,6-Tribromophenol	16	3.46	mg/Kg	1	2.67	130	10 - 117
Terphenyl-d14		1.99	mg/Kg	1	2.67	74	10 - 116

[16]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 90829 - HGLSB27-02-0608

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**11.5**	**11.5**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**47.7**	**47.7**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**1.00**	**1.00**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90829 - HGLSB27-02-0608

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	62.8 - 115

Sample: 90829 - HGLSB27-02-0608

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.842	mg/Kg	10	0.100	84	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.986	mg/Kg	10	0.100	99	71.9 - 123.7

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Sample: 90829 - HGLSB27-02-0608

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~6.65~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~4.46~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~3.42~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	J	7.29	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	J
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	

continued . . .

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sample 90829 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	J	**4.44**	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	J
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	J	**2.62**	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	J
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	JB	~~**5.02**~~	<10.0	1.46	µg/Kg	10	0.101	1	0.1007	10.0 U
1,3,5-Trimethylbenzene	JB	~~**5.17**~~	<10.0	1.36	µg/Kg	10	0.104	1	0.1042	10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482	
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	JB	~~**4.12**~~	<10.0	2.54	µg/Kg	10	0.113	1	0.1128	10.0 U
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	J	**3.92**	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	J
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	J	**6.37**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	J
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	J	**32.6**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585	J
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		455	µg/Kg	10	50.0	91	42 - 129
Toluene-d8		499	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		502	µg/Kg	10	50.0	100	78 - 120

Sample: 90830 - HGLSB27-02-1113

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued . . .

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sample 90830 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene		**11.5**	**11.5**	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene		**15.8**	**15.8**	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene		**16.7**	**16.7**	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

continued . . .

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sample 90830 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol	[17]	9.67	mg/Kg	1	2.67	362	10 - 98.8
Phenol-d5	[18]	5.28	mg/Kg	1	2.67	198	10 - 105
Nitrobenzene-d5	[19]	10.7	mg/Kg	1	2.67	401	10 - 114
2-Fluorobiphenyl		2.97	mg/Kg	1	2.67	111	10 - 122
2,4,6-Tribromophenol		3.03	mg/Kg	1	2.67	113	10 - 117
Terphenyl-d14		2.94	mg/Kg	1	2.67	110	10 - 116

Sample: 90830 - HGLSB27-02-1113

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26989	Date Analyzed:	2006-05-31	Analyzed By:	TP

[17]High surrogate recovery due to peak interference.
[18]High surrogate recovery due to peak interference.
[19]High surrogate recovery due to peak interference.

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Prep Batch: 23692 Sample Preparation: 2006-05-30 Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**9.50**	**9.50**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**5.60**	**5.60**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**7.03**	**7.03**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90830 - HGLSB27-02-1113

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 26755 Date Analyzed: 2006-05-22 Analyzed By: DS
Prep Batch: 23478 Sample Preparation: 2006-05-22 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**3480**	**3480**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	62.8 - 115

Sample: 90830 - HGLSB27-02-1113

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 26822 Date Analyzed: 2006-05-24 Analyzed By: KB
Prep Batch: 23551 Sample Preparation: 2006-05-24 Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**4790**	**4790**	<12.1	mg/Kg	100	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[20]	0.486	mg/Kg	100	0.0100	49	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[21]	95.8	mg/Kg	100	0.0100	9580	71.9 - 123.7

Sample: 90830 - HGLSB27-02-1113

Analysis: Volatiles Analytical Method: S 8260B Prep Method: S 5030B
QC Batch: 26796 Date Analyzed: 2006-05-23 Analyzed By: JG
Prep Batch: 23529 Sample Preparation: 2006-05-23 Prepared By: JG

[20] Surrogate out due to peak interference.
[21] Surrogate out due to peak interferencc.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<120	<500	<120	µg/Kg	500	0.241	1	0.2414
Dichlorodifluoromethane	U	<39.4	<500	<39.4	µg/Kg	500	0.0789	1	0.0789
Chloromethane (methyl chloride)	U	<114	<500	<114	µg/Kg	500	0.229	1	0.229
Vinyl Chloride	U	<71.0	<500	<71.0	µg/Kg	500	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<350	<2500	<350	µg/Kg	500	0.700	5	0.7
Chloroethane	U	<86.5	<500	<86.5	µg/Kg	500	0.173	1	0.1732
Trichlorofluoromethane	U	<60.0	<500	<60.0	µg/Kg	500	0.120	1	0.1204
Acetone	U	<850	<5000	<850	µg/Kg	500	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<244	<2500	<244	µg/Kg	500	0.488	5	0.4878
Carbon Disulfide	U	<47.4	<500	<47.4	µg/Kg	500	0.0947	1	0.0947
Acrylonitrile	U	<247	<500	<247	µg/Kg	500	0.494	1	0.4945
2-Butanone (MEK)	U	<700	<2500	<700	µg/Kg	500	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<393	<2500	<393	µg/Kg	500	0.786	5	0.786
2-Hexanone	U	<111	<2500	<111	µg/Kg	500	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<66.5	<5000	<66.5	µg/Kg	500	0.133	10	0.1331
1,1-Dichloroethene	U	<58.5	<500	<58.5	µg/Kg	500	0.117	1	0.1166
Methylene chloride	U	<158	<2500	<158	µg/Kg	500	0.315	5	0.3154
MTBE	U	<76.5	<500	<76.5	µg/Kg	500	0.153	1	0.1529
trans-1,2-Dichloroethene	U	<77.0	<500	<77.0	µg/Kg	500	0.154	1	0.1535
1,1-Dichloroethane	U	<25.6	<500	<25.6	µg/Kg	500	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<106	<500	<106	µg/Kg	500	0.213	1	0.2129
2,2-Dichloropropane	U	<49.1	<500	<49.1	µg/Kg	500	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<99.0	<500	<99.0	µg/Kg	500	0.198	1	0.198
Chloroform	U	<24.3	<500	<24.3	µg/Kg	500	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<50.5	<500	<50.5	µg/Kg	500	0.101	1	0.101
1,1-Dichloropropene	U	<80.0	<500	<80.0	µg/Kg	500	0.160	1	0.1599
Benzene		**6170**	**6170**	<118	µg/Kg	500	0.236	1	0.2365
Carbon Tetrachloride	U	<54.0	<500	<54.0	µg/Kg	500	0.108	1	0.1082
1,2-Dichloropropane	U	<50.5	<500	<50.5	µg/Kg	500	0.101	1	0.1009
Trichloroethene (TCE)	U	<97.5	<500	<97.5	µg/Kg	500	0.195	1	0.1951
Dibromomethane (methylene bromide)	U	<81.0	<500	<81.0	µg/Kg	500	0.162	1	0.1618
Bromodichloromethane	U	<47.9	<500	<47.9	µg/Kg	500	0.0958	1	0.0958
2-Chloroethyl vinyl ether	U	<65.5	<2500	<65.5	µg/Kg	500	0.131	5	0.1314
cis-1,3-Dichloropropene	U	<59.5	<500	<59.5	µg/Kg	500	0.119	1	0.119
trans-1,3-Dichloropropene	U	<43.0	<500	<43.0	µg/Kg	500	0.0860	1	0.086
Toluene		**49900**	**49900**	<67.5	µg/Kg	500	0.135	1	0.1352
1,1,2-Trichloroethane	U	<102	<500	<102	µg/Kg	500	0.203	1	0.2031
1,3-Dichloropropane	U	<60.0	<500	<60.0	µg/Kg	500	0.120	1	0.1199
Dibromochloromethane	U	<66.0	<500	<66.0	µg/Kg	500	0.132	1	0.1317
1,2-Dibromoethane (EDB)	U	<74.0	<500	<74.0	µg/Kg	500	0.148	1	0.1477
Tetrachloroethene (PCE)	U	<92.5	<500	<92.5	µg/Kg	500	0.185	1	0.1848
Chlorobenzene	U	<62.0	<500	<62.0	µg/Kg	500	0.124	1	0.1236
1,1,1,2-Tetrachloroethane	U	<60.0	<500	<60.0	µg/Kg	500	0.120	1	0.1203
Ethylbenzene		**61000**	**61000**	<30.0	µg/Kg	500	0.0599	1	0.0599
m,p-Xylene		**74900**	**74900**	<87.5	µg/Kg	500	0.175	1	0.1754
Bromoform	U	<90.0	<500	<90.0	µg/Kg	500	0.180	1	0.1802
Styrene	U	<44.9	<500	<44.9	µg/Kg	500	0.0898	1	0.0898
o-Xylene		**33600**	**33600**	<49.6	µg/Kg	500	0.0991	1	0.0991
1,1,2,2-Tetrachloroethane	U	<128	<500	<128	µg/Kg	500	0.256	1	0.2555
2-Chlorotoluene	U	<49.8	<500	<49.8	µg/Kg	500	0.0997	1	0.0997
1,2,3-Trichloropropane	U	<46.8	<500	<46.8	µg/Kg	500	0.0935	1	0.0935
Isopropylbenzene		**14200**	**14200**	<52.5	µg/Kg	500	0.105	1	0.1048
Bromobenzene	U	<71.0	<500	<71.0	µg/Kg	500	0.142	1	0.142

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sample 90830 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene		**21600**	**21600**	<50.5	µg/Kg	500	0.101	1	0.1007
1,3,5-Trimethylbenzene		**17000**	**17000**	<52.0	µg/Kg	500	0.104	1	0.1042
tert-Butylbenzene	U	<98.0	<500	<98.0	µg/Kg	500	0.196	1	0.1963
1,2,4-Trimethylbenzene		**53800**	**53800**	<74.0	µg/Kg	500	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<220	<500	<220	µg/Kg	500	0.440	1	0.4405
sec-Butylbenzene		**7830**	**7830**	<56.5	µg/Kg	500	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<46.2	<500	<46.2	µg/Kg	500	0.0924	1	0.0924
p-Isopropyltoluene		**6160**	**6160**	<52.5	µg/Kg	500	0.105	1	0.1046
4-Chlorotoluene	U	<37.0	<500	<37.0	µg/Kg	500	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<54.5	<500	<54.5	µg/Kg	500	0.109	1	0.1092
n-Butylbenzene		**9680**	**9680**	<58.0	µg/Kg	500	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<96.0	<2500	<96.0	µg/Kg	500	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<595	<2500	<595	µg/Kg	500	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<156	<2500	<156	µg/Kg	500	0.311	5	0.3107
Naphthalene		**8280**	**8280**	<129	µg/Kg	500	0.258	5	0.2585
Hexachlorobutadiene	U	<79.0	<2500	<79.0	µg/Kg	500	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		23500	µg/Kg	500	50.0	94	42 - 129
Toluene-d8		25000	µg/Kg	500	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		24900	µg/Kg	500	50.0	100	78 - 120

Sample: 90831 - HGLSB27-01-0608

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444

continued . . .

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sample 90831 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04

continued . . .

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sample 90831 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.61	mg/Kg	1	2.67	98	10 - 98.8
Phenol-d5	22	3.03	mg/Kg	1	2.67	113	10 - 105
Nitrobenzene-d5	23	3.56	mg/Kg	1	2.67	133	10 - 114
2-Fluorobiphenyl		3.14	mg/Kg	1	2.67	118	10 - 122
2,4,6-Tribromophenol	24	3.36	mg/Kg	1	2.67	126	10 - 117
Terphenyl-d14		2.58	mg/Kg	1	2.67	97	10 - 116

Sample: 90831 - HGLSB27-01-0608

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26990	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444

continued . . .

[22]High surrogate recovery. Sample non-detect, result bias high.
[23]High surrogate recovery. Sample non-detect, result bias high.
[24]High surrogate recovery. Sample non-detect, result bias high.

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sample 90831 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**7.34**	**7.34**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**1.31**	**1.31**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead	U	<0.367	<1.00	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90831 - HGLSB27-01-0608

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**124**	**124**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	89	62.8 - 115

Sample: 90831 - HGLSB27-01-0608

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**309**	**309**	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.743	mg/Kg	10	0.100	74	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[25]	2.16	mg/Kg	10	0.100	216	71.9 - 123.7

Sample: 90831 - HGLSB27-01-0608

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

[25] High surrogate recovery due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414	
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229	
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7	
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732	
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878	
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947	
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945	
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166	
Methylene chloride	JB	~~6.89~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154	50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	JB	~~4.35~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352	10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~2.02~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	J	**3.12**	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	J
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	J	**1.62**	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	J
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	J	**2.35**	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	J
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	

continued . . .

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sample 90831 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	JB	~~2.05~~	<10.0	1.46	µg/Kg	10	0.101	1	0.1007 10.0 U
1,3,5-Trimethylbenzene	JB	~~2.36~~	<10.0	1.36	µg/Kg	10	0.104	1	0.1042 10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963
1,2,4-Trimethylbenzene	J	**5.95**	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482 J
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405
sec-Butylbenzene		**30.5**	**30.5**	2.54	µg/Kg	10	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924
p-Isopropyltoluene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092
n-Butylbenzene	U	<1.16	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107
Naphthalene	J	**14.1**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585 J
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		460	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		494	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		497	µg/Kg	10	50.0	99	78 - 120

Sample: 90832 - HGLSB27-04-0810

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444

continued ...

Validated EPA Level 3 (Verification), Quality by Design, January 17, 2007 KO

sample 90832 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04

continued . . .

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sample 90832 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.65	mg/Kg	1	2.67	62	10 - 98.8
Phenol-d5		1.73	mg/Kg	1	2.67	65	10 - 105
Nitrobenzene-d5		1.71	mg/Kg	1	2.67	64	10 - 114
2-Fluorobiphenyl		1.86	mg/Kg	1	2.67	70	10 - 122
2,4,6-Tribromophenol		2.79	mg/Kg	1	2.67	104	10 - 117
Terphenyl-d14	[26]	6.53	mg/Kg	1	2.67	244	10 - 116

Sample: 90832 - HGLSB27-04-0810

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26990	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228

continued ...

[26]High surrogate recovery. Sample non-detect, result bias high.

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sample 90832 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**11.0**	**11.0**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**1.51**	**1.51**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead	J	**0.886**	<1.00	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90832 - HGLSB27-04-0810

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	62.8 - 115

Sample: 90832 - HGLSB27-04-0810

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.676	mg/Kg	10	0.100	68	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.747	mg/Kg	10	0.100	75	71.9 - 123.7

Sample: 90832 - HGLSB27-04-0810

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26796	Date Analyzed:	2006-05-23	Analyzed By:	JG
Prep Batch:	23529	Sample Preparation:	2006-05-23	Prepared By:	JG

continued . . .

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sample 90832 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~7.40~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154 50.0 U
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198
Chloroform	U	<0.486	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599
Benzene	U	<2.36	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086
Toluene	JB	~~4.55~~	<10.0	3.75	µg/Kg	10	0.135	1	0.1352 10.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203
Ethylbenzene	JB	~~1.47~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599 10.0 U
m,p-Xylene	J	**2.43**	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754 ?
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898

continued . . .

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sample 90832 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	J	**1.76**	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	J
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	JB	~~1.24~~	<10.0	1.46	µg/Kg	10	0.101	1	0.1007	10.0 U
1,3,5-Trimethylbenzene	JB	~~1.29~~	<10.0	1.36	µg/Kg	10	0.104	1	0.1042	10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	J	**4.16**	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482	J
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	JB	~~2.01~~	<10.0	2.54	µg/Kg	10	0.113	1	0.1128	10.0 U
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	J	**1.48**	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	J
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	J	**1.83**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	J
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	J	**8.71**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585	J
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		462	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		502	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		501	µg/Kg	10	50.0	100	78 - 120

Sample: 90833 - SBDUP02

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued . . .

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sample 90833 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene		**0.750**	**0.750**	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene		**1.58**	**1.58**	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene		**1.60**	**1.60**	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

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sample 90833 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.30	mg/Kg	1	2.67	86	10 - 98.8
Phenol-d5		2.34	mg/Kg	1	2.67	88	10 - 105
Nitrobenzene-d5	[27]	3.17	mg/Kg	1	2.67	119	10 - 114
2-Fluorobiphenyl		2.55	mg/Kg	1	2.67	96	10 - 122
2,4,6-Tribromophenol		3.00	mg/Kg	1	2.67	112	10 - 117
Terphenyl-d14	[28]	7.77	mg/Kg	1	2.67	291	10 - 116

Sample: 90833 - SBDUP02

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26990	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

[27]High surrogate recovery due to peak interference.
[28]High surrogate recovery due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic	U	<0.228	<2.00	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**49.9**	**49.9**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium	U	<0.00794	<0.100	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**3.72**	**3.72**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**4.46**	**4.46**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90833 - SBDUP02

Analysis: TPH DRO
QC Batch: 26755
Prep Batch: 23478

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-22
Sample Preparation: 2006-05-22

Prep Method: N/A
Analyzed By: DS
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**288**	**288**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	1	150	86	62.8 - 115

Sample: 90833 - SBDUP02

Analysis: TPH GRO
QC Batch: 26822
Prep Batch: 23551

Analytical Method: S 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**282**	**282**	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.798	mg/Kg	10	0.100	80	68 - 129.6
4-Bromofluorobenzene (4-BFB)	[29]	9.61	mg/Kg	10	0.100	961	71.9 - 123.7

Sample: 90833 - SBDUP02

Analysis: Volatiles
QC Batch: 26796
Prep Batch: 23529

Analytical Method: S 8260B
Date Analyzed: 2006-05-23
Sample Preparation: 2006-05-23

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

[29] High surrogate recovery due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<24.1	<100	<24.1	µg/Kg	100	0.241	1	0.2414	
Dichlorodifluoromethane	U	<7.89	<100	<7.89	µg/Kg	100	0.0789	1	0.0789	
Chloromethane (methyl chloride)	U	<22.9	<100	<22.9	µg/Kg	100	0.229	1	0.229	
Vinyl Chloride	U	<14.2	<100	<14.2	µg/Kg	100	0.142	1	0.1425	
Bromomethane (methyl bromide)	U	<70.0	<500	<70.0	µg/Kg	100	0.700	5	0.7	
Chloroethane	U	<17.3	<100	<17.3	µg/Kg	100	0.173	1	0.1732	
Trichlorofluoromethane	U	<12.0	<100	<12.0	µg/Kg	100	0.120	1	0.1204	
Acetone	U	<170	<1000	<170	µg/Kg	100	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<48.8	<500	<48.8	µg/Kg	100	0.488	5	0.4878	
Carbon Disulfide	U	<9.47	<100	<9.47	µg/Kg	100	0.0947	1	0.0947	
Acrylonitrile	U	<49.4	<100	<49.4	µg/Kg	100	0.494	1	0.4945	
2-Butanone (MEK)	U	<140	<500	<140	µg/Kg	100	1.40	5	1.4017	
4-Methyl-2-pentanone (MIBK)	U	<78.6	<500	<78.6	µg/Kg	100	0.786	5	0.786	
2-Hexanone	U	<22.2	<500	<22.2	µg/Kg	100	0.222	5	0.2224	
trans 1,4-Dichloro-2-butene	U	<13.3	<1000	<13.3	µg/Kg	100	0.133	10	0.1331	
1,1-Dichloroethene	U	<11.7	<100	<11.7	µg/Kg	100	0.117	1	0.1166	
Methylene chloride	J	**50.6**	<500	<31.5	µg/Kg	100	0.315	5	0.3154	J
MTBE	U	<15.3	<100	<15.3	µg/Kg	100	0.153	1	0.1529	
trans-1,2-Dichloroethene	U	<15.4	<100	<15.4	µg/Kg	100	0.154	1	0.1535	
1,1-Dichloroethane	U	<5.13	<100	<5.13	µg/Kg	100	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<21.3	<100	<21.3	µg/Kg	100	0.213	1	0.2129	
2,2-Dichloropropane	U	<9.82	<100	<9.82	µg/Kg	100	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<19.8	<100	<19.8	µg/Kg	100	0.198	1	0.198	
Chloroform	U	<4.86	<100	<4.86	µg/Kg	100	0.0486	1	0.0486	
1,1,1-Trichloroethane	U	<10.1	<100	<10.1	µg/Kg	100	0.101	1	0.101	
1,1-Dichloropropene	U	<16.0	<100	<16.0	µg/Kg	100	0.160	1	0.1599	
Benzene	J	**42.8**	<100	<23.6	µg/Kg	100	0.236	1	0.2365	J
Carbon Tetrachloride	U	<10.8	<100	<10.8	µg/Kg	100	0.108	1	0.1082	
1,2-Dichloropropane	U	<10.1	<100	<10.1	µg/Kg	100	0.101	1	0.1009	
Trichloroethene (TCE)	U	<19.5	<100	<19.5	µg/Kg	100	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<16.2	<100	<16.2	µg/Kg	100	0.162	1	0.1618	
Bromodichloromethane	U	<9.58	<100	<9.58	µg/Kg	100	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<13.1	<500	<13.1	µg/Kg	100	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<11.9	<100	<11.9	µg/Kg	100	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<8.60	<100	<8.60	µg/Kg	100	0.0860	1	0.086	
Toluene		**1110**	**1110**	<13.5	µg/Kg	100	0.135	1	0.1352	
1,1,2-Trichloroethane	U	<20.3	<100	<20.3	µg/Kg	100	0.203	1	0.2031	
1,3-Dichloropropane	U	<12.0	<100	<12.0	µg/Kg	100	0.120	1	0.1199	
Dibromochloromethane	U	<13.2	<100	<13.2	µg/Kg	100	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<14.8	<100	<14.8	µg/Kg	100	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<18.5	<100	<18.5	µg/Kg	100	0.185	1	0.1848	
Chlorobenzene	U	<12.4	<100	<12.4	µg/Kg	100	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<12.0	<100	<12.0	µg/Kg	100	0.120	1	0.1203	
Ethylbenzene		**2880**	**2880**	<5.99	µg/Kg	100	0.0599	1	0.0599	
m,p-Xylene		**5340**	**5340**	<17.5	µg/Kg	100	0.175	1	0.1754	
Bromoform	U	<18.0	<100	<18.0	µg/Kg	100	0.180	1	0.1802	
Styrene	U	<8.98	<100	<8.98	µg/Kg	100	0.0898	1	0.0898	
o-Xylene		**2320**	**2320**	<9.91	µg/Kg	100	0.0991	1	0.0991	
1,1,2,2-Tetrachloroethane	U	<25.6	<100	<25.6	µg/Kg	100	0.256	1	0.2555	
2-Chlorotoluene	U	<9.97	<100	<9.97	µg/Kg	100	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<9.35	<100	<9.35	µg/Kg	100	0.0935	1	0.0935	
Isopropylbenzene		**1080**	**1080**	<10.5	µg/Kg	100	0.105	1	0.1048	
Bromobenzene	U	<14.2	<100	<14.2	µg/Kg	100	0.142	1	0.142	

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sample 90833 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene		**1740**	**1740**	<10.1	µg/Kg	100	0.101	1	0.1007
1,3,5-Trimethylbenzene		**1910**	**1910**	<10.4	µg/Kg	100	0.104	1	0.1042
tert-Butylbenzene	U	<19.6	<100	<19.6	µg/Kg	100	0.196	1	0.1963
1,2,4-Trimethylbenzene		**5950**	**5950**	<14.8	µg/Kg	100	0.148	1	0.1482
1,4-Dichlorobenzene (para)	U	<44.0	<100	<44.0	µg/Kg	100	0.440	1	0.4405
sec-Butylbenzene		**874**	**874**	<11.3	µg/Kg	100	0.113	1	0.1128
1,3-Dichlorobenzene (meta)	U	<9.24	<100	<9.24	µg/Kg	100	0.0924	1	0.0924
p-Isopropyltoluene		**730**	**730**	<10.5	µg/Kg	100	0.105	1	0.1046
4-Chlorotoluene	U	<7.39	<100	<7.39	µg/Kg	100	0.0739	1	0.0739
1,2-Dichlorobenzene (ortho)	U	<10.9	<100	<10.9	µg/Kg	100	0.109	1	0.1092
n-Butylbenzene		**932**	**932**	<11.6	µg/Kg	100	0.116	1	0.1156
1,2-Dibromo-3-chloropropane	U	<19.2	<500	<19.2	µg/Kg	100	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<119	<500	<119	µg/Kg	100	1.19	5	1.1906
1,2,4-Trichlorobenzene	U	<31.1	<500	<31.1	µg/Kg	100	0.311	5	0.3107
Naphthalene		**1130**	**1130**	<25.8	µg/Kg	100	0.258	5	0.2585
Hexachlorobutadiene	U	<15.8	<500	<15.8	µg/Kg	100	0.158	5	0.1583

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		4740	µg/Kg	100	50.0	95	42 - 129
Toluene-d8		4970	µg/Kg	100	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		4950	µg/Kg	100	50.0	99	78 - 120

Sample: 90835 - HGLGW27-03-051606

Analysis:	Ag, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Silver	U	<0.000297	<0.00200	<0.000297	mg/L	1	0.000297	0.002	0.000297

Sample: 90835 - HGLGW27-03-051606

Analysis:	As, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Arsenic	U	<0.00255	<0.00500	<0.00255	mg/L	1	0.00255	0.005	0.002551

Sample: 90835 - HGLGW27-03-051606

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Analysis: Ba, Dissolved | Analytical Method: S 6010B | Prep Method: S 3005A
QC Batch: 26992 | Date Analyzed: 2006-06-01 | Analyzed By: RR
Prep Batch: 23648 | Sample Preparation: 2006-05-30 | Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Barium		**0.0220**	**0.0220**	<0.00148	mg/L	1	0.00148	0.01	0.001475

Sample: 90835 - HGLGW27-03-051606

Analysis: Cd, Dissolved | Analytical Method: S 6010B | Prep Method: S 3005A
QC Batch: 26992 | Date Analyzed: 2006-06-01 | Analyzed By: RR
Prep Batch: 23648 | Sample Preparation: 2006-05-30 | Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Cadmium	U	<0.000595	<0.00100	<0.000595	mg/L	1	0.000595	0.001	0.000595

Sample: 90835 - HGLGW27-03-051606

Analysis: Cr, Dissolved | Analytical Method: S 6010B | Prep Method: S 3005A
QC Batch: 26992 | Date Analyzed: 2006-06-01 | Analyzed By: RR
Prep Batch: 23648 | Sample Preparation: 2006-05-30 | Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium	U	<0.000238	<0.00500	<0.000238	mg/L	1	0.000238	0.005	0.000238

Sample: 90835 - HGLGW27-03-051606

Analysis: Hg, Dissolved | Analytical Method: S 7470A | Prep Method: N/A
QC Batch: 27000 | Date Analyzed: 2006-06-01 | Analyzed By: TP
Prep Batch: 23693 | Sample Preparation: 2006-05-31 | Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 90835 - HGLGW27-03-051606

Analysis: Pb, Dissolved | Analytical Method: S 6010B | Prep Method: S 3005A
QC Batch: 26992 | Date Analyzed: 2006-06-01 | Analyzed By: RR
Prep Batch: 23648 | Sample Preparation: 2006-05-30 | Prepared By: TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Lead	U	<0.00180	<0.00500	<0.00180	mg/L	1	0.00180	0.005	0.001796

Sample: 90835 - HGLGW27-03-051606

Analysis:	Se, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	26992	Date Analyzed:	2006-06-01	Analyzed By:	RR
Prep Batch:	23648	Sample Preparation:	2006-05-30	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Selenium		**0.0970**	**0.0970**	<0.00232	mg/L	1	0.00232	0.01	0.002318

Sample: 90835 - HGLGW27-03-051606

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	26843	Date Analyzed:	2006-05-23	Analyzed By:	AG
Prep Batch:	23468	Sample Preparation:	2006-05-19	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	J	**0.00240**	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone		**0.0178**	**0.0178**	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719

continued . . .

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sample 90835 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Naphthalene		**0.0421**	**0.0421**	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene		**0.0153**	**0.0153**	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene		**0.0232**	**0.0232**	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997

continued . . .

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sample 90835 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0169	mg/L	1	0.0800	21	10 - 84.7
Phenol-d5		0.0118	mg/L	1	0.0800	15	10 - 54.9
Nitrobenzene-d5		0.0401	mg/L	1	0.0800	50	10 - 202
2-Fluorobiphenyl		0.0414	mg/L	1	0.0800	52	10 - 199
2,4,6-Tribromophenol		0.0801	mg/L	1	0.0800	100	10 - 141
Terphenyl-d14		0.103	mg/L	1	0.0800	129	10 - 160

Sample: 90835 - HGLGW27-03-051606

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.0110**	**0.0110**	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium		**0.0220**	**0.0220**	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 90835 - HGLGW27-03-051606

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26809	Date Analyzed:	2006-05-24	Analyzed By:	JL

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Prep Batch: 23544 Sample Preparation: 2006-05-24 Prepared By: JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**29.1**	**29.1**	<0.119	mg/L	0.1	1.19	50	1.19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.4	mg/L	0.1	150	89	66.6 - 111

Sample: 90835 - HGLGW27-03-051606

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 26698 Date Analyzed: 2006-05-21 Analyzed By: KB
Prep Batch: 23447 Sample Preparation: 2006-05-21 Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**24.2**	**24.2**	<0.144	mg/L	5	0.0288	0.1	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[30]	0.861	mg/L	5	0.200	86	88.8 - 95.6
4-Bromofluorobenzene (4-BFB)	[31]	1.48	mg/L	5	0.200	148	75.6 - 111.2

Sample: 90835 - HGLGW27-03-051606

Analysis: Volatiles Analytical Method: S 8260B Prep Method: S 5030B
QC Batch: 26849 Date Analyzed: 2006-05-24 Analyzed By: JG
Prep Batch: 23577 Sample Preparation: 2006-05-24 Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<6.99	<100	<6.99	µg/L	100	0.0699	1	0.0699
Dichlorodifluoromethane	U	<5.98	<100	<5.98	µg/L	100	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<23.0	<100	<23.0	µg/L	100	0.230	1	0.2298
Vinyl Chloride	U	<9.02	<100	<9.02	µg/L	100	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<74.0	<100	<74.0	µg/L	100	0.740	1	0.7402
Chloroethane	U	<19.5	<100	<19.5	µg/L	100	0.195	1	0.1952
Trichlorofluoromethane	U	<16.0	<100	<16.0	µg/L	100	0.160	1	0.16
Acetone	U	<85.4	<1000	<85.4	µg/L	100	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<11.2	<500	<11.2	µg/L	100	0.112	5	0.1119
Carbon Disulfide	U	<7.64	<100	<7.64	µg/L	100	0.0764	1	0.0764
Acrylonitrile	U	<18.4	<100	<18.4	µg/L	100	0.184	1	0.1837
2-Butanone (MEK)	U	<39.4	<500	<39.4	µg/L	100	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<48.4	<500	<48.4	µg/L	100	0.484	5	0.484
2-Hexanone	U	<9.75	<100	<9.75	µg/L	100	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<42.1	<1000	<42.1	µg/L	100	0.421	10	0.4207

continued . . .

[30] Surrogate out due to peak interference.
[31] High surrogate recovery due to peak interference.

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sample 90835 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,1-Dichloroethene	U	<7.36	<100	<7.36	µg/L	100	0.0736	1	0.0736	
Methylene chloride	U	<68.9	<500	<68.9	µg/L	100	0.689	5	0.6888	
MTBE	U	<5.04	<100	<5.04	µg/L	100	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<5.98	<100	<5.98	µg/L	100	0.0598	1	0.0598	
1,1-Dichloroethane	U	<2.99	<100	<2.99	µg/L	100	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<10.1	<100	<10.1	µg/L	100	0.101	1	0.1006	
2,2-Dichloropropane	U	<6.65	<100	<6.65	µg/L	100	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	J	**52.4**	<100	<5.57	µg/L	100	0.0557	1	0.0557	J
Chloroform	U	<4.75	<100	<4.75	µg/L	100	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<8.46	<100	<8.46	µg/L	100	0.0846	1	0.0846	
1,1-Dichloropropene	U	<4.23	<100	<4.23	µg/L	100	0.0423	1	0.0423	
Benzene		**2360**	**2360**	<4.95	µg/L	100	0.0495	1	0.0495	
Carbon Tetrachloride	U	<12.1	<100	<12.1	µg/L	100	0.121	1	0.1213	
1,2-Dichloropropane	U	<9.33	<100	<9.33	µg/L	100	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<4.95	<100	<4.95	µg/L	100	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<6.40	<100	<6.40	µg/L	100	0.0640	1	0.064	
Bromodichloromethane	U	<6.51	<100	<6.51	µg/L	100	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<9.05	<500	<9.05	µg/L	100	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<6.40	<100	<6.40	µg/L	100	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<5.04	<100	<5.04	µg/L	100	0.0504	1	0.0504	
Toluene		**1940**	**1940**	<7.36	µg/L	100	0.0736	1	0.0736	
1,1,2-Trichloroethane	U	<10.6	<100	<10.6	µg/L	100	0.106	1	0.1056	
1,3-Dichloropropane	U	<6.25	<100	<6.25	µg/L	100	0.0625	1	0.0625	
Dibromochloromethane	U	<7.91	<100	<7.91	µg/L	100	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<4.60	<100	<4.60	µg/L	100	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<6.96	<100	<6.96	µg/L	100	0.0696	1	0.0696	
Chlorobenzene	U	<2.17	<100	<2.17	µg/L	100	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<12.5	<100	<12.5	µg/L	100	0.125	1	0.1253	
Ethylbenzene		**2330**	**2330**	<5.66	µg/L	100	0.0566	1	0.0566	
m,p-Xylene		**1460**	**1460**	<3.63	µg/L	100	0.0363	1	0.0363	
Bromoform	U	<8.59	<100	<8.59	µg/L	100	0.0859	1	0.0859	
Styrene	U	<3.94	<100	<3.94	µg/L	100	0.0394	1	0.0394	
o-Xylene		**1020**	**1020**	<5.04	µg/L	100	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
2-Chlorotoluene	U	<2.83	<100	<2.83	µg/L	100	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<6.79	<100	<6.79	µg/L	100	0.0679	1	0.0679	
Isopropylbenzene		**230**	**230**	<4.06	µg/L	100	0.0406	1	0.0406	
Bromobenzene	U	<10.3	<100	<10.3	µg/L	100	0.103	1	0.1033	
n-Propylbenzene		**264**	**264**	<4.23	µg/L	100	0.0423	1	0.0423	
1,3,5-Trimethylbenzene		**266**	**266**	<5.57	µg/L	100	0.0557	1	0.0557	
tert-Butylbenzene	U	<7.70	<100	<7.70	µg/L	100	0.0770	1	0.077	
1,2,4-Trimethylbenzene		**940**	**940**	<3.36	µg/L	100	0.0336	1	0.0336	
1,4-Dichlorobenzene (para)	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
sec-Butylbenzene	J	**51.6**	<100	<4.39	µg/L	100	0.0439	1	0.0439	J
1,3-Dichlorobenzene (meta)	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
p-Isopropyltoluene	J	**39.8**	<100	<5.13	µg/L	100	0.0513	1	0.0513	J
4-Chlorotoluene	U	<4.60	<100	<4.60	µg/L	100	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<6.29	<100	<6.29	µg/L	100	0.0629	1	0.0629	
n-Butylbenzene	J	**44.8**	<100	<4.00	µg/L	100	0.0400	1	0.04	J
1,2-Dibromo-3-chloropropane	U	<53.8	<200	<53.8	µg/L	100	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<50.4	<500	<50.4	µg/L	100	0.504	5	0.5035	

continued ...

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sample 90835 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2,4-Trichlorobenzene	U	<16.6	<500	<16.6	µg/L	100	0.166	5	0.1663
Naphthalene	J	**163**	<500	<41.7	µg/L	100	0.417	5	0.4166
Hexachlorobutadiene	U	<17.6	<500	<17.6	µg/L	100	0.176	5	0.1758

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.0	µg/L	1	50.0	98	70 - 130
Toluene-d8		50.4	µg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		48.0	µg/L	1	50.0	96	70 - 130

Sample: 90836 - HGLSD27-01-0002

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27046	Date Analyzed:	2006-05-24	Analyzed By:	AG
Prep Batch:	23470	Sample Preparation:	2006-05-22	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	J	**0.0570**	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403

continued . . .

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sample 90836 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352	
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373	
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402	
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046	
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475	
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041	
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034	
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209	
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403	
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442	
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041	
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417	
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411	
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531	
Acenaphthylene		**0.291**	**0.291**	<0.0465	mg/Kg	1	0.0465	0.25	0.0465	
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454	
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278	
Acenaphthene	J	**0.124**	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461	J
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113	
Dibenzofuran		**0.352**	**0.352**	<0.0480	mg/Kg	1	0.0480	0.25	0.048	
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431	
4-Nitrophenol	J	**0.0530**	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166	J
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427	
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471	
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361	
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523	
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435	
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643	
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466	
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278	
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067	
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368	
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555	
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536	
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352	
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584	
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349	
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04	
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532	
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368	
Phenanthrene		**0.470**	**0.470**	<0.0438	mg/Kg	1	0.0438	0.25	0.0438	
Anthracene		**2.96**	**2.96**	<0.0565	mg/Kg	1	0.0565	0.25	0.0565	
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475	
Fluoranthene		**6.67**	**6.67**	<0.0456	mg/Kg	1	0.0456	0.25	0.0456	
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178	
Pyrene		**5.88**	**5.88**	<0.124	mg/Kg	1	0.124	0.25	0.124	
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407	
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15	
Benzo(a)anthracene		**2.68**	**2.68**	<0.0538	mg/Kg	1	0.0538	0.25	0.0538	
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427	
Chrysene		**3.80**	**3.80**	<0.0609	mg/Kg	1	0.0609	0.25	0.0609	

continued . . .

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sample 90836 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-ethylhexyl)phthalate		**5.49**	**5.49**	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene		**4.10**	**4.10**	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene		**2.32**	**2.32**	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene		**3.20**	**3.20**	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene		**2.02**	**2.02**	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene		**1.25**	**1.25**	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene		**2.71**	**2.71**	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.61	mg/Kg	1	2.67	60	10 - 98.8
Phenol-d5		0.420	mg/Kg	1	2.67	16	10 - 105
Nitrobenzene-d5		2.41	mg/Kg	1	2.67	90	10 - 114
2-Fluorobiphenyl		2.51	mg/Kg	1	2.67	94	10 - 122
2,4,6-Tribromophenol	[32]	3.72	mg/Kg	1	2.67	139	10 - 117
Terphenyl-d14		2.87	mg/Kg	1	2.67	107	10 - 116

Sample: 90836 - HGLSD27-01-0002

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	26990	Date Analyzed:	2006-05-31	Analyzed By:	TP
Prep Batch:	23692	Sample Preparation:	2006-05-30	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00444	<0.0500	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic		**3.81**	**3.81**	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**13500**	**13500**	<6.01	mg/Kg	100	0.0601	1	0.0601
Total Cadmium		**21.6**	**21.6**	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**290**	**290**	<0.125	mg/Kg	10	0.0125	0.5	0.0125
Total Mercury		**0.0800**	**0.0800**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**1900**	**1900**	<3.67	mg/Kg	10	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

Sample: 90836 - HGLSD27-01-0002

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26810	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23545	Sample Preparation:	2006-05-24	Prepared By:	JL

[32] High surrogate recovery due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**107**	**107**	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[33]	182	mg/Kg	1	150	121	62.8 - 115

Sample: 90836 - HGLSD27-01-0002

Analysis: TPH GRO
QC Batch: 26822
Prep Batch: 23551

Analytical Method: S 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		~~2.89~~	**2.89**	<1.21	mg/Kg	10	0.121	0.1	0.121

2.89 U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.720	mg/Kg	10	0.100	72	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	71.9 - 123.7

Sample: 90836 - HGLSD27-01-0002

Analysis: Volatiles
QC Batch: 26796
Prep Batch: 23529

Analytical Method: S 8260B
Date Analyzed: 2006-05-23
Sample Preparation: 2006-05-23

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<2.41	<10.0	<2.41	µg/Kg	10	0.241	1	0.2414
Dichlorodifluoromethane	U	<0.789	<10.0	<0.789	µg/Kg	10	0.0789	1	0.0789
Chloromethane (methyl chloride)	U	<2.29	<10.0	<2.29	µg/Kg	10	0.229	1	0.229
Vinyl Chloride	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.1425
Bromomethane (methyl bromide)	U	<7.00	<50.0	<7.00	µg/Kg	10	0.700	5	0.7
Chloroethane	U	<1.73	<10.0	<1.73	µg/Kg	10	0.173	1	0.1732
Trichlorofluoromethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1204
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<4.88	<50.0	<4.88	µg/Kg	10	0.488	5	0.4878
Carbon Disulfide	U	<0.947	<10.0	<0.947	µg/Kg	10	0.0947	1	0.0947
Acrylonitrile	U	<4.94	<10.0	<4.94	µg/Kg	10	0.494	1	0.4945
2-Butanone (MEK)	U	<14.0	<50.0	<14.0	µg/Kg	10	1.40	5	1.4017
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<2.22	<50.0	<2.22	µg/Kg	10	0.222	5	0.2224
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<1.17	<10.0	<1.17	µg/Kg	10	0.117	1	0.1166
Methylene chloride	JB	~~10.3~~	<50.0	5.51	µg/Kg	10	0.315	5	0.3154
MTBE	U	<1.53	<10.0	<1.53	µg/Kg	10	0.153	1	0.1529

50.0 U

continued ...

[33] High surrogate recovery due to peak interference.

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sample 90836 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
trans-1,2-Dichloroethene	U	<1.54	<10.0	<1.54	µg/Kg	10	0.154	1	0.1535	
1,1-Dichloroethane	U	<0.513	<10.0	<0.513	µg/Kg	10	0.0513	1	0.0513	
cis-1,2-Dichloroethene	U	<2.13	<10.0	<2.13	µg/Kg	10	0.213	1	0.2129	
2,2-Dichloropropane	U	<0.982	<10.0	<0.982	µg/Kg	10	0.0982	1	0.0982	
1,2-Dichloroethane (EDC)	U	<1.98	<10.0	<1.98	µg/Kg	10	0.198	1	0.198	
Chloroform	J	**0.580**	<10.0	<0.486	µg/Kg	10	0.0486	1	0.0486	J
1,1,1-Trichloroethane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.101	
1,1-Dichloropropene	U	<1.60	<10.0	<1.60	µg/Kg	10	0.160	1	0.1599	
Benzene	J	**5.42**	<10.0	<2.36	µg/Kg	10	0.236	1	0.2365	J
Carbon Tetrachloride	U	<1.08	<10.0	<1.08	µg/Kg	10	0.108	1	0.1082	
1,2-Dichloropropane	U	<1.01	<10.0	<1.01	µg/Kg	10	0.101	1	0.1009	
Trichloroethene (TCE)	U	<1.95	<10.0	<1.95	µg/Kg	10	0.195	1	0.1951	
Dibromomethane (methylene bromide)	U	<1.62	<10.0	<1.62	µg/Kg	10	0.162	1	0.1618	
Bromodichloromethane	U	<0.958	<10.0	<0.958	µg/Kg	10	0.0958	1	0.0958	
2-Chloroethyl vinyl ether	U	<1.31	<50.0	<1.31	µg/Kg	10	0.131	5	0.1314	
cis-1,3-Dichloropropene	U	<1.19	<10.0	<1.19	µg/Kg	10	0.119	1	0.119	
trans-1,3-Dichloropropene	U	<0.860	<10.0	<0.860	µg/Kg	10	0.0860	1	0.086	
Toluene	B	~~**13.0**~~	**13.0**	3.75	µg/Kg	10	0.135	1	0.1352	13.0 U
1,1,2-Trichloroethane	U	<2.03	<10.0	<2.03	µg/Kg	10	0.203	1	0.2031	
1,3-Dichloropropane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1199	
Dibromochloromethane	U	<1.32	<10.0	<1.32	µg/Kg	10	0.132	1	0.1317	
1,2-Dibromoethane (EDB)	U	<1.48	<10.0	<1.48	µg/Kg	10	0.148	1	0.1477	
Tetrachloroethene (PCE)	U	<1.85	<10.0	<1.85	µg/Kg	10	0.185	1	0.1848	
Chlorobenzene	U	<1.24	<10.0	<1.24	µg/Kg	10	0.124	1	0.1236	
1,1,1,2-Tetrachloroethane	U	<1.20	<10.0	<1.20	µg/Kg	10	0.120	1	0.1203	
Ethylbenzene	JB	~~**3.83**~~	<10.0	0.870	µg/Kg	10	0.0599	1	0.0599	10.0 U
m,p-Xylene	J	**4.78**	<10.0	<1.75	µg/Kg	10	0.175	1	0.1754	J
Bromoform	U	<1.80	<10.0	<1.80	µg/Kg	10	0.180	1	0.1802	
Styrene	U	<0.898	<10.0	<0.898	µg/Kg	10	0.0898	1	0.0898	
o-Xylene	J	**2.28**	<10.0	<0.991	µg/Kg	10	0.0991	1	0.0991	J
1,1,2,2-Tetrachloroethane	U	<2.56	<10.0	<2.56	µg/Kg	10	0.256	1	0.2555	
2-Chlorotoluene	U	<0.997	<10.0	<0.997	µg/Kg	10	0.0997	1	0.0997	
1,2,3-Trichloropropane	U	<0.935	<10.0	<0.935	µg/Kg	10	0.0935	1	0.0935	
Isopropylbenzene	U	<1.05	<10.0	<1.05	µg/Kg	10	0.105	1	0.1048	
Bromobenzene	U	<1.42	<10.0	<1.42	µg/Kg	10	0.142	1	0.142	
n-Propylbenzene	JB	~~**1.22**~~	<10.0	1.46	µg/Kg	10	0.101	1	0.1007	10.0 U
1,3,5-Trimethylbenzene	JB	~~**1.32**~~	<10.0	1.36	µg/Kg	10	0.104	1	0.1042	10.0 U
tert-Butylbenzene	U	<1.96	<10.0	<1.96	µg/Kg	10	0.196	1	0.1963	
1,2,4-Trimethylbenzene	J	**3.68**	<10.0	<1.48	µg/Kg	10	0.148	1	0.1482	J
1,4-Dichlorobenzene (para)	U	<4.40	<10.0	<4.40	µg/Kg	10	0.440	1	0.4405	
sec-Butylbenzene	JB	~~**1.32**~~	<10.0	2.54	µg/Kg	10	0.113	1	0.1128	10.0 U
1,3-Dichlorobenzene (meta)	U	<0.924	<10.0	<0.924	µg/Kg	10	0.0924	1	0.0924	
p-Isopropyltoluene	J	**1.66**	<10.0	<1.05	µg/Kg	10	0.105	1	0.1046	J
4-Chlorotoluene	U	<0.739	<10.0	<0.739	µg/Kg	10	0.0739	1	0.0739	
1,2-Dichlorobenzene (ortho)	U	<1.09	<10.0	<1.09	µg/Kg	10	0.109	1	0.1092	
n-Butylbenzene	J	**2.10**	<10.0	<1.16	µg/Kg	10	0.116	1	0.1156	J
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<11.9	<50.0	<11.9	µg/Kg	10	1.19	5	1.1906	
1,2,4-Trichlorobenzene	U	<3.11	<50.0	<3.11	µg/Kg	10	0.311	5	0.3107	
Naphthalene	J	**7.39**	<50.0	<2.58	µg/Kg	10	0.258	5	0.2585	J
Hexachlorobutadiene	U	<1.58	<50.0	<1.58	µg/Kg	10	0.158	5	0.1583	

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		459	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		500	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		499	µg/Kg	10	50.0	100	78 - 120

Sample: 90837 - HGLGW27-02-051606

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	26843	Date Analyzed:	2006-05-23	Analyzed By:	AG
Prep Batch:	23468	Sample Preparation:	2006-05-19	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol		**0.0133**	**0.0133**	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol		**0.0538**	**0.0538**	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone		**0.0200**	**0.0200**	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol		**0.0152**	**0.0152**	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid		**0.106**	**0.106**	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene		**0.0541**	**0.0541**	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene		**0.0152**	**0.0152**	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene		**0.0211**	**0.0211**	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143

continued . . .

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sample 90837 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate		**0.0109**	**0.0109**	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548

continued . . .

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sample 90837 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0209	mg/L	1	0.0800	26	10 - 84.7
Phenol-d5		0.0147	mg/L	1	0.0800	18	10 - 54.9
Nitrobenzene-d5		0.0564	mg/L	1	0.0800	70	10 - 202
2-Fluorobiphenyl		0.0433	mg/L	1	0.0800	54	10 - 199
2,4,6-Tribromophenol		0.0928	mg/L	1	0.0800	116	10 - 141
Terphenyl-d14		0.102	mg/L	1	0.0800	128	10 - 160

Sample: 90837 - HGLGW27-02-051606

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium		**0.0400**	**0.0400**	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	J	**0.00300**	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 90837 - HGLGW27-02-051606

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26754	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23476	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	JB	**4.17**	<5.00	0.510	mg/L	0.1	1.19	50	1.19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.5	mg/L	0.1	150	110	66.6 - 111

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Sample: 90837 - HGLGW27-02-051606

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	26698	Date Analyzed:	2006-05-21	Analyzed By:	KB
Prep Batch:	23447	Sample Preparation:	2006-05-21	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**56.4**	**56.4**	<0.144	mg/L	5	0.0288	0.1	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[34]	0.867	mg/L	5	0.200	87	88.8 - 95.6
4-Bromofluorobenzene (4-BFB)	[35]	1.21	mg/L	5	0.200	121	75.6 - 111.2

Sample: 90837 - HGLGW27-02-051606

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26849	Date Analyzed:	2006-05-24	Analyzed By:	JG
Prep Batch:	23577	Sample Preparation:	2006-05-24	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<6.99	<100	<6.99	µg/L	100	0.0699	1	0.0699
Dichlorodifluoromethane	U	<5.98	<100	<5.98	µg/L	100	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<23.0	<100	<23.0	µg/L	100	0.230	1	0.2298
Vinyl Chloride	U	<9.02	<100	<9.02	µg/L	100	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<74.0	<100	<74.0	µg/L	100	0.740	1	0.7402
Chloroethane	U	<19.5	<100	<19.5	µg/L	100	0.195	1	0.1952
Trichlorofluoromethane	U	<16.0	<100	<16.0	µg/L	100	0.160	1	0.16
Acetone	U	<85.4	<1000	<85.4	µg/L	100	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<11.2	<500	<11.2	µg/L	100	0.112	5	0.1119
Carbon Disulfide	U	<7.64	<100	<7.64	µg/L	100	0.0764	1	0.0764
Acrylonitrile	U	<18.4	<100	<18.4	µg/L	100	0.184	1	0.1837
2-Butanone (MEK)	U	<39.4	<500	<39.4	µg/L	100	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<48.4	<500	<48.4	µg/L	100	0.484	5	0.484
2-Hexanone	U	<9.75	<100	<9.75	µg/L	100	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<42.1	<1000	<42.1	µg/L	100	0.421	10	0.4207
1,1-Dichloroethene	U	<7.36	<100	<7.36	µg/L	100	0.0736	1	0.0736
Methylene chloride	U	<68.9	<500	<68.9	µg/L	100	0.689	5	0.6888
MTBE	U	<5.04	<100	<5.04	µg/L	100	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<5.98	<100	<5.98	µg/L	100	0.0598	1	0.0598
1,1-Dichloroethane	U	<2.99	<100	<2.99	µg/L	100	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<10.1	<100	<10.1	µg/L	100	0.101	1	0.1006
2,2-Dichloropropane	U	<6.65	<100	<6.65	µg/L	100	0.0665	1	0.0665
1,2-Dichloroethane (EDC)	U	<5.57	<100	<5.57	µg/L	100	0.0557	1	0.0557
Chloroform	U	<4.75	<100	<4.75	µg/L	100	0.0475	1	0.0475
1,1,1-Trichloroethane	U	<8.46	<100	<8.46	µg/L	100	0.0846	1	0.0846
1,1-Dichloropropene	U	<4.23	<100	<4.23	µg/L	100	0.0423	1	0.0423
Benzene		**7750**	**7750**	<4.95	µg/L	100	0.0495	1	0.0495
Carbon Tetrachloride	U	<12.1	<100	<12.1	µg/L	100	0.121	1	0.1213

continued . . .

[34] Surrogate out due to peak interference.
[35] High surrogate recovery due to peak interference.

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sample 90837 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,2-Dichloropropane	U	<9.33	<100	<9.33	µg/L	100	0.0933	1	0.0933	
Trichloroethene (TCE)	J	**6.89**	<100	<4.95	µg/L	100	0.0495	1	0.0495	f
Dibromomethane (methylene bromide)	U	<6.40	<100	<6.40	µg/L	100	0.0640	1	0.064	
Bromodichloromethane	U	<6.51	<100	<6.51	µg/L	100	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<9.05	<500	<9.05	µg/L	100	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<6.40	<100	<6.40	µg/L	100	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<5.04	<100	<5.04	µg/L	100	0.0504	1	0.0504	
Toluene		**5690**	**5690**	<7.36	µg/L	100	0.0736	1	0.0736	
1,1,2-Trichloroethane	U	<10.6	<100	<10.6	µg/L	100	0.106	1	0.1056	
1,3-Dichloropropane	U	<6.25	<100	<6.25	µg/L	100	0.0625	1	0.0625	
Dibromochloromethane	U	<7.91	<100	<7.91	µg/L	100	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<4.60	<100	<4.60	µg/L	100	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<6.96	<100	<6.96	µg/L	100	0.0696	1	0.0696	
Chlorobenzene	U	<2.17	<100	<2.17	µg/L	100	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<12.5	<100	<12.5	µg/L	100	0.125	1	0.1253	
Ethylbenzene		**1030**	**1030**	<5.66	µg/L	100	0.0566	1	0.0566	
m,p-Xylene		**1430**	**1430**	<3.63	µg/L	100	0.0363	1	0.0363	
Bromoform	U	<8.59	<100	<8.59	µg/L	100	0.0859	1	0.0859	
Styrene	U	<3.94	<100	<3.94	µg/L	100	0.0394	1	0.0394	
o-Xylene		**755**	**755**	<5.04	µg/L	100	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
2-Chlorotoluene	U	<2.83	<100	<2.83	µg/L	100	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<6.79	<100	<6.79	µg/L	100	0.0679	1	0.0679	
Isopropylbenzene	J	**82.0**	<100	<4.06	µg/L	100	0.0406	1	0.0406	f
Bromobenzene	U	<10.3	<100	<10.3	µg/L	100	0.103	1	0.1033	
n-Propylbenzene		**110**	**110**	<4.23	µg/L	100	0.0423	1	0.0423	
1,3,5-Trimethylbenzene		**118**	**118**	<5.57	µg/L	100	0.0557	1	0.0557	
tert-Butylbenzene	U	<7.70	<100	<7.70	µg/L	100	0.0770	1	0.077	
1,2,4-Trimethylbenzene		**412**	**412**	<3.36	µg/L	100	0.0336	1	0.0336	
1,4-Dichlorobenzene (para)	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
sec-Butylbenzene	J	**28.0**	<100	<4.39	µg/L	100	0.0439	1	0.0439	f
1,3-Dichlorobenzene (meta)	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
p-Isopropyltoluene	J	**20.2**	<100	<5.13	µg/L	100	0.0513	1	0.0513	f
4-Chlorotoluene	U	<4.60	<100	<4.60	µg/L	100	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<6.29	<100	<6.29	µg/L	100	0.0629	1	0.0629	
n-Butylbenzene	J	**33.2**	<100	<4.00	µg/L	100	0.0400	1	0.04	f
1,2-Dibromo-3-chloropropane	U	<53.8	<200	<53.8	µg/L	100	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<50.4	<500	<50.4	µg/L	100	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<16.6	<500	<16.6	µg/L	100	0.166	5	0.1663	
Naphthalene	J	**133**	<500	<41.7	µg/L	100	0.417	5	0.4166	f
Hexachlorobutadiene	U	<17.6	<500	<17.6	µg/L	100	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.6	µg/L	1	50.0	99	70 - 130
Toluene-d8		50.2	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		48.1	µg/L	1	50.0	96	70 - 130

Sample: 90838 - GWDUP-01

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Analysis: Ag, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Silver	U	<0.000297	<0.00200	<0.000297	mg/L	1	0.000297	0.002	0.000297

Sample: 90838 - GWDUP-01

Analysis: As, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Arsenic	U	<0.00255	<0.00500	<0.00255	mg/L	1	0.00255	0.005	0.002551

Sample: 90838 - GWDUP-01

Analysis: Ba, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Barium		**0.0230**	**0.0230**	<0.00148	mg/L	1	0.00148	0.01	0.001475

Sample: 90838 - GWDUP-01

Analysis: Cd, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Cadmium	U	<0.000595	<0.00100	<0.000595	mg/L	1	0.000595	0.001	0.000595

Sample: 90838 - GWDUP-01

Analysis: Cr, Dissolved
QC Batch: 26992
Prep Batch: 23648

Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium	U	<0.000238	<0.00500	<0.000238	mg/L	1	0.000238	0.005	0.000238

Sample: 90838 - GWDUP-01

Analysis: Hg, Dissolved
QC Batch: 27000
Prep Batch: 23693
Analytical Method: S 7470A
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-31
Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 90838 - GWDUP-01

Analysis: Pb, Dissolved
QC Batch: 26992
Prep Batch: 23648
Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30
Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Lead	U	<0.00180	<0.00500	<0.00180	mg/L	1	0.00180	0.005	0.001796

Sample: 90838 - GWDUP-01

Analysis: Se, Dissolved
QC Batch: 26992
Prep Batch: 23648
Analytical Method: S 6010B
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-30
Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Selenium		**0.0810**	**0.0810**	<0.00232	mg/L	1	0.00232	0.01	0.002318

Sample: 90838 - GWDUP-01

Analysis: Semivolatiles
QC Batch: 26843
Prep Batch: 23468
Analytical Method: S 8270C
Date Analyzed: 2006-05-23
Sample Preparation: 2006-05-19
Prep Method: S 3510C
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121

continued ...

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sample 90838 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone		**0.0228**	**0.0228**	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene		**0.0557**	**0.0557**	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene		**0.0211**	**0.0211**	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene		**0.0298**	**0.0298**	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803

continued ...

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sample 90838 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0173	mg/L	1	0.0800	22	10 - 84.7
Phenol-d5		0.0133	mg/L	1	0.0800	17	10 - 54.9
Nitrobenzene-d5		0.0473	mg/L	1	0.0800	59	10 - 202
2-Fluorobiphenyl		0.0490	mg/L	1	0.0800	61	10 - 199
2,4,6-Tribromophenol		0.0834	mg/L	1	0.0800	104	10 - 141
Terphenyl-d14		0.0892	mg/L	1	0.0800	112	10 - 160

Sample: 90838 - GWDUP-01

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Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.0140**	**0.0140**	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium		**0.0360**	**0.0360**	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 90838 - GWDUP-01

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26809	Date Analyzed:	2006-05-24	Analyzed By:	JL
Prep Batch:	23544	Sample Preparation:	2006-05-24	Prepared By:	JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**60.2**	**60.2**	<0.119	mg/L	0.1	1.19	50	1.19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.8	mg/L	0.1	150	99	66.6 - 111

Sample: 90838 - GWDUP-01

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	26698	Date Analyzed:	2006-05-21	Analyzed By:	KB
Prep Batch:	23447	Sample Preparation:	2006-05-21	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**23.6**	**23.6**	<0.288	mg/L	10	0.0288	0.1	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[36]	1.69	mg/L	10	0.200	84	88.8 - 95.6
4-Bromofluorobenzene (4-BFB)	[37]	2.46	mg/L	10	0.200	123	75.6 - 111.2

[36] Surrogate out due to peak interference.
[37] High surrogate recovery due to peak interference.

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Sample: 90838 - GWDUP-01

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26849	Date Analyzed:	2006-05-24	Analyzed By:	JG
Prep Batch:	23577	Sample Preparation:	2006-05-24	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<6.99	<100	<6.99	µg/L	100	0.0699	1	0.0699
Dichlorodifluoromethane	U	<5.98	<100	<5.98	µg/L	100	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<23.0	<100	<23.0	µg/L	100	0.230	1	0.2298
Vinyl Chloride	U	<9.02	<100	<9.02	µg/L	100	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<74.0	<100	<74.0	µg/L	100	0.740	1	0.7402
Chloroethane	U	<19.5	<100	<19.5	µg/L	100	0.195	1	0.1952
Trichlorofluoromethane	U	<16.0	<100	<16.0	µg/L	100	0.160	1	0.16
Acetone	J	**850**	<1000	<85.4	µg/L	100	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<11.2	<500	<11.2	µg/L	100	0.112	5	0.1119
Carbon Disulfide	U	<7.64	<100	<7.64	µg/L	100	0.0764	1	0.0764
Acrylonitrile	U	<18.4	<100	<18.4	µg/L	100	0.184	1	0.1837
2-Butanone (MEK)	U	<39.4	<500	<39.4	µg/L	100	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<48.4	<500	<48.4	µg/L	100	0.484	5	0.484
2-Hexanone	U	<9.75	<100	<9.75	µg/L	100	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<42.1	<1000	<42.1	µg/L	100	0.421	10	0.4207
1,1-Dichloroethene	U	<7.36	<100	<7.36	µg/L	100	0.0736	1	0.0736
Methylene chloride	U	<68.9	<500	<68.9	µg/L	100	0.689	5	0.6888
MTBE	U	<5.04	<100	<5.04	µg/L	100	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<5.98	<100	<5.98	µg/L	100	0.0598	1	0.0598
1,1-Dichloroethane	U	<2.99	<100	<2.99	µg/L	100	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<10.1	<100	<10.1	µg/L	100	0.101	1	0.1006
2,2-Dichloropropane	U	<6.65	<100	<6.65	µg/L	100	0.0665	1	0.0665
1,2-Dichloroethane (EDC)	U	<5.57	<100	<5.57	µg/L	100	0.0557	1	0.0557
Chloroform	U	<4.75	<100	<4.75	µg/L	100	0.0475	1	0.0475
1,1,1-Trichloroethane	U	<8.46	<100	<8.46	µg/L	100	0.0846	1	0.0846
1,1-Dichloropropene	U	<4.23	<100	<4.23	µg/L	100	0.0423	1	0.0423
Benzene		**2800**	**2800**	<4.95	µg/L	100	0.0495	1	0.0495
Carbon Tetrachloride	U	<12.1	<100	<12.1	µg/L	100	0.121	1	0.1213
1,2-Dichloropropane	U	<9.33	<100	<9.33	µg/L	100	0.0933	1	0.0933
Trichloroethene (TCE)	U	<4.95	<100	<4.95	µg/L	100	0.0495	1	0.0495
Dibromomethane (methylene bromide)	U	<6.40	<100	<6.40	µg/L	100	0.0640	1	0.064
Bromodichloromethane	U	<6.51	<100	<6.51	µg/L	100	0.0651	1	0.0651
2-Chloroethyl vinyl ether	U	<9.05	<500	<9.05	µg/L	100	0.0905	5	0.0905
cis-1,3-Dichloropropene	U	<6.40	<100	<6.40	µg/L	100	0.0640	1	0.064
trans-1,3-Dichloropropene	U	<5.04	<100	<5.04	µg/L	100	0.0504	1	0.0504
Toluene		**2430**	**2430**	<7.36	µg/L	100	0.0736	1	0.0736
1,1,2-Trichloroethane	U	<10.6	<100	<10.6	µg/L	100	0.106	1	0.1056
1,3-Dichloropropane	U	<6.25	<100	<6.25	µg/L	100	0.0625	1	0.0625
Dibromochloromethane	U	<7.91	<100	<7.91	µg/L	100	0.0791	1	0.0791
1,2-Dibromoethane (EDB)	U	<4.60	<100	<4.60	µg/L	100	0.0460	1	0.046
Tetrachloroethene (PCE)	U	<6.96	<100	<6.96	µg/L	100	0.0696	1	0.0696
Chlorobenzene	U	<2.17	<100	<2.17	µg/L	100	0.0217	1	0.0217
1,1,1,2-Tetrachloroethane	U	<12.5	<100	<12.5	µg/L	100	0.125	1	0.1253
Ethylbenzene		**3080**	**3080**	<5.66	µg/L	100	0.0566	1	0.0566
m,p-Xylene		**1930**	**1930**	<3.63	µg/L	100	0.0363	1	0.0363
Bromoform	U	<8.59	<100	<8.59	µg/L	100	0.0859	1	0.0859
Styrene	U	<3.94	<100	<3.94	µg/L	100	0.0394	1	0.0394

continued . . .

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sample 90838 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene		**1390**	**1390**	<5.04	µg/L	100	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
2-Chlorotoluene	U	<2.83	<100	<2.83	µg/L	100	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<6.79	<100	<6.79	µg/L	100	0.0679	1	0.0679	
Isopropylbenzene		**374**	**374**	<4.06	µg/L	100	0.0406	1	0.0406	
Bromobenzene	U	<10.3	<100	<10.3	µg/L	100	0.103	1	0.1033	
n-Propylbenzene		**443**	**443**	<4.23	µg/L	100	0.0423	1	0.0423	
1,3,5-Trimethylbenzene		**427**	**427**	<5.57	µg/L	100	0.0557	1	0.0557	
tert-Butylbenzene	U	<7.70	<100	<7.70	µg/L	100	0.0770	1	0.077	
1,2,4-Trimethylbenzene		**1460**	**1460**	<3.36	µg/L	100	0.0336	1	0.0336	
1,4-Dichlorobenzene (para)	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
sec-Butylbenzene		**105**	**105**	<4.39	µg/L	100	0.0439	1	0.0439	
1,3-Dichlorobenzene (meta)	U	<6.72	<100	<6.72	µg/L	100	0.0672	1	0.0672	
p-Isopropyltoluene	J	**75.6**	<100	<5.13	µg/L	100	0.0513	1	0.0513	J
4-Chlorotoluene	U	<4.60	<100	<4.60	µg/L	100	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<6.29	<100	<6.29	µg/L	100	0.0629	1	0.0629	
n-Butylbenzene	J	**95.6**	<100	<4.00	µg/L	100	0.0400	1	0.04	J
1,2-Dibromo-3-chloropropane	U	<53.8	<200	<53.8	µg/L	100	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<50.4	<500	<50.4	µg/L	100	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<16.6	<500	<16.6	µg/L	100	0.166	5	0.1663	
Naphthalene	J	**232**	<500	<41.7	µg/L	100	0.417	5	0.4166	J
Hexachlorobutadiene	U	<17.6	<500	<17.6	µg/L	100	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.9	µg/L	1	50.0	98	70 - 130
Toluene-d8		50.5	µg/L	1	50.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)		47.6	µg/L	1	50.0	95	70 - 130

Sample: 91026 - RB05-1506

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	27049	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23541	Sample Preparation:	2006-05-24	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147

continued ...

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sample 91026 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063

continued . . .

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sample 91026 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0147	mg/L	1	0.0800	18	10 - 84.7
Phenol-d5		0.0162	mg/L	1	0.0800	20	10 - 54.9
Nitrobenzene-d5		0.0805	mg/L	1	0.0800	101	10 - 202
2-Fluorobiphenyl		0.0779	mg/L	1	0.0800	97	10 - 199
2,4,6-Tribromophenol		0.0373	mg/L	1	0.0800	47	10 - 141
Terphenyl-d14		0.0876	mg/L	1	0.0800	110	10 - 160

Sample: 91026 - RB05-1506

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium	J	**0.00200**	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead		**0.0270**	**0.0270**	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 91026 - RB05-1506

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26754	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23476	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	JB	~~0.540~~	<5.00	0.510	mg/L	0.1	1.19	50	1.19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.6	mg/L	0.1	150	90	66.6 - 111

Sample: 91026 - RB05-1506

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	26781	Date Analyzed:	2006-05-23	Analyzed By:	KB
Prep Batch:	23513	Sample Preparation:	2006-05-23	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.144	<0.500	<0.144	mg/L	5	0.0288	0.1	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[38]	0.414	mg/L	5	0.100	83	88.8 - 95.6
4-Bromofluorobenzene (4-BFB)		0.419	mg/L	5	0.100	84	75.6 - 111.2

Sample: 91026 - RB05-1506

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	27108	Date Analyzed:	2006-05-29	Analyzed By:	JG
Prep Batch:	23791	Sample Preparation:	2006-05-29	Prepared By:	JG

[38] Surrogate TFT out due to matrix interference. Sample was reran on 5/23/06 to confirm matrix interference results.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699	
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298	
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902	
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402	
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952	
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16	
Acetone	U	<0.854	<10.0	<0.854	µg/L	1	0.854	10	0.8536	
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119	
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764	
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837	
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941	
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484	
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975	
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207	
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888	
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	J	**0.660**	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	J
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	J	~~0.260~~	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	1.00 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	<0.0217	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	J	~~0.0700~~	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	1.00 U
m,p-Xylene	J	~~0.170~~	<1.00	<0.0363	µg/L	1	0.0363	1	0.0363	1.00 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	<0.0406	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	

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sample 91026 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077
1,2,4-Trimethylbenzene	U	<0.0336	<1.00	<0.0336	µg/L	1	0.0336	1	0.0336
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
sec-Butylbenzene	U	<0.0439	<1.00	<0.0439	µg/L	1	0.0439	1	0.0439
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
p-Isopropyltoluene	U	<0.0513	<1.00	<0.0513	µg/L	1	0.0513	1	0.0513
4-Chlorotoluene	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629
n-Butylbenzene	J	**0.0500**	<1.00	<0.0400	µg/L	1	0.0400	1	0.04
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663
Naphthalene	U	<0.417	<5.00	<0.417	µg/L	1	0.417	5	0.4166
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.1	µg/L	1	50.0	96	70 - 130
Toluene-d8		49.6	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		45.6	µg/L	1	50.0	91	70 - 130

Sample: 91027 - RB05-051606

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	27049	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23541	Sample Preparation:	2006-05-24	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529

continued ...

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sample 91027 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014

continued ...

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sample 91027 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0332	mg/L	1	0.0800	42	10 - 84.7
Phenol-d5		0.0224	mg/L	1	0.0800	28	10 - 54.9
Nitrobenzene-d5		0.0809	mg/L	1	0.0800	101	10 - 202
2-Fluorobiphenyl		0.0824	mg/L	1	0.0800	103	10 - 199
2,4,6-Tribromophenol		0.0736	mg/L	1	0.0800	92	10 - 141
Terphenyl-d14		0.0881	mg/L	1	0.0800	110	10 - 160

Sample: 91027 - RB05-051606

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium	U	<0.00200	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004

continued . . .

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sample 91027 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 91027 - RB05-051606

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26754	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23476	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	JB	~~0.390~~	<5.00	0.510	mg/L	0.1	1.19	50	1.19

5.00 U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.1	mg/L	0.1	150	87	66.6 - 111

Sample: 91027 - RB05-051606

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	26781	Date Analyzed:	2006-05-23	Analyzed By:	KB
Prep Batch:	23513	Sample Preparation:	2006-05-23	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.144	<0.500	<0.144	mg/L	5	0.0288	0.1	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[39]	0.422	mg/L	5	0.100	84	88.8 - 95.6
4-Bromofluorobenzene (4-BFB)		0.432	mg/L	5	0.100	86	75.6 - 111.2

Sample: 91027 - RB05-051606

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	27108	Date Analyzed:	2006-05-29	Analyzed By:	JG
Prep Batch:	23791	Sample Preparation:	2006-05-29	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699

continued . . .

[39] Surrogate TFT out due to matrix interference. Sample was reran on 5/23/06 to confirm matrix interference results.

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sample 91027 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298	
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902	
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402	
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952	
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16	
Acetone	U	<0.854	<10.0	<0.854	µg/L	1	0.854	10	0.8536	
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119	
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764	
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837	
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941	
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484	
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975	
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207	
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888	
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	J	**0.620**	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	J
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	J	~~**0.0500**~~	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	1.00 U
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	J	~~**0.220**~~	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	1.00 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	<0.0217	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	J	~~**0.0700**~~	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	1.00 U
m,p-Xylene	J	~~**0.160**~~	<1.00	<0.0363	µg/L	1	0.0363	1	0.0363	1.00 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	<0.0406	µg/L	1	0.0406	1	0.0406	

continued ...

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sample 91027 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033
n-Propylbenzene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077
1,2,4-Trimethylbenzene	U	<0.0336	<1.00	<0.0336	µg/L	1	0.0336	1	0.0336
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
sec-Butylbenzene	U	<0.0439	<1.00	<0.0439	µg/L	1	0.0439	1	0.0439
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
p-Isopropyltoluene	U	<0.0513	<1.00	<0.0513	µg/L	1	0.0513	1	0.0513
4-Chlorotoluene	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629
n-Butylbenzene	J	**0.0500**	<1.00	<0.0400	µg/L	1	0.0400	1	0.04
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663
Naphthalene	U	<0.417	<5.00	<0.417	µg/L	1	0.417	5	0.4166
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.6	µg/L	1	50.0	97	70 - 130
Toluene-d8		49.9	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		45.9	µg/L	1	50.0	92	70 - 130

Method Blank (1)

QC Batch: 26698
Prep Batch: 23447

Date Analyzed: 2006-05-21
QC Preparation: 2006-05-21

Analyzed By: KB
Prepared By: KB

Parameter	Flag	Result	Units	Reporting Limits
GRO		0.341	mg/L	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.160	mg/L	1	0.200	80	70 - 130
4-Bromofluorobenzene (4-BFB)		0.175	mg/L	1	0.200	88	70 - 130

Method Blank (1)

QC Batch: 26749
Prep Batch: 23488

Date Analyzed: 2006-05-22
QC Preparation: 2006-05-22

Analyzed By: JG
Prepared By: JG

Parameter	Flag	Result	Units	Reporting Limits
Bromochloromethane		<0.0699	µg/L	0.0699
Dichlorodifluoromethane		<0.0598	µg/L	0.0598
Chloromethane (methyl chloride)		<0.230	µg/L	0.2298
Vinyl Chloride		<0.0902	µg/L	0.0902

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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Type of Samples: Soils and Water
Dates of Sampling: June 15-17, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. 6061925
Purchase Order No. P0000715
QBD Job No. 1296E

Reviewed and approved,

Thomas S. Davis, Principal — Date 2/6/07

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Attachment 1 Data Qualifier Flag Definitions
Attachment 2 Summary Table of Data Qualifier Flags
Attachment 3 Reviewed/Revised Laboratory Forms

A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; *"Functional Guidelines for Evaluating Inorganics Analyses,"* as revised, 2004; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of three electronic data packages, consisting of a 71-page laboratory report for soils, a 58-page laboratory report for waters, and a 623-page supporting data package from TraceAnalysis, Inc. in Lubbock, Texas, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

All results were acceptable, although some received qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 8260B	Method 8270C	Method 8015M-GRO	Method 8015M-DRO
HGL GW27-07	93200	Water	X	X	X	X
HGL GW27-008	93201	Water	X	X	X	X
HGL RBGW061506	93204	Water	X	X	X	X
HGL SB29-L6-0103	93205	Soil	X	X	X	X
HGL SB DUP08	93206	Soil	X	X	X	X
HGLTB061606	93221	Water	X			
HGLSB29-L4-0204	03239	Soil	X	X	X	X
HGLSB29-K3-1416	93242	Soil	X	X	X	X
HGLSB29-I5-1417	93243	Soil	X	X	X	X
HGLSB29-F7-2022	93244	Soil	X	X	X	X
HGLSB29-F4-1820	93245	Soil	X	X	X	X
HGLSB29-D6-2426	93246	Soil	X	X	X	X
HGLRBSB-061706	93247	Water	X	X	X	X
HGLLTB-061706	93248	Water	X		X	

Sample Identification	Laboratory Identification	Matrix	Methods 6010B/7470	Method 8330	Method 8321A	
HGL GW27-07	93200	Water	X	NR	NR	
HGL GW27-008	93201	Water	X	NR	NR	
HGL RBGW061506	93204	Water	X	NR	NR	
HGL SB29-L6-0103	93205	Soil	X	NR	NR	
HGL SB DUP08	93206	Soil	X	NR	NR	
HGLTB061606	93221	Water		NR	NR	
HGLSB29-L4-0204	03239	Soil	X	NR	NR	
HGLSB29-K3-1416	93242	Soil	X	NR	NR	
HGLSB29-I5-1417	93243	Soil	X	NR	NR	
HGLSB29-F7-2022	93244	Soil	X	NR	NR	
HGLSB29-F4-1820	93245	Soil	X	NR	NR	
HGLSB29-D6-2426	93246	Soil	X	NR	NR	
HGLRBSB-061706	93247	Water	X	NR		
HGLLTB-061706	93248	Water				

Key:

Method 8260B	=	Volatile organics by GC/MS
Method 8270C	=	Semivolatile organics by GC/MS (Aniline only)
Method 8015M-GRO	=	Total Petroleum Hydrocarbons-Gasoline Range Organics by GC
Method 8015M-DRO	=	Total Petroleum Hydrocarbons-Diesel Range Organics by GC
Methods 6010B/7470	=	Metals by ICP/CVAA
Method 8321A	=	Perchlorate by LCMS
Method 8330	=	Nitroaromatics and nitroamines by HPLC
NR	=	Not reported – Requested on COC, lab reported and QBD validated under separate cover

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
All	6071813	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The date and time relinquished and the date and time received by the laboratory do not match on the COC form. However, the shipping waybill was referenced and appropriate physical custody could be documented by obtaining shipping information from the courier service, so no data qualifier flags are recommended.

E. Review of Volatile Organic Analyses by GC/MS

EPA Method 8260B

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment, field, and trip blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Nineteen target analytes were detected in the method blank associated with the water samples in QC Batch No. 27581, two of which were common laboratory contaminants. Twenty-three target analytes were detected in the method blank associated with the soil samples in QC Batch No. 27546, two of which were common laboratory contaminants, and 22 analytes were detected in the soil method blank in QC Batch No. 27694, three of which were common laboratory contaminants. Ten target analytes were detected in the Trip Blank from June 16, 2006, and seven were detected in the Trip Blank from June 17, 2006.

The analytes that were not common laboratory contaminants were evaluated in the samples in accordance with this decision tree, with any data qualifier flags listed in Table 3.

- If the sample result was less than five times (5X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.

- If the sample result was less than 5X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.
- If the sample result was greater than 5X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Toluene and methylene chloride, which are common laboratory contaminants, were evaluated in accordance with the following decision tree, with any data qualifier flags also listed in Table 3.

- If the sample result was less than ten times (10X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 10X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.
- If the sample result was greater than 10X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL GW27-07	Benzene	Trip blank	TB=0.160	TB=ND	1.57	U
HGL GW27-07	Toluene	Method blank Trip blank	MB=0.180 TB=0.250	MB=ND TB=ND	1.14	U
HGL GW27-07	Chlorobenzene	Method blank	MB=0.040	MB=ND	1.00	U
HGL GW27-07	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.180	MB=ND TB=ND	1.00	U
HGL GW27-07	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.180	MB=ND TB=ND	1.00	U
HGL GW27-07	o-Xylene	Method blank Trip blank	MB=0.130 TB=0.0800	MB=ND TB=ND	1.00	U
HGL GW27-07	Isopropylbenzene	Method blank	MB=0.200	MB=ND	1.00	U
HGL GW27-07	n-Propylbenzene	Method blank Trip blank	MB=0.280 TB=0.0900	MB=ND TB=ND	1.00	U
HGL GW27-07	1,3,5-Trimethylbenzene	Method blank Trip blank	MB=0.240 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-07	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.100	MB=ND TB=ND	1.00	U
HGL GW27-07	sec-Butylbenzene	Method blank Trip blank	MB=0.100 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-07	n-Butylbenzene	Method blank	MB=0.330	MB=ND	1.00	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL GW27-07	Naphthalene	Method blank	MB=0.620	MB=ND	5.00	U
HGL GW27-008	Benzene	Trip blank	TB=0.160	TB=ND	1.00	U
HGL GW27-008	Toluene	Method blank Trip blank	MB=0.180 TB=0.250	MB=ND TB=ND	1.00	U
HGL GW27-008	Chlorobenzene	Method blank	MB=0.040	MB=ND	1.00	U
HGL GW27-008	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.180	MB=ND TB=ND	1.00	U
HGL GW27-008	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.180	MB=ND TB=ND	1.00	U
HGL GW27-008	o-Xylene	Method blank Trip blank	MB=0.130 TB=0.0800	MB=ND TB=ND	1.00	U
HGL GW27-008	Isopropylbenzene	Method blank	MB=0.200	MB=ND	1.00	U
HGL GW27-008	n-Propylbenzene	Method blank Trip blank	MB=0.280 TB=0.0900	MB=ND TB=ND	1.00	U
HGL GW27-008	1,3,5-Trimethylbenzene	Method blank Trip blank	MB=0.240 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-008	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.100	MB=ND TB=ND	1.00	U
HGL GW27-008	sec-Butylbenzene	Method blank Trip blank	MB=0.100 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-008	p-Isopropylbenzene	Method blank	MB=0.270	MB=ND	1.00	U
HGL RBGW061506	Methylene chloride	Trip blank	TB=0.980	TB=ND	5.00	U
HGL RBGW061506	Benzene	Trip blank	TB=0.160	TB=ND	1.00	U
HGL RBGW061506	Toluene	Method blank Trip blank	MB=0.180 TB=0.250	MB=ND TB=ND	1.00	U
HGL RBGW061506	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.180	MB=ND TB=ND	1.00	U
HGL RBGW061506	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.180	MB=ND TB=ND	1.00	U
HGL RBGW061506	Isopropylbenzene	Method blank	MB=0.200	MB=ND	1.00	U
HGL RBGW061506	n-Propylbenzene	Method blank Trip blank	MB=0.280 TB=0.0900	MB=ND TB=ND	1.00	U
HGL RBGW061506	1,3,5-Trimethylbenzene	Method blank Trip blank	MB=0.240 TB=0.0600	MB=ND TB=ND	1.00	U
HGL RBGW061506	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.100	MB=ND TB=ND	1.00	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL RBGW061506	sec-Butylbenzene	Method blank Trip blank	MB=0.100 TB=0.0600	MB=ND TB=ND	1.00	U
HGL RBGW061506	p-Isopropylbenzene	Method blank	MB=0.270	MB=ND	1.00	U
HGL RBGW061506	n-Butylbenzene	Method blank	MB=0.330	MB=ND	1.00	U
HGLRBSB-061706	Benzene	Trip blank	TB=0.0700	TB=ND	1.00	U
HGLRBSB-061706	Toluene	Method blank Trip blank	MB=0.180 TB=0.120	MB=ND TB=ND	1.00	U
HGLRBSB-061706	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.0600	MB=ND TB=ND	1.00	U
HGLRBSB-061706	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.0500	MB=ND TB=ND	1.00	U
HGLRBSB-061706	n-Propylbenzene	Method blank	MB=0.280	MB=ND	1.00	U
HGLRBSB-061706	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.0400	MB=ND TB=ND	1.00	U
HGLRBSB-061706	sec-Butylbenzene	Method blank	MB=0.100	MB=ND	1.00	U
HGLRBSB-061706	p-Isopropylbenzene	Method blank	MB=0.270	MB=ND	1.00	U
HGLRBSB-061706	n-Butylbenzene	Method blank	MB=0.330	MB=ND	1.00	U
HGL SB29-L6-0103	Methylene chloride	Method blank Trip blank	MB=10.7 TB=0.980	MB=ND TB=ND	50.0	U
HGL SB29-L6-0103	Toluene	Method blank Trip blank	MB=1.90 TB=0.250	MB=ND TB=ND	10.0	U
HGL SB29-L6-0103	Tetrachloroethene	Method blank	MB=2.35	MB=ND	10.0	U
HGL SB29-L6-0103	Ethylbenzene	Method blank Trip blank	MB=1.52 TB=0.180	MB=ND TB=ND	10.0	U
HGL SB29-L6-0103	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGL SB29-L6-0103	o-Xylene	Method blank	MB=1.83	MB=ND	10.0	U
HGL SB29-L6-0103	Isopropylbenzene	Method blank	MB=2.51	MB=ND	10.0	U
HGL SB29-L6-0103	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGL SB29-L6-0103	1,3,5-Trimethylbenzene	Method blank	MB=2.99	MB=ND	10.0	U
HGL SB29-L6-0103	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGL SB29-L6-0103	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGL SB29-L6-0103	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGL SB29-L6-0103	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGL SB29-L6-0103	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGL SB29-L6-0103	4-Chlorotoluene	Method blank	MB=2.13	MB=ND	10.0	U
HGL SB29-L6-0103	1,2-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL SB29-L6-0103	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGL SB29-L6-0103	1,2,3-Trichlorobenzene	Method blank	MB=19.6	MB=ND	50.0	U
HGL SB29-L6-0103	1,2,4-Trichlorobenzene	Method blank	MB=9.37	MB=ND	50.0	U
HGL SB29-L6-0103	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGL SB29-L6-0103	Hexachlorobutadiene	Method blank	MB=15.6	MB=ND	50.0	U
HGL SB DUP08	Methylene chloride	Method blank Trip blank	MB=10.7 TB=0.980	MB=ND TB=ND	50.0	U
HGL SB DUP08	Toluene	Method blank Trip blank	MB=1.90 TB=0.250	MB=ND TB=ND	10.0	U
HGL SB DUP08	Ethylbenzene	Method blank Trip blank	MB=1.52 TB=0.180	MB=ND TB=ND	10.0	U
HGL SB DUP08	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGL SB DUP08	o-Xylene	Method blank	MB=1.83	MB=ND	10.0	U
HGL SB DUP08	Isopropylbenzene	Method blank	MB=2.51	MB=ND	10.0	U
HGL SB DUP08	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGL SB DUP08	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGL SB DUP08	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGL SB DUP08	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGL SB DUP08	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGL SB DUP08	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGL SB DUP08	4-Chlorotoluene	Method blank	MB=2.13	MB=ND	10.0	U
HGL SB DUP08	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGL SB DUP08	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGL SB DUP08	Hexachlorobutadiene	Method blank	MB=15.6	MB=ND	50.0	U
HGLSB29-L4-0204	Methylene chloride	Method blank Trip blank	MB=10.7 TB=0.980	MB=ND TB=ND	50.0	U
HGLSB29-L4-0204	Toluene	Method blank Trip blank	MB=1.90 TB=0.250	MB=ND TB=ND	10.0	U
HGLSB29-L4-0204	Ethylbenzene	Method blank Trip blank	MB=1.52 TB=0.180	MB=ND TB=ND	10.0	U
HGLSB29-L4-0204	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-L4-0204	o-Xylene	Method blank	MB=1.83	MB=ND	10.0	U
HGLSB29-L4-0204	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-L4-0204	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-L4-0204	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-L4-0204	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-L4-0204	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-L4-0204	1,2-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-L4-0204	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-L4-0204	1,2,3-Trichlorobenzene	Method blank	MB=19.6	MB=ND	50.0	U
HGLSB29-L4-0204	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-K3-1416	Methylene chloride	Method blank Trip blank	MB=5.36 TB=0.980	MB=ND TB=ND	50.0	U
HGLSB29-K3-1416	Toluene	Method blank Trip blank	MB=1.75 TB=0.250	MB=ND TB=ND	10.0	U
HGLSB29-K3-1416	Ethylbenzene	Method blank Trip blank	MB=1.20 TB=0.180	MB=ND TB=ND	10.0	U
HGLSB29-K3-1416	m,p-Xylene	Method blank	MB=2.62	MB=ND	10.0	U
HGLSB29-K3-1416	o-Xylene	Method blank	MB=1.07	MB=ND	10.0	U
HGLSB29-K3-1416	n-Propylbenzene	Method blank	MB=2.08	MB=ND	10.0	U
HGLSB29-K3-1416	tert-Butylbenzene	Method blank	MB=1.63	MB=ND	10.0	U
HGLSB29-K3-1416	1,2,4-Trimethylbenzene	Method blank	MB=2.06	MB=ND	10.0	U
HGLSB29-K3-1416	sec-Butylbenzene	Method blank	MB=2.50	MB=ND	10.0	U
HGLSB29-K3-1416	1,3-Dichlorobenzene	Method blank	MB=2.26	MB=ND	10.0	U
HGLSB29-K3-1416	p-Isopropylbenzene	Method blank	MB=2.61	MB=ND	10.0	U
HGLSB29-K3-1416	4-Chlorotoluene	Method blank	MB=1.49	MB=ND	10.0	U
HGLSB29-K3-1416	1,2-Dichlorobenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB29-K3-1416	n-Butylbenzene	Method blank	MB=3.38	MB=ND	10.0	U
HGLSB29-K3-1416	1,2,4-Trichlorobenzene	Method blank	MB=7.30	MB=ND	50.0	U
HGLSB29-K3-1416	Naphthalene	Method blank	MB=13.7	MB=ND	50.0	U
HGLSB29-K3-1416	Hexachlorobutadiene	Method blank	MB=15.1	MB=ND	50.0	U
HGLSB29-I5-1417	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-I5-1417	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLSB29-I5-1417	Ethylbenzene	Method blank	MB=1.52	MB=ND	10.0	U
HGLSB29-I5-1417	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-I5-1417	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-I5-1417	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-I5-1417	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-I5-1417	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-I5-1417	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-I5-1417	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-I5-1417	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-I5-1417	1,2,3-Trichlorobenzene	Method blank	MB=19.6	MB=ND	50.0	U
HGLSB29-I5-1417	1,2,4-Trichlorobenzene	Method blank	MB=9.37	MB=ND	50.0	U
HGLSB29-I5-1417	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-I5-1417	Hexachlorobutadiene	Method blank	MB=23.4	MB=ND	50.0	U
HGLSB29-F7-2022	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-F7-2022	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLSB29-F7-2022	Ethylbenzene	Method blank	MB=1.52	MB=ND	10.0	U
HGLSB29-F7-2022	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-F7-2022	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-F7-2022	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-F7-2022	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-F7-2022	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-F7-2022	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-F7-2022	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-F7-2022	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-F7-2022	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-F4-1820	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-F4-1820	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLSB29-F4-1820	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-F4-1820	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-F4-1820	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-F4-1820	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-F4-1820	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-F4-1820	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-F4-1820	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-F4-1820	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-F4-1820	Hexachlorobutadiene	Method blank	MB=23.4	MB=ND	50.0	U
HGLSB29-D6-2426	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-D6-2426	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLSB29-D6-2426	Ethylbenzene	Method blank	MB=1.52	MB=ND	10.0	U
HGLSB29-D6-2426	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-D6-2426	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-D6-2426	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-D6-2426	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-D6-2426	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-D6-2426	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-D6-2426	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-D6-2426	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 4, these results have been flagged "J" to indicate an estimated value.

Table 4. VOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL GW27-07	Trichloroethene	Value < RL	Value=0.220	RL=1.00	0.220	J
HGL GW27-008	Trichloroethene	Value < RL	Value=0.170	RL=1.00	0.170	J
HGLRBSB-061706	Chloroform	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLTB061606	Methylene chloride	Value < RL	Value=0.980	RL=5.00	0.980	J
HGLTB061606	Benzene	Value < RL	Value=0.160	RL=1.00	0.160	J
HGLTB061606	Toluene	Value < RL	Value=0.250	RL=1.00	0.250	J
HGLTB061606	Ethylbenzene	Value < RL	Value=0.180	RL=1.00	0.180	J
HGLTB061606	m,p-Xylene	Value < RL	Value=0.180	RL=1.00	0.180	J
HGLTB061606	o-Xylene	Value < RL	Value=0.0800	RL=1.00	0.0800	J
HGLTB061606	n-Propylbenzene	Value < RL	Value=0.0900	RL=1.00	0.0900	J
HGLTB061606	1,3,5-Trimethylbenzene	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLTB061606	1,2,4-Trimethylbenzene	Value < RL	Value=0.100	RL=1.00	0.100	J
HGLTB061606	sec-Butylbenzene	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLLTB-061706	Methylene chloride	Value < RL	Value=1.09	RL=5.00	1.09	J
HGLLTB-061706	Benzene	Value < RL	Value=0.0700	RL=1.00	0. 0700	J
HGLLTB-061706	Toluene	Value < RL	Value=0.120	RL=1.00	0. 120	J
HGLLTB-061706	Ethylbenzene	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLLTB-061706	m,p-Xylene	Value < RL	Value=0.0500	RL=1.00	0.0500	J
HGLLTB-061706	1,2,4-Trimethylbenzene	Value < RL	Value=0.0400	RL=1.00	0.0400	J
HGL SB29-L6-0103	Carbon disulfide	Value < RL	Value=0.520	RL=10.0	0.520	J
HGLSB29-I5-1417	Carbon disulfide	Value < RL	Value=0.440	RL=10.0	0.440	J
HGLSB29-F4-1820	1,4-Dichlorobenzene	Value < RL	Value=0.550	RL=10.0	0.550	J
HGLSB29-D6-2426	Carbon disulfide	Value < RL	Value=0.370	RL=10.0	0.370	J
HGLSB29-D6-2426	1,4-Dichlorobenzene	Value < RL	Value=0.640	RL=10.0	0.640	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGL SB DUP08 is a duplicate of Sample HGL SB29-L6-0103. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 5, were reported as not detected.

Table 5. VOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGL SB29-L6-0103	HGL SB DUP08	
Carbon disulfide	0.520	All ND	NC

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

F. Review of Semivolatile Organic Analyses by GC/MS

EPA Method 8270C

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 6, these results have been flagged "J" to indicate an estimated value.

Table 6. SVOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL SB DUP08	Diethylphthalate	Value < RL	Value=0.236	RL=0.250	0.236	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGL SB DUP08 is a duplicate of Sample HGL SB29-L6-0103. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 7, were reported as not detected.

Table 7. SVOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGL SB29-L6-0103	HGL SB DUP08	
Diethylphthalate	0.256	0.236	8.1

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

G. Review of TPH-GRO Analyses by GC

EPA Method 8015B-Modified

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Gasoline range organics were detected in all of the method blanks associated with all samples. Because the samples were all reported as not detected, no data qualifier flags are recommended.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGL SB DUP08 is a duplicate of Sample HGL SB29-L6-0103. All test results were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

H. Review of TPH-DRO Analyses by GC

EPA Method 8015B Modified

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have

been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 8, these results have been flagged "J" to indicate an estimated value.

Table 8. TPH-DRO Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL SB29-L6-0103	Diesel Range Organics	Value < RL	Value=21.9	RL=50.0	21.9	J
HGL SB DUP08	Diesel Range Organics	Value < RL	Value=11.7	RL=50.0	11.7	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGL SB DUP08 is a duplicate of Sample HGL SB29-L6-0103. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 9, were reported as not detected.

Table 9. TPH-DRO Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGL SB29-L6-0103	HGL SB DUP08	
Diesel Range Organics	21.9	11.7	60.7

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

I. Review of Metals Analyses by ICP and AA

EPA Methods 1311/6000/7471

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that the proper number of standards were used and the correlation coefficient criteria was met All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted in Table 10.

Table 10. Metals Data Qualifiers Due to MS/MSD Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL GW27-008	Cadmium	MS/MSD	%R=72, 74	%R=83.3-108	0.000595	UJ
HGL GW27-008	Lead	MS/MSD	%R=67, 65	%R=81.2-105	0.00180	UJ

Discussion: The recoveries for lead and cadmium were out of criteria at 72 and 74 percent for cadmium and 67 and 65 percent for lead in the MS/MSD pair for water samples associated with QC Batch No. 27629. Since the recoveries for the LCS/LCSD were acceptable, only the results for these analytes in the sample spiked, HGL GW27-008, have been flagged "UJ" to indicate an estimated reporting limit.

A single MS for water samples for silver was out of criteria at 126 percent. Since all other accuracy measurements (e.g., the other matrix spike, the LCS, and the calibration verifications) were acceptable, no data qualifier flags are recommended.

5. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

6. Sample Duplicates

Sample duplicates were analyzed as required by the referenced method and all RPDs were within acceptable criteria.

7. Cold Vapor Atomic Absorption Special Requirements

All special criteria for GFAA analysis were performed at a frequency required by the referenced method and were within acceptable criteria.

8. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and digestion procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. As listed in Table 11, these results have been flagged "J" to indicate an estimated value.

Table 11. Metals Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL GW27-07	Selenium	Value < RL	Value=0.0070	RL=0.0100	0.0070	J
HGL RBGW061506	Barium	Value < RL	Value=0.0040	RL=0.0100	0.0040	J
HGLRBSB-061706	Barium	Value < RL	Value=0.0050	RL=0.0100	0.0050	J
HGL SB DUP08	Chromium	Value < RL	Value=0.683	RL=1.00	0.683	J
HGLSB29-L4-0204	Cadmium	Value < RL	Value=0.384	RL=0.500	0.384	J
HGLSB29-L4-0204	Mercury	Value < RL	Value=0.0056	RL=0.040	0.0056	J
HGLSB29-I5-1417	Mercury	Value < RL	Value=0.0063	RL=0.040	0.0063	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-F4-1820	Cadmium	Value < RL	Value=0.238	RL=0.500	0.238	J
HGLSB29-D6-2426	Mercury	Value < RL	Value=0.0075	RL=0.0400	0.0075	J

9. Field Duplicates

Field duplicates were collected and analyzed. Sample HGL SB DUP08 is a duplicate of Sample HGL SB29-L6-0103. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 12, were reported as not detected.

Table 12. Metals Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGL SB29-L6-0103	HGL SB DUP08	
Silver	1.38	1.33	3.7
Barium	24.1	19.0	23.7
Chromium	1.18	0.683	53.4
Mercury	0.0407	ND	NC

Key: ND = Not detected
NC = Not calculable

10. Laboratory Contact

There was no verbal or written communication with the laboratory.

11. Other Comments

None.

12. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Inorganics

U = The analyte was analyzed for but not detected above the numerical quantitation limit. The numerical value may be either a detection limit or a quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Type of Samples: Soils and Water
Dates of Sampling: June 15-17, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
VOC Data Qualifiers						
HGL GW27-07	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.100	MB=ND TB=ND	1.00	U
HGL GW27-07	1,3,5-Trimethylbenzene	Method blank Trip blank	MB=0.240 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-07	Benzene	Trip blank	TB=0.160	TB=ND	1.57	U
HGL GW27-07	Chlorobenzene	Method blank	MB=0.040	MB=ND	1.00	U
HGL GW27-07	Ethylbenzene	Method blank Trip blank	MB=0.140 TB–0.180	MB=ND TB–ND	1.00	U
HGL GW27-07	Isopropylbenzene	Method blank	MB=0.200	MB=ND	1.00	U
HGL GW27-07	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.180	MB=ND TB=ND	1.00	U
HGL GW27-07	Naphthalene	Method blank	MB=0.620	MB=ND	5.00	U
HGL GW27-07	n-Butylbenzene	Method blank	MB=0.330	MB=ND	1.00	U
HGL GW27-07	n-Propylbenzene	Method blank Trip blank	MB=0.280 TB=0.0900	MB=ND TB=ND	1.00	U
HGL GW27-07	o-Xylene	Method blank Trip blank	MB=0.130 TB=0.0800	MB=ND TB=ND	1.00	U
HGL GW27-07	sec-Butylbenzene	Method blank Trip blank	MB=0.100 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-07	Toluene	Method blank Trip blank	MB=0.180 TB=0.250	MB=ND TB=ND	1.14	U
HGL GW27-07	Trichloroethene	Value < RL	Value=0.220	RL=1.00	0.220	J
HGL GW27-008	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.100	MB=ND TB=ND	1.00	U
HGL GW27-008	1,3,5-Trimethylbenzene	Method blank Trip blank	MB=0.240 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-008	Benzene	Trip blank	TB=0.160	TB=ND	1.00	U
HGL GW27-008	Chlorobenzene	Method blank	MB=0.040	MB=ND	1.00	U
HGL GW27-008	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.180	MB=ND TB=ND	1.00	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL GW27-008	Isopropylbenzene	Method blank	MB=0.200	MB=ND	1.00	U
HGL GW27-008	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.180	MB=ND TB=ND	1.00	U
HGL GW27-008	n-Propylbenzene	Method blank Trip blank	MB=0.280 TB=0.0900	MB=ND TB=ND	1.00	U
HGL GW27-008	o-Xylene	Method blank Trip blank	MB=0.130 TB=0.0800	MB=ND TB=ND	1.00	U
HGL GW27-008	p-Isopropylbenzene	Method blank	MB=0.270	MB=ND	1.00	U
HGL GW27-008	sec-Butylbenzene	Method blank Trip blank	MB=0.100 TB=0.0600	MB=ND TB=ND	1.00	U
HGL GW27-008	Toluene	Method blank Trip blank	MB=0.180 TB=0.250	MB=ND TB=ND	1.00	U
HGL GW27-008	Trichloroethene	Value < RL	Value=0.170	RL=1.00	0.170	J
HGL RBGW061506	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.100	MB=ND TB=ND	1.00	U
HGL RBGW061506	1,3,5-Trimethylbenzene	Method blank Trip blank	MB=0.240 TB=0.0600	MB=ND TB=ND	1.00	U
HGL RBGW061506	Benzene	Trip blank	TB=0.160	TB=ND	1.00	U
HGL RBGW061506	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.180	MB=ND TB=ND	1.00	U
HGL RBGW061506	Isopropylbenzene	Method blank	MB=0.200	MB=ND	1.00	U
HGL RBGW061506	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.180	MB=ND TB=ND	1.00	U
HGL RBGW061506	Methylene chloride	Trip blank	TB=0.980	TB=ND	5.00	U
HGL RBGW061506	n-Butylbenzene	Method blank	MB=0.330	MB=ND	1.00	U
HGL RBGW061506	n-Propylbenzene	Method blank Trip blank	MB=0.280 TB=0.0900	MB=ND TB=ND	1.00	U
HGL RBGW061506	p-Isopropylbenzene	Method blank	MB=0.270	MB=ND	1.00	U
HGL RBGW061506	sec-Butylbenzene	Method blank Trip blank	MB=0.100 TB=0.0600	MB=ND TB=ND	1.00	U
HGL RBGW061506	Toluene	Method blank Trip blank	MB=0.180 TB=0.250	MB=ND TB=ND	1.00	U
HGL SB29-L6-0103	1,2,3-Trichlorobenzene	Method blank	MB=19.6	MB=ND	50.0	U
HGL SB29-L6-0103	1,2,4-Trichlorobenzene	Method blank	MB=9.37	MB=ND	50.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL SB29-L6-0103	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGL SB29-L6-0103	1,2-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGL SB29-L6-0103	1,3,5-Trimethylbenzene	Method blank	MB=2.99	MB=ND	10.0	U
HGL SB29-L6-0103	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGL SB29-L6-0103	4-Chlorotoluene	Method blank	MB=2.13	MB=ND	10.0	U
HGL SB29-L6-0103	Carbon disulfide	Value < RL	Value=0.520	RL=10.0	0.520	J
HGL SB29-L6-0103	Ethylbenzene	Method blank Trip blank	MB=1.52 TB=0.180	MB=ND TB=ND	10.0	U
HGL SB29-L6-0103	Hexachlorobutadiene	Method blank	MB=15.6	MB=ND	50.0	U
HGL SB29-L6-0103	Isopropylbenzene	Method blank	MB=2.51	MB=ND	10.0	U
HGL SB29-L6-0103	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGL SB29-L6-0103	Methylene chloride	Method blank Trip blank	MB=10.7 TB=0.980	MB=ND TB=ND	50.0	U
HGL SB29-L6-0103	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGL SB29-L6-0103	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGL SB29-L6-0103	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGL SB29-L6-0103	o-Xylene	Method blank	MB=1.83	MB=ND	10.0	U
HGL SB29-L6-0103	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGL SB29-L6-0103	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGL SB29-L6-0103	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGL SB29-L6-0103	Tetrachloroethene	Method blank	MB=2.35	MB=ND	10.0	U
HGL SB29-L6-0103	Toluene	Method blank Trip blank	MB=1.90 TB=0.250	MB=ND TB=ND	10.0	U
HGL SB DUP08	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGL SB DUP08	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGL SB DUP08	4-Chlorotoluene	Method blank	MB=2.13	MB=ND	10.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGL SB DUP08	Ethylbenzene	Method blank Trip blank	MB=1.52 TB=0.180	MB=ND TB=ND	10.0	U
HGL SB DUP08	Hexachlorobutadiene	Method blank	MB=15.6	MB=ND	50.0	U
HGL SB DUP08	Isopropylbenzene	Method blank	MB=2.51	MB=ND	10.0	U
HGL SB DUP08	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGL SB DUP08	Methylene chloride	Method blank Trip blank	MB=10.7 TB=0.980	MB=ND TB=ND	50.0	U
HGL SB DUP08	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGL SB DUP08	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGL SB DUP08	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGL SB DUP08	o-Xylene	Method blank	MB=1.83	MB=ND	10.0	U
HGL SB DUP08	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGL SB DUP08	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGL SB DUP08	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGL SB DUP08	Toluene	Method blank Trip blank	MB=1.90 TB=0.250	MB=ND TB=ND	10.0	U
HGLTB061606	1,2,4-Trimethylbenzene	Value < RL	Value=0.100	RL=1.00	0.100	J
HGLTB061606	1,3,5-Trimethylbenzene	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLTB061606	Benzene	Value < RL	Value=0.160	RL=1.00	0.160	J
HGLTB061606	Ethylbenzene	Value < RL	Value=0.180	RL=1.00	0.180	J
HGLTB061606	m,p-Xylene	Value < RL	Value=0.180	RL=1.00	0.180	J
HGLTB061606	Methylene chloride	Value < RL	Value=0.980	RL=5.00	0.980	J
HGLTB061606	n-Propylbenzene	Value < RL	Value=0.0900	RL=1.00	0.0900	J
HGLTB061606	o-Xylene	Value < RL	Value=0.0800	RL=1.00	0.0800	J
HGLTB061606	sec-Butylbenzene	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLTB061606	Toluene	Value < RL	Value=0.250	RL=1.00	0.250	J
HGLSB29-L4-0204	1,2,3-Trichlorobenzene	Method blank	MB=19.6	MB=ND	50.0	U
HGLSB29-L4-0204	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-L4-0204	1,2-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-L4-0204	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-L4-0204	Ethylbenzene	Method blank Trip blank	MB=1.52 TB=0.180	MB=ND TB=ND	10.0	U
HGLSB29-L4-0204	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-L4-0204	Methylene chloride	Method blank Trip blank	MB=10.7 TB=0.980	MB=ND TB=ND	50.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-L4-0204	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-L4-0204	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-L4-0204	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-L4-0204	o-Xylene	Method blank	MB=1.83	MB=ND	10.0	U
HGLSB29-L4-0204	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-L4-0204	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-L4-0204	Toluene	Method blank Trip blank	MB=1.90 TB=0.250	MB=ND TB=ND	10.0	U
HGLSB29-K3-1416	1,2,4-Trichlorobenzene	Method blank	MB=7.30	MB=ND	50.0	U
HGLSB29-K3-1416	1,2,4-Trimethylbenzene	Method blank	MB=2.06	MB=ND	10.0	U
HGLSB29-K3-1416	1,2-Dichlorobenzene	Method blank	MB=2.23	MB=ND	10.0	U
HGLSB29-K3-1416	1,3-Dichlorobenzene	Method blank	MB=2.26	MB=ND	10.0	U
HGLSB29-K3-1416	4-Chlorotoluene	Method blank	MB=1.49	MB=ND	10.0	U
HGLSB29-K3-1416	Ethylbenzene	Method blank Trip blank	MB=1.20 TB=0.180	MB=ND TB=ND	10.0	U
HGLSB29-K3-1416	Hexachlorobutadiene	Method blank	MB=15.1	MB=ND	50.0	U
HGLSB29-K3-1416	m,p-Xylene	Method blank	MB=2.62	MB=ND	10.0	U
HGLSB29-K3-1416	Methylene chloride	Method blank Trip blank	MB=5.36 TB=0.980	MB=ND TB=ND	50.0	U
HGLSB29-K3-1416	Naphthalene	Method blank	MB=13.7	MB=ND	50.0	U
HGLSB29-K3-1416	n-Butylbenzene	Method blank	MB=3.38	MB=ND	10.0	U
HGLSB29-K3-1416	n-Propylbenzene	Method blank	MB=2.08	MB=ND	10.0	U
HGLSB29-K3-1416	o-Xylene	Method blank	MB=1.07	MB=ND	10.0	U
HGLSB29-K3-1416	p-Isopropylbenzene	Method blank	MB=2.61	MB=ND	10.0	U
HGLSB29-K3-1416	sec-Butylbenzene	Method blank	MB=2.50	MB=ND	10.0	U
HGLSB29-K3-1416	tert-Butylbenzene	Method blank	MB=1.63	MB=ND	10.0	U
HGLSB29-K3-1416	Toluene	Method blank Trip blank	MB=1.75 TB=0.250	MB=ND TB=ND	10.0	U
HGLSB29-I5-1417	1,2,3-Trichlorobenzene	Method blank	MB=19.6	MB=ND	50.0	U
HGLSB29-I5-1417	1,2,4-Trichlorobenzene	Method blank	MB=9.37	MB=ND	50.0	U
HGLSB29-I5-1417	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-I5-1417	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-I5-1417	Carbon disulfide	Value < RL	Value=0.440	RL=10.0	0.440	J
HGLSB29-I5-1417	Ethylbenzene	Method blank	MB=1.52	MB=ND	10.0	U
HGLSB29-I5-1417	Hexachlorobutadiene	Method blank	MB=23.4	MB=ND	50.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-I5-1417	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-I5-1417	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-I5-1417	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-I5-1417	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-I5-1417	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-I5-1417	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-I5-1417	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-I5-1417	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-I5-1417	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLSB29-F7-2022	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-F7-2022	1,3-Dichlorobenzene	Method blank	MB=2.57	MB=ND	10.0	U
HGLSB29-F7-2022	Ethylbenzene	Method blank	MB=1.52	MB=ND	10.0	U
HGLSB29-F7-2022	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-F7-2022	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-F7-2022	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-F7-2022	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-F7-2022	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-F7-2022	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-F7-2022	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-F7-2022	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-F7-2022	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLSB29-F4-1820	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-F4-1820	1,4-Dichlorobenzene	Value < RL	Value=0.550	RL=10.0	0.550	J
HGLSB29-F4-1820	Hexachlorobutadiene	Method blank	MB=23.4	MB=ND	50.0	U
HGLSB29-F4-1820	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-F4-1820	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-F4-1820	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-F4-1820	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-F4-1820	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-F4-1820	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-F4-1820	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-F4-1820	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-F4-1820	Toluene	Method blank	MB=1.90	MB=ND	10.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB29-D6-2426	1,2,4-Trimethylbenzene	Method blank	MB=3.43	MB=ND	10.0	U
HGLSB29-D6-2426	1,4-Dichlorobenzene	Value < RL	Value=0.640	RL=10.0	0.640	J
HGLSB29-D6-2426	Carbon disulfide	Value < RL	Value=0.370	RL=10.0	0.370	J
HGLSB29-D6-2426	Ethylbenzene	Method blank	MB=1.52	MB=ND	10.0	U
HGLSB29-D6-2426	m,p-Xylene	Method blank	MB=3.56	MB=ND	10.0	U
HGLSB29-D6-2426	Methylene chloride	Method blank Trip blank	MB=10.7 TB=1.09	MB=ND TB=ND	50.0	U
HGLSB29-D6-2426	Naphthalene	Method blank	MB=19.5	MB=ND	50.0	U
HGLSB29-D6-2426	n-Butylbenzene	Method blank	MB=5.77	MB=ND	10.0	U
HGLSB29-D6-2426	n-Propylbenzene	Method blank	MB=3.05	MB=ND	10.0	U
HGLSB29-D6-2426	p-Isopropylbenzene	Method blank	MB=3.83	MB=ND	10.0	U
HGLSB29-D6-2426	sec-Butylbenzene	Method blank	MB=3.94	MB=ND	10.0	U
HGLSB29-D6-2426	tert-Butylbenzene	Method blank	MB=3.20	MB=ND	10.0	U
HGLSB29-D6-2426	Toluene	Method blank	MB=1.90	MB=ND	10.0	U
HGLRBSB-061706	1,2,4-Trimethylbenzene	Method blank Trip blank	MB=0.260 TB=0.0400	MB=ND TB=ND	1.00	U
HGLRBSB-061706	Benzene	Trip blank	TB=0.0700	TB=ND	1.00	U
HGLRBSB-061706	Chloroform	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLRBSB-061706	Ethylbenzene	Method blank Trip blank	MB=0.140 TB=0.0600	MB=ND TB=ND	1.00	U
HGLRBSB-061706	m,p-Xylene	Method blank Trip blank	MB=0.310 TB=0.0500	MB=ND TB=ND	1.00	U
HGLRBSB-061706	n-Butylbenzene	Method blank	MB=0.330	MB=ND	1.00	U
HGLRBSB-061706	n-Propylbenzene	Method blank	MB=0.280	MB=ND	1.00	U
HGLRBSB-061706	p-Isopropylbenzene	Method blank	MB=0.270	MB=ND	1.00	U
HGLRBSB-061706	sec-Butylbenzene	Method blank	MB=0.100	MB=ND	1.00	U
HGLRBSB-061706	Toluene	Method blank Trip blank	MB=0.180 TB=0.120	MB=ND TB=ND	1.00	U
HGLLTB-061706	1,2,4-Trimethylbenzene	Value < RL	Value=0.0400	RL=1.00	0.0400	J
HGLLTB-061706	Benzene	Value < RL	Value=0.0700	RL=1.00	0. 0700	J
HGLLTB-061706	Ethylbenzene	Value < RL	Value=0.0600	RL=1.00	0.0600	J
HGLLTB-061706	m,p-Xylene	Value < RL	Value=0.0500	RL=1.00	0.0500	J
HGLLTB-061706	Methylene chloride	Value < RL	Value=1.09	RL=5.00	1.09	J
HGLLTB-061706	Toluene	Value < RL	Value=0.120	RL=1.00	0. 120	J
SVOC Data Qualifiers						
HGL SB DUP08	Diethylphthalate	Value < RL	Value=0.236	RL=0.250	0.236	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
TPH-GRO Data Qualifiers						
	None					
TPH-DRO Data Qualifiers						
HGL SB29-L6-0103	Diesel Range Organics	Value < RL	Value=21.9	RL=50.0	21.9	J
HGL SB DUP08	Diesel Range Organics	Value < RL	Value=11.7	RL=50.0	11.7	J
Metals Data Qualifiers						
HGL GW27-07	Selenium	Value < RL	Value=0.0070	RL=0.0100	0.0070	J
HGL GW27-008	Cadmium	MS/MSD	%R=72, 74	%R=83.3-108	0.000595	UJ
HGL GW27-008	Lead	MS/MSD	%R=67, 65	%R=81.2-105	0.00180	UJ
HGL RBGW061506	Barium	Value < RL	Value=0.0040	RL=0.0100	0.0040	J
HGL SB DUP08	Chromium	Value < RL	Value=0.683	RL=1.00	0.683	J
HGLSB29-L4-0204	Cadmium	Value < RL	Value=0.384	RL=0.500	0.384	J
HGLSB29-L4-0204	Mercury	Value < RL	Value=0.0056	RL=0.040	0.0056	J
HGLSB29-I5-1417	Mercury	Value < RL	Value=0.0063	RL=0.040	0.0063	J
HGLSB29-F4-1820	Cadmium	Value < RL	Value=0.238	RL=0.500	0.238	J
HGLSB29-D6-2426	Mercury	Value < RL	Value=0.0075	RL=0.0400	0.0075	J
HGLRBSB-061706	Barium	Value < RL	Value=0.0050	RL=0.0100	0.0050	J

Attachment 3 Reviewed/Revised Laboratory Forms

Analytical Report

Sample: 93205 - GHL SB29-L6-010

Analysis: Semivolatiles
QC Batch: 27765
Prep Batch: 24220

Analytical Method: S 8270C
Date Analyzed: 2006-06-29
Sample Preparation: 2006-06-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531

continued ...

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sample 93205 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate		**0.256**	**0.256**	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.10	mg/Kg	1	2.67	41	10 - 98.8
Phenol-d5		1.30	mg/Kg	1	2.67	49	10 - 105
Nitrobenzene-d5		1.21	mg/Kg	1	2.67	45	10 - 114
2-Fluorobiphenyl		1.51	mg/Kg	1	2.67	56	10 - 122
2,4,6-Tribromophenol		1.81	mg/Kg	1	2.67	68	10 - 117
Terphenyl-d14		1.42	mg/Kg	1	2.67	53	10 - 116

Sample: 93205 - GHL SB29-L6-010

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27975	Date Analyzed:	2006-06-22	Analyzed By:	RR
Prep Batch:	24099	Sample Preparation:	2006-06-20	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.38**	**1.38**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**24.1**	**24.1**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**1.18**	**1.18**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0407**	**0.0407**	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93205 - GHL SB29-L6-010

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	27441	Date Analyzed:	2006-06-19	Analyzed By:	JL
Prep Batch:	24066	Sample Preparation:	2006-06-19	Prepared By:	SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**21.9**	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		172	mg/Kg	1	150	115	50 - 150

Sample: 93205 - GHL SB29-L6-010

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	27447	Date Analyzed:	2006-06-19	Analyzed By:	KB
Prep Batch:	24069	Sample Preparation:	2006-06-19	Prepared By:	KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.959	mg/Kg	10	0.100	96	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	10	0.100	109	71.9 - 123.7

Sample: 93205 - GHL SB29-L6-010

Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	J	**0.520**	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	J
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~9.71~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	50 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.82~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10.0 U

continued . . .

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sample 93205 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	JB	~~1.59~~	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	10 U
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	JB	~~1.05~~	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	10 U
m,p-Xylene	JB	~~2.31~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	
o-Xylene	JB	~~1.35~~	<10.0	1.83	µg/Kg	10	0.679	1	0.0679	10 U
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504	
Isopropylbenzene	JB	~~1.85~~	<10.0	2.51	µg/Kg	10	1.30	1	0.13	10 U
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048	
n-Propylbenzene	JB	~~2.55~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421	10 U
1,3,5-Trimethylbenzene	JB	~~2.66~~	<10.0	2.99	µg/Kg	10	2.10	1	0.21	
tert-Butylbenzene	JB	~~2.46~~	<10.0	3.20	µg/Kg	10	0.410	1	0.041	
1,2,4-Trimethylbenzene	JB	~~2.93~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535	
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387	
sec-Butylbenzene	JB	~~3.39~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632	10 U
1,3-Dichlorobenzene (meta)	JB	~~1.93~~	<10.0	2.57	µg/Kg	10	0.534	1	0.0534	
p-Isopropyltoluene	JB	~~3.60~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679	
4-Chlorotoluene	JB	~~1.44~~	<10.0	2.13	µg/Kg	10	0.675	1	0.0675	
1,2-Dichlorobenzene (ortho)	JB	~~1.46~~	<10.0	2.57	µg/Kg	10	0.475	1	0.0475	
n-Butylbenzene	JB	~~4.86~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979	
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915	
1,2,3-Trichlorobenzene	JB	~~9.72~~	<50.0	19.6	µg/Kg	10	3.64	5	0.364	10 U
1,2,4-Trichlorobenzene	JB	~~5.45~~	<50.0	9.37	µg/Kg	10	2.28	5	0.228	
Naphthalene	JB	~~11.4~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441	
Hexachlorobutadiene	JB	~~15.6~~	<50.0	23.4	µg/Kg	10	3.24	5	0.324	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		469	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		500	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		492	µg/Kg	10	50.0	98	78 - 120

Sample: 93206 - HGL SB DUP08

Analysis: Semivolatiles
QC Batch: 27765
Prep Batch: 24220

Analytical Method: S 8270C
Date Analyzed: 2006-06-29
Sample Preparation: 2006-06-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517

continued ...

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sample 93206 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431

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Sample: 93206 - HGL SB DUP08

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27975	Date Analyzed:	2006-06-22	Analyzed By:	RR
Prep Batch:	24099	Sample Preparation:	2006-06-20	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.33**	**1.33**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**19.0**	**19.0**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium	J	**0.683**	<1.00	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00299	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93206 - HGL SB DUP08

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	27441	Date Analyzed:	2006-06-19	Analyzed By:	JL
Prep Batch:	24066	Sample Preparation:	2006-06-19	Prepared By:	SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**11.7**	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		150	mg/Kg	1	150	100	50 - 150

Sample: 93206 - HGL SB DUP08

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	27447	Date Analyzed:	2006-06-19	Analyzed By:	KB
Prep Batch:	24069	Sample Preparation:	2006-06-19	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	10	0.100	106	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.20	mg/Kg	10	0.100	120	71.9 - 123.7

Sample: 93206 - HGL SB DUP08

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Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	~~JB~~	~~10.5~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	50 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	~~JB~~	~~1.72~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	~~JB~~	~~0.760~~	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	10 U
m,p-Xylene	~~JB~~	~~1.50~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	
o-Xylene	~~JB~~	~~0.940~~	<10.0	1.83	µg/Kg	10	0.679	1	0.0679	10 U
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703	

continued . . .

Validated EPA Level 3 (Verification), Quality by Design, February 3, 2007

sample 93206 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504
Isopropylbenzene	JB	**1.32**	<10.0	2.51	µg/Kg	10	1.30	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048
n-Propylbenzene	JB	**1.79**	<10.0	3.05	µg/Kg	10	0.421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21
tert-Butylbenzene	JB	**1.92**	<10.0	3.20	µg/Kg	10	0.410	1	0.041
1,2,4-Trimethylbenzene	JB	**2.00**	<10.0	3.43	µg/Kg	10	0.535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387
sec-Butylbenzene	JB	**2.34**	<10.0	3.94	µg/Kg	10	0.632	1	0.0632
1,3-Dichlorobenzene (meta)	JB	**1.24**	<10.0	2.57	µg/Kg	10	0.534	1	0.0534
p-Isopropyltoluene	JB	**2.34**	<10.0	3.83	µg/Kg	10	0.679	1	0.0679
4-Chlorotoluene	JB	**1.02**	<10.0	2.13	µg/Kg	10	0.675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	2.57	µg/Kg	10	0.475	1	0.0475
n-Butylbenzene	JB	**3.74**	<10.0	5.77	µg/Kg	10	0.979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	19.6	µg/Kg	10	3.64	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	9.37	µg/Kg	10	2.28	5	0.228
Naphthalene	JB	**8.34**	<50.0	19.5	µg/Kg	10	4.41	5	0.441
Hexachlorobutadiene	JB	**10.7**	<50.0	23.4	µg/Kg	10	3.24	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		468	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		496	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		492	µg/Kg	10	50.0	98	78 - 120

Supplemental Qualifiers
KFR 3.21.07

Sample: 93239 - HGLSB29-L4-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27765	Date Analyzed:	2006-06-29	Analyzed By:	AG
Prep Batch:	24220	Sample Preparation:	2006-06-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034

continued . . .

sample 93239 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.04	mg/Kg	1	2.67	39	10 - 98.8
Phenol-d5		0.830	mg/Kg	1	2.67	31	10 - 105
Nitrobenzene-d5		1.38	mg/Kg	1	2.67	52	10 - 114
2-Fluorobiphenyl		1.03	mg/Kg	1	2.67	38	10 - 122
2,4,6-Tribromophenol		1.39	mg/Kg	1	2.67	52	10 - 117
Terphenyl-d14		2.63	mg/Kg	1	2.67	98	10 - 116

Sample: 93239 - HGLSB29-L4-0204

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27570	Date Analyzed:	2006-06-23	Analyzed By:	RR
Prep Batch:	24126	Sample Preparation:	2006-06-21	Prepared By:	TS

sample 93206 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504	
Isopropylbenzene	~~JB~~	~~1.32~~	<10.0	2.51	µg/Kg	10	1.30	1	0.13	10 U
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048	
n-Propylbenzene	~~JB~~	~~1.79~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421	10 U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21	
tert-Butylbenzene	~~JB~~	~~1.92~~	<10.0	3.20	µg/Kg	10	0.410	1	0.041	10 U
1,2,4-Trimethylbenzene	~~JB~~	~~2.00~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535	10 U
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387	
sec-Butylbenzene	~~JB~~	~~2.34~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632	10 U
1,3-Dichlorobenzene (meta)	~~JB~~	~~1.24~~	<10.0	2.57	µg/Kg	10	0.534	1	0.0534	10 U
p-Isopropyltoluene	~~JB~~	~~2.34~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679	10 U
4-Chlorotoluene	~~JB~~	~~1.02~~	<10.0	2.13	µg/Kg	10	0.675	1	0.0675	10 U
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	2.57	µg/Kg	10	0.475	1	0.0475	
n-Butylbenzene	~~JB~~	~~3.74~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979	10 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915	
1,2,3-Trichlorobenzene	U	<3.64	<50.0	19.6	µg/Kg	10	3.64	5	0.364	
1,2,4-Trichlorobenzene	U	<2.28	<50.0	9.37	µg/Kg	10	2.28	5	0.228	
Naphthalene	~~JB~~	~~8.34~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441	50 U
Hexachlorobutadiene	~~JB~~	~~10.7~~	<50.0	23.4	µg/Kg	10	3.24	5	0.324	50 U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		468	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		496	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		492	µg/Kg	10	50.0	98	78 - 120

Sample: 93239 - HGLSB29-L4-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27765	Date Analyzed:	2006-06-29	Analyzed By:	AG
Prep Batch:	24220	Sample Preparation:	2006-06-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034

continued . . .

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sample 93239 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536

continued ...

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sample 93239 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.04	mg/Kg	1	2.67	39	10 - 98.8
Phenol-d5		0.830	mg/Kg	1	2.67	31	10 - 105
Nitrobenzene-d5		1.38	mg/Kg	1	2.67	52	10 - 114
2-Fluorobiphenyl		1.03	mg/Kg	1	2.67	38	10 - 122
2,4,6-Tribromophenol		1.39	mg/Kg	1	2.67	52	10 - 117
Terphenyl-d14		2.63	mg/Kg	1	2.67	98	10 - 116

Sample: 93239 - HGLSB29-L4-0204

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27570	Date Analyzed:	2006-06-23	Analyzed By:	RR
Prep Batch:	24126	Sample Preparation:	2006-06-21	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.911**	**0.911**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**50.2**	**50.2**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	J	**0.384**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**2.57**	**2.57**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	J	**0.00561**	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93239 - HGLSB29-L4-0204

Analysis: TPH DRO
QC Batch: 27515
Prep Batch: 24129

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: N/A
Analyzed By: JL
Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<10.7	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	50 - 150

Sample: 93239 - HGLSB29-L4-0204

Analysis: TPH GRO
QC Batch: 27487
Prep Batch: 24103

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.824	mg/Kg	10	0.100	82	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.925	mg/Kg	10	0.100	92	71.9 - 123.7

Sample: 93239 - HGLSB29-L4-0204

Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

continued ...

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sample 93239 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~10.4~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	SOU
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.61~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	JB	~~0.580~~	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	10 U
m,p-Xylene	JB	~~1.43~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	

continued...

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sample 93239 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	JB	~~0.820~~	<10.0	1.83	µg/Kg	10	0.679	1	0.0679	10 U
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	2.51	µg/Kg	10	1.30	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048	
n-Propylbenzene	JB	~~1.48~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421	10 U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21	
tert-Butylbenzene	U	<0.410	<10.0	3.20	µg/Kg	10	0.410	1	0.041	
1,2,4-Trimethylbenzene	JB	~~1.87~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535	10 U
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387	
sec-Butylbenzene	JB	~~2.02~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632	10 U
1,3-Dichlorobenzene (meta)	JB	~~1.13~~	<10.0	2.57	µg/Kg	10	0.534	1	0.0534	
p-Isopropyltoluene	JB	~~2.17~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679	
4-Chlorotoluene	U	<0.675	<10.0	2.13	µg/Kg	10	0.675	1	0.0675	
1,2-Dichlorobenzene (ortho)	JB	~~0.730~~	<10.0	2.57	µg/Kg	10	0.475	1	0.0475	10 U
n-Butylbenzene	JB	~~3.59~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979	10 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915	
1,2,3-Trichlorobenzene	JB	~~4.89~~	<50.0	19.6	µg/Kg	10	3.64	5	0.364	50 U
1,2,4-Trichlorobenzene	U	<2.28	<50.0	9.37	µg/Kg	10	2.28	5	0.228	
Naphthalene	JB	~~7.33~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441	50 U
Hexachlorobutadiene	U	<3.24	<50.0	23.4	µg/Kg	10	3.24	5	0.324	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		468	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		503	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		491	µg/Kg	10	50.0	98	78 - 120

Sample: 93242 - HGLSB29-K3-1416

Analysis: Semivolatiles
QC Batch: 27719
Prep Batch: 24292

Analytical Method: S 8270C
Date Analyzed: 2006-06-28
Sample Preparation: 2006-06-28

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued ...

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sample 93242 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

continued . . .

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sample 93242 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.750	mg/Kg	1	2.67	28	10 - 98.8
Phenol-d5		0.770	mg/Kg	1	2.67	29	10 - 105
Nitrobenzene-d5		0.830	mg/Kg	1	2.67	31	10 - 114
2-Fluorobiphenyl		1.01	mg/Kg	1	2.67	38	10 - 122
2,4,6-Tribromophenol		1.33	mg/Kg	1	2.67	50	10 - 117
Terphenyl-d14		1.86	mg/Kg	1	2.67	70	10 - 116

Sample: 93242 - HGLSB29-K3-1416

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27658	Date Analyzed:	2006-06-27	Analyzed By:	RR
Prep Batch:	24232	Sample Preparation:	2006-06-26	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27716	Date Analyzed:	2006-06-28	Analyzed By:	TP
Prep Batch:	24273	Sample Preparation:	2006-06-28	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**26.0**	**26.0**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**7.11**	**7.11**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00299	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93242 - HGLSB29-K3-1416

Analysis: TPH DRO
QC Batch: 27649
Prep Batch: 24248

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-27
Sample Preparation: 2006-06-26

Prep Method: N/A
Analyzed By: JL
Prepared By: JL

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<10.7	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		159	mg/Kg	1	150	106	50 - 150

Sample: 93242 - HGLSB29-K3-1416

Analysis: TPH GRO
QC Batch: 27608
Prep Batch: 24212

Analytical Method: S 8015B
Date Analyzed: 2006-06-24
Sample Preparation: 2006-06-24

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.742	mg/Kg	10	0.100	74	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	10	0.100	85	71.9 - 123.7

Sample: 93242 - HGLSB29-K3-1416

Analysis: Volatiles
QC Batch: 27694
Prep Batch: 24282

Analytical Method: S 8260B
Date Analyzed: 2006-06-27
Sample Preparation: 2006-06-27

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

continued . . .

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sample 93242 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	0.540	µg/Kg	10	0.346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~6.06~~	<50.0	5.36	µg/Kg	10	1.19	5	0.119	50.0 U FQ
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.52~~	<10.0	1.75	µg/Kg	10	1.12	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.20	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	JB	~~0.870~~	<10.0	1.20	µg/Kg	10	0.376	1	0.0376	10.0 U
m,p-Xylene	JB	~~1.78~~	<10.0	2.62	µg/Kg	10	0.714	1	0.0714	10.0 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.796	1	0.0796	

continued ...

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sample 93242 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	JB	~~0.850~~	<10.0	1.07	µg/Kg	10	0.679	1	0.0679	10.0 U
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	1.74	µg/Kg	10	1.30	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048	
n-Propylbenzene	JB	~~1.58~~	<10.0	2.08	µg/Kg	10	0.421	1	0.0421	10.0 U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.12	µg/Kg	10	2.10	1	0.21	
tert-Butylbenzene	JB	~~1.63~~	<10.0	2.07	µg/Kg	10	0.410	1	0.041	10.0 U
1,2,4-Trimethylbenzene	JB	~~1.98~~	<10.0	2.06	µg/Kg	10	0.535	1	0.0535	10.0 U
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387	
sec-Butylbenzene	JB	~~1.89~~	<10.0	2.50	µg/Kg	10	0.632	1	0.0632	10.0 U
1,3-Dichlorobenzene (meta)	JB	~~1.53~~	<10.0	2.26	µg/Kg	10	0.534	1	0.0534	
p-Isopropyltoluene	JB	~~2.20~~	<10.0	2.61	µg/Kg	10	0.679	1	0.0679	
4-Chlorotoluene	JB	~~1.06~~	<10.0	1.49	µg/Kg	10	0.675	1	0.0675	
1,2-Dichlorobenzene (ortho)	JB	~~1.20~~	<10.0	2.23	µg/Kg	10	0.475	1	0.0475	
n-Butylbenzene	JB	~~2.87~~	<10.0	3.38	µg/Kg	10	0.979	1	0.0979	
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915	
1,2,3-Trichlorobenzene	U	<3.64	<50.0	14.8	µg/Kg	10	3.64	5	0.364	
1,2,4-Trichlorobenzene	JB	~~4.65~~	<50.0	7.30	µg/Kg	10	2.28	5	0.228	50.0 U
Naphthalene	JB	~~9.31~~	<50.0	13.7	µg/Kg	10	4.41	5	0.441	
Hexachlorobutadiene	JB	~~9.18~~	<50.0	15.1	µg/Kg	10	3.24	5	0.324	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		497	µg/Kg	10	50.0	99	42 - 129
Toluene-d8		510	µg/Kg	10	50.0	102	93 - 107
4-Bromofluorobenzene (4-BFB)		512	µg/Kg	10	50.0	102	78 - 120

Sample: 93243 - HGLSB29-I5-1417

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27765	Date Analyzed:	2006-06-29	Analyzed By:	AG
Prep Batch:	24220	Sample Preparation:	2006-06-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued ...

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sample 93243 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

continued...

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sample 93243 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.28	mg/Kg	1	2.67	48	10 - 98.8
Phenol-d5		1.57	mg/Kg	1	2.67	59	10 - 105
Nitrobenzene-d5		1.41	mg/Kg	1	2.67	53	10 - 114
2-Fluorobiphenyl		1.89	mg/Kg	1	2.67	71	10 - 122
2,4,6-Tribromophenol		2.12	mg/Kg	1	2.67	79	10 - 117
Terphenyl-d14		1.43	mg/Kg	1	2.67	54	10 - 116

Sample: 93243 - HGLSB29-I5-1417

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27570	Date Analyzed:	2006-06-23	Analyzed By:	RR
Prep Batch:	24126	Sample Preparation:	2006-06-21	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.359**	**0.359**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**18.5**	**18.5**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**0.704**	**0.704**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**7.19**	**7.19**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	J	**0.00632**	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead		**4.71**	**4.71**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93243 - HGLSB29-I5-1417

Analysis: TPH DRO
QC Batch: 27515
Prep Batch: 24129

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: N/A
Analyzed By: JL
Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<10.7	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	87	50 - 150

Sample: 93243 - HGLSB29-I5-1417

Analysis: TPH GRO
QC Batch: 27487
Prep Batch: 24103

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.778	mg/Kg	10	0.100	78	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.839	mg/Kg	10	0.100	84	71.9 - 123.7

Sample: 93243 - HGLSB29-I5-1417

Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

continued . . .

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sample 93243 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	J	**0.440**	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	J
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~12.4~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	50.0 U FD
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.65~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	JB	~~0.470~~	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	10.0 U
m,p-Xylene	JB	~~1.09~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10.0 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	

continued...

Validated EPA Level 3 (Verification), Quality by Design, February 3, 2007

sample 93243 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
o-Xylene	U	<0.679	<10.0	1.83	µg/Kg	10	0.679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	2.51	µg/Kg	10	1.30	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048
n-Propylbenzene	JB	~~1.08~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421 10.0 U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21
tert-Butylbenzene	JB	~~1.35~~	<10.0	3.20	µg/Kg	10	0.410	1	0.041 10.0 U
1,2,4-Trimethylbenzene	JB	~~1.42~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535 10.0 U
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387
sec-Butylbenzene	JB	~~1.85~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632 10.0 U
1,3-Dichlorobenzene (meta)	JB	~~0.800~~	<10.0	2.57	µg/Kg	10	0.534	1	0.0534 ↓
p-Isopropyltoluene	JB	~~1.77~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	2.13	µg/Kg	10	0.675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	2.57	µg/Kg	10	0.475	1	0.0475
n-Butylbenzene	JB	~~2.80~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979 10.0 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915
1,2,3-Trichlorobenzene	JB	~~4.58~~	<50.0	19.6	µg/Kg	10	3.64	5	0.364 50.0 U
1,2,4-Trichlorobenzene	JB	~~2.80~~	<50.0	9.37	µg/Kg	10	2.28	5	0.228 50.0 U
Naphthalene	JB	~~9.46~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441 50.0 U
Hexachlorobutadiene	JB	~~7.31~~	<50.0	23.4	µg/Kg	10	3.24	5	0.324 50.0 U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		466	µg/Kg	10	50.0	93	42 - 129
Toluene-d8		498	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		500	µg/Kg	10	50.0	100	78 - 120

Sample: 93244 - HGLSB29-F7-2022

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27765	Date Analyzed:	2006-06-29	Analyzed By:	AG
Prep Batch:	24220	Sample Preparation:	2006-06-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued . . .

Validated EPA Level 3 (Verification), Quality by Design, February 3, 2007 FKO

sample 93244 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

continued...

Validated EPA Level 3 (Verification), Quality by Design, February 3, 2007

sample 93244 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.11	mg/Kg	1	2.67	42	10 - 98.8
Phenol-d5		1.29	mg/Kg	1	2.67	48	10 - 105
Nitrobenzene-d5		1.24	mg/Kg	1	2.67	46	10 - 114
2-Fluorobiphenyl		1.52	mg/Kg	1	2.67	57	10 - 122
2,4,6-Tribromophenol		2.28	mg/Kg	1	2.67	85	10 - 117
Terphenyl-d14		1.55	mg/Kg	1	2.67	58	10 - 116

Sample: 93244 - HGLSB29-F7-2022

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27570	Date Analyzed:	2006-06-23	Analyzed By:	RR
Prep Batch:	24126	Sample Preparation:	2006-06-21	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.653**	**0.653**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**45.2**	**45.2**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**0.757**	**0.757**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**7.33**	**7.33**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00299	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead		**3.80**	**3.80**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93244 - HGLSB29-F7-2022

Analysis: TPH DRO
QC Batch: 27515
Prep Batch: 24129

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: N/A
Analyzed By: JL
Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<10.7	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		139	mg/Kg	1	150	93	50 - 150

Sample: 93244 - HGLSB29-F7-2022

Analysis: TPH GRO
QC Batch: 27487
Prep Batch: 24103

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.15	mg/Kg	10	0.100	115	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.21	mg/Kg	10	0.100	121	71.9 - 123.7

Sample: 93244 - HGLSB29-F7-2022

Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

continued . . .

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sample 93244 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~11.1~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.59~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	JB	~~0.610~~	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	10.0 U
m,p-Xylene	JB	~~1.23~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10.0 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	

continued . . .

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sample 93244 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
o-Xylene	U	<0.679	<10.0	1.83	µg/Kg	10	0.679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	2.51	µg/Kg	10	1.30	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048	
n-Propylbenzene	JB	~~0.890~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421	10.0 U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21	
tert-Butylbenzene	JB	~~1.04~~	<10.0	3.20	µg/Kg	10	0.410	1	0.041	10.0 U
1,2,4-Trimethylbenzene	JB	~~1.21~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535	10.0 U
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387	
sec-Butylbenzene	JB	~~1.50~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632	10.0 U
1,3-Dichlorobenzene (meta)	JB	~~0.640~~	<10.0	2.57	µg/Kg	10	0.534	1	0.0534	↓
p-Isopropyltoluene	JB	~~1.78~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679	
4-Chlorotoluene	U	<0.675	<10.0	2.13	µg/Kg	10	0.675	1	0.0675	
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	2.57	µg/Kg	10	0.475	1	0.0475	
n-Butylbenzene	JB	~~2.30~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979	10.0 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915	
1,2,3-Trichlorobenzene	U	<3.64	<50.0	19.6	µg/Kg	10	3.64	5	0.364	
1,2,4-Trichlorobenzene	U	<2.28	<50.0	9.37	µg/Kg	10	2.28	5	0.228	
Naphthalene	JB	~~7.20~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441	50.0 U
Hexachlorobutadiene	U	<3.24	<50.0	23.4	µg/Kg	10	3.24	5	0.324	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		472	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		502	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		492	µg/Kg	10	50.0	98	78 - 120

Sample: 93245 - HGLSB29-F4-1820

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27765	Date Analyzed:	2006-06-29	Analyzed By:	AG
Prep Batch:	24220	Sample Preparation:	2006-06-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued...

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sample 93245 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

continued . . .

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sample 93245 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.33	mg/Kg	1	2.67	50	10 - 98.8
Phenol-d5		1.60	mg/Kg	1	2.67	60	10 - 105
Nitrobenzene-d5		1.52	mg/Kg	1	2.67	57	10 - 114
2-Fluorobiphenyl		1.99	mg/Kg	1	2.67	74	10 - 122
2,4,6-Tribromophenol		2.59	mg/Kg	1	2.67	97	10 - 117
Terphenyl-d14		1.84	mg/Kg	1	2.67	69	10 - 116

Sample: 93245 - HGLSB29-F4-1820

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27570	Date Analyzed:	2006-06-23	Analyzed By:	RR
Prep Batch:	24126	Sample Preparation:	2006-06-21	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.860**	**0.860**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**42.0**	**42.0**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	J	**0.238**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**1.74**	**1.74**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00299	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93245 - HGLSB29-F4-1820

Analysis: TPH DRO
QC Batch: 27515
Prep Batch: 24129

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: N/A
Analyzed By: JL
Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<10.7	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	150	96	50 - 150

Sample: 93245 - HGLSB29-F4-1820

Analysis: TPH GRO
QC Batch: 27487
Prep Batch: 24103

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.736	mg/Kg	10	0.100	74	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.798	mg/Kg	10	0.100	80	71.9 - 123.7

Sample: 93245 - HGLSB29-F4-1820

Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

continued...

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sample 93245 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~11.2~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	50,0 U FQ
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.51~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10,0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	
m,p-Xylene	JB	~~0.810~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10,0 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	

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sample 93245 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
o-Xylene	U	<0.679	<10.0	1.83	µg/Kg	10	0.679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	2.51	µg/Kg	10	1.30	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048
n-Propylbenzene	JB	~~0.770~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421 10.0U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21
tert-Butylbenzene	JB	~~1.01~~	<10.0	3.20	µg/Kg	10	0.410	1	0.041 10.0U
1,2,4-Trimethylbenzene	JB	~~1.11~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535 10.0U
1,4-Dichlorobenzene (para)	J	0.550	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387 J
sec-Butylbenzene	JB	~~1.46~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	2.57	µg/Kg	10	0.534	1	0.0534
p-Isopropyltoluene	JB	~~1.25~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679 10.0U
4-Chlorotoluene	U	<0.675	<10.0	2.13	µg/Kg	10	0.675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	2.57	µg/Kg	10	0.475	1	0.0475
n-Butylbenzene	JB	~~2.19~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979 10.0U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	19.6	µg/Kg	10	3.64	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	9.37	µg/Kg	10	2.28	5	0.228
Naphthalene	JB	~~7.05~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441 50.0U
Hexachlorobutadiene	JB	~~4.47~~	<50.0	23.4	µg/Kg	10	3.24	5	0.324 50.0U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		469	µg/Kg	10	50.0	94	42 - 129
Toluene-d8		494	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		496	µg/Kg	10	50.0	99	78 - 120

Sample: 93246 - HGLSB29-D6-2426

Analysis: Semivolatiles
QC Batch: 27765
Prep Batch: 24220

Analytical Method: S 8270C
Date Analyzed: 2006-06-29
Sample Preparation: 2006-06-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364

continued...

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sample 93246 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368

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sample 93246 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.30	mg/Kg	1	2.67	49	10 - 98.8
Phenol-d5		1.61	mg/Kg	1	2.67	60	10 - 105
Nitrobenzene-d5		1.46	mg/Kg	1	2.67	55	10 - 114
2-Fluorobiphenyl		1.93	mg/Kg	1	2.67	72	10 - 122
2,4,6-Tribromophenol		2.50	mg/Kg	1	2.67	94	10 - 117
Terphenyl-d14		1.78	mg/Kg	1	2.67	67	10 - 116

Sample: 93246 - HGLSB29-D6-2426

Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27506	Date Analyzed:	2006-06-21	Analyzed By:	TP
Prep Batch:	24116	Sample Preparation:	2006-06-20	Prepared By:	TP
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27570	Date Analyzed:	2006-06-23	Analyzed By:	RR
Prep Batch:	24126	Sample Preparation:	2006-06-21	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.476**	**0.476**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**66.0**	**66.0**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**0.692**	**0.692**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**5.68**	**5.68**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	J	**0.00757**	<0.0400	<0.00299	mg/Kg	1	0.00299	0.04	0.00299
Total Lead		**3.05**	**3.05**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 93246 - HGLSB29-D6-2426

Analysis: TPH DRO
QC Batch: 27515
Prep Batch: 24129

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: N/A
Analyzed By: JL
Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<10.7	<50.0	<10.7	mg/Kg	1	10.7	50	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	50 - 150

Sample: 93246 - HGLSB29-D6-2426

Analysis: TPH GRO
QC Batch: 27487
Prep Batch: 24103

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	1.21	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.643	mg/Kg	10	0.100	64	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.746	mg/Kg	10	0.100	75	71.9 - 123.7

Sample: 93246 - HGLSB29-D6-2426

Analysis: Volatiles
QC Batch: 27546
Prep Batch: 24149

Analytical Method: S 8260B
Date Analyzed: 2006-06-21
Sample Preparation: 2006-06-21

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

[1]TFT surrogate recovery outside normal limits. ICV/CCV and BFB surrogate recovery show the method to be in control.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	1.71	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	3.68	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	17.0	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.640	5	0.064	
Carbon Disulfide	J	**0.370**	<10.0	<0.346	µg/Kg	10	0.346	1	0.0346	J
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	1.51	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	3.78	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	7.86	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	5.70	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	1.33	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.639	1	0.0639	
Methylene chloride	JB	~~11.9~~	<50.0	10.7	µg/Kg	10	1.19	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.561	1	0.0561	
Toluene	JB	~~1.59~~	<10.0	1.90	µg/Kg	10	1.12	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	3.25	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	2.35	µg/Kg	10	0.826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	0.490	µg/Kg	10	0.426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.289	1	0.0289	
Ethylbenzene	JB	~~0.390~~	<10.0	1.52	µg/Kg	10	0.376	1	0.0376	10.0 U
m,p-Xylene	JB	~~0.940~~	<10.0	3.56	µg/Kg	10	0.714	1	0.0714	10.0 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.426	1	0.0426	
Styrene	U	<0.796	<10.0	1.05	µg/Kg	10	0.796	1	0.0796	
o-Xylene	U	<0.679	<10.0	1.83	µg/Kg	10	0.679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	1.26	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	2.51	µg/Kg	10	1.30	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.480	1	0.048	

continued . . .

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sample 93246 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Propylbenzene	JB	~~0.630~~	<10.0	3.05	µg/Kg	10	0.421	1	0.0421 10.0 U
1,3,5-Trimethylbenzene	U	<2.10	<10.0	2.99	µg/Kg	10	2.10	1	0.21
tert-Butylbenzene	JB	~~0.750~~	<10.0	3.20	µg/Kg	10	0.410	1	0.041 10.0 U
1,2,4-Trimethylbenzene	JB	~~0.960~~	<10.0	3.43	µg/Kg	10	0.535	1	0.0535 10.0 U
1,4-Dichlorobenzene (para)	J	**0.640**	<10.0	<0.387	µg/Kg	10	0.387	1	0.0387 J
sec-Butylbenzene	JB	~~1.11~~	<10.0	3.94	µg/Kg	10	0.632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	2.57	µg/Kg	10	0.534	1	0.0534
p-Isopropyltoluene	JB	~~1.11~~	<10.0	3.83	µg/Kg	10	0.679	1	0.0679 10.0 U
4-Chlorotoluene	U	<0.675	<10.0	2.13	µg/Kg	10	0.675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	2.57	µg/Kg	10	0.475	1	0.0475
n-Butylbenzene	JB	~~2.12~~	<10.0	5.77	µg/Kg	10	0.979	1	0.0979 10.0 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	1.92	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	19.6	µg/Kg	10	3.64	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	9.37	µg/Kg	10	2.28	5	0.228
Naphthalene	JB	~~6.37~~	<50.0	19.5	µg/Kg	10	4.41	5	0.441 50.0 U
Hexachlorobutadiene	U	<3.24	<50.0	23.4	µg/Kg	10	3.24	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		460	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		493	µg/Kg	10	50.0	99	93 - 107
4-Bromofluorobenzene (4-BFB)		496	µg/Kg	10	50.0	99	78 - 120

Method Blank (1)

QC Batch: 27441
Prep Batch: 24066

Date Analyzed: 2006-06-19
QC Preparation: 2006-06-19

Analyzed By: JL
Prepared By: JL

Parameter	Flag	Result	Units	Reporting Limits
DRO		<10.7	mg/Kg	10.7

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		146	mg/Kg	1	150	97	50 - 150

Method Blank (1)

QC Batch: 27447
Prep Batch: 24069

Date Analyzed: 2006-06-19
QC Preparation: 2006-06-19

Analyzed By: KB
Prepared By: KB

Parameter	Flag	Result	Units	Reporting Limits
GRO		2.59	mg/Kg	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	10	0.100	107	81.7 - 119
4-Bromofluorobenzene (4-BFB)		0.923	mg/Kg	10	0.100	92	60.1 - 102

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Analytical Report

Sample: 93200 - HGL GW27-07

Analysis: Ag, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Silver		**0.0110**	**0.0110**	<0.000297	mg/L	1	0.000297	0.002	0.000297

Sample: 93200 - HGL GW27-07

Analysis: As, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Arsenic	U	<0.00255	<0.00500	<0.00255	mg/L	1	0.00255	0.005	0.002551

Sample: 93200 - HGL GW27-07

Analysis: Ba, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Barium		**0.0390**	**0.0390**	<0.00148	mg/L	1	0.00148	0.01	0.001475

Sample: 93200 - HGL GW27-07

Analysis: Cd, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Cadmium	U	<0.000595	<0.00100	<0.000595	mg/L	1	0.000595	0.001	0.000595

Sample: 93200 - HGL GW27-07

Analysis: Cr, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium	U	<0.000238	<0.00500	<0.000238	mg/L	1	0.000238	0.005	0.000238

Sample: 93200 - HGL GW27-07

Analysis: Hg, Dissolved
QC Batch: 27646
Prep Batch: 24173

Analytical Method: S 7470A
Date Analyzed: 2006-06-23
Sample Preparation: 2006-06-22

Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 93200 - HGL GW27-07

Analysis: Pb, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Lead	U	<0.00180	<0.00500	<0.00180	mg/L	1	0.00180	0.005	0.001796

Sample: 93200 - HGL GW27-07

Analysis: Se, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Selenium	J	**0.00700**	<0.0100	<0.00232	mg/L	1	0.00232	0.01	0.002318

Sample: 93200 - HGL GW27-07

Analysis: Semivolatiles
QC Batch: 27651
Prep Batch: 24152

Analytical Method: S 8270C
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-22

Prep Method: S 3510C
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121

continued . . .

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sample 93200 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803

continued . . .

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sample 93200 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0153	mg/L	1	0.0800	19	10 - 84.7
Phenol-d5		0.00940	mg/L	1	0.0800	12	10 - 54.9
Nitrobenzene-d5		0.0370	mg/L	1	0.0800	46	10 - 202
2-Fluorobiphenyl		0.0421	mg/L	1	0.0800	53	10 - 199
2,4,6-Tribromophenol		0.0532	mg/L	1	0.0800	66	10 - 141
Terphenyl-d14		0.0590	mg/L	1	0.0800	74	10 - 160

Sample: 93200 - HGL GW27-07

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Analysis: Total 8 Metals
QC Batch: 27611
Prep Batch: 24164
Analysis: Total 8 Metals
QC Batch: 27647
Prep Batch: 24174

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-22
Analytical Method: S 7470A
Date Analyzed: 2006-06-23
Sample Preparation: 2006-06-22

Prep Method: S 3010A
Analyzed By: RR
Prepared By: TS
Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.0130**	**0.0130**	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium		**0.345**	**0.345**	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium		**0.0480**	**0.0480**	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000217	<0.000200	<0.0000217	mg/L	1	0.0000217	0.0002	2.17e-05
Total Lead		**0.0170**	**0.0170**	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 93200 - HGL GW27-07

Analysis: TPH DRO
QC Batch: 27477
Prep Batch: 24097

Analytical Method: Mod. 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: N/A
Analyzed By: JL
Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<0.106	<5.00	<0.106	mg/L	0.1	0.106	50	1.06

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		22.4	mg/L	0.1	150	149	50 - 150

Sample: 93200 - HGL GW27-07

Analysis: TPH GRO
QC Batch: 27486
Prep Batch: 24102

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5030B
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.0272	<0.100	<0.0272	mg/L	1	0.0272	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0927	mg/L	1	0.100	93	80 - 120
4-Bromofluorobenzene (4-BFB)		0.0944	mg/L	1	0.100	94	80 - 120

Sample: 93200 - HGL GW27-07

Analysis: Volatiles

Analytical Method: S 8260B

Prep Method: S 5030B

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QC Batch: 27581
Prep Batch: 24185

Date Analyzed: 2006-06-22
Sample Preparation: 2006-06-22

Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699	
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298	
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902	
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402	
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952	
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16	
Acetone	U	<0.854	<10.0	2.30	µg/L	1	0.854	10	0.8536	
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119	
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764	
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837	
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941	
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484	
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975	
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207	
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888	
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene		~~1.57~~	1.57	<0.0495	µg/L	1	0.0495	1	0.0495	1.57 U
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	J	0.220	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	J
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	B	~~1.14~~	1.14	0.180	µg/L	1	0.0736	1	0.0736	1.14 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	0.220	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	JB	~~0.0500~~	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	1.0 U
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	JB	~~0.770~~	<1.00	0.140	µg/L	1	0.0566	1	0.0566	1.0 U
m,p-Xylene	JB	~~0.680~~	<1.00	0.310	µg/L	1	0.0363	1	0.0363	1.0 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	JB	~~0.240~~	<1.00	0.130	µg/L	1	0.0504	1	0.0504	1.0 U
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	

continued . . .

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sample 93200 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	JB	~~0.110~~	<1.00	0.200	µg/L	1	0.0406	1	0.0406	1.0 U
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	JB	~~0.190~~	<1.00	0.280	µg/L	1	0.0423	1	0.0423	1.0 U
1,3,5-Trimethylbenzene	JB	~~0.140~~	<1.00	0.240	µg/L	1	0.0557	1	0.0557	1.0 U
tert-Butylbenzene	U	<0.0770	<1.00	0.250	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	~~0.260~~	<1.00	0.220	µg/L	1	0.0336	1	0.0336	1.0 U
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	~~0.100~~	<1.00	0.280	µg/L	1	0.0439	1	0.0439	1.0 U
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	0.270	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	U	<0.0513	<1.00	0.270	µg/L	1	0.0513	1	0.0513	
4-Chlorotoluene	U	<0.0460	<1.00	0.190	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	0.270	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	JB	~~0.140~~	<1.00	0.330	µg/L	1	0.0400	1	0.04	1.0 U
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	JB	~~1.01~~	<5.00	0.620	µg/L	1	0.417	5	0.4166	5.0 U
Hexachlorobutadiene	U	<0.176	<5.00	1.94	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.5	µg/L	1	50.0	103	70 - 130
Toluene-d8		50.1	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		49.1	µg/L	1	50.0	98	70 - 130

Sample: 93201 - HGL GW27-008

Analysis:	Ag, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	27629	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24183	Sample Preparation:	2006-06-23	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Silver	U	<0.000297	<0.00200	<0.000297	mg/L	1	0.000297	0.002	0.000297

Sample: 93201 - HGL GW27-008

Analysis:	As, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	27629	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24183	Sample Preparation:	2006-06-23	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Arsenic	U	<0.00255	<0.00500	<0.00255	mg/L	1	0.00255	0.005	0.002551

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Sample: 93201 - HGL GW27-008

Analysis:	Ba, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	27629	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24183	Sample Preparation:	2006-06-23	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Barium		**0.0290**	**0.0290**	<0.00148	mg/L	1	0.00148	0.01	0.001475

Sample: 93201 - HGL GW27-008

Analysis:	Cd, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	27629	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24183	Sample Preparation:	2006-06-23	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Cadmium	U	<0.000595	<0.00100	<0.000595	mg/L	1	0.000595	0.001	0.000595

Sample: 93201 - HGL GW27-008

Analysis:	Cr, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	27629	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24183	Sample Preparation:	2006-06-23	Prepared By:	TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium	U	<0.000238	<0.00500	<0.000238	mg/L	1	0.000238	0.005	0.000238

Sample: 93201 - HGL GW27-008

Analysis:	Hg, Dissolved	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27646	Date Analyzed:	2006-06-23	Analyzed By:	TP
Prep Batch:	24173	Sample Preparation:	2006-06-22	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 93201 - HGL GW27-008

Analysis:	Pb, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	27629	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24183	Sample Preparation:	2006-06-23	Prepared By:	TS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Lead	U	<0.00180	<0.00500	<0.00180	mg/L	1	0.00180	0.005	0.001796

Sample: 93201 - HGL GW27-008

Analysis: Se, Dissolved
QC Batch: 27629
Prep Batch: 24183

Analytical Method: S 6010B
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-23

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Selenium		**0.0100**	**0.0100**	<0.00232	mg/L	1	0.00232	0.01	0.002318

Sample: 93201 - HGL GW27-008

Analysis: Semivolatiles
QC Batch: 27651
Prep Batch: 24152

Analytical Method: S 8270C
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-22

Prep Method: S 3510C
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719

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sample 93201 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997

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sample 93201 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0154	mg/L	1	0.0800	19	10 - 84.7
Phenol-d5		0.0109	mg/L	1	0.0800	14	10 - 54.9
Nitrobenzene-d5		0.0378	mg/L	1	0.0800	47	10 - 202
2-Fluorobiphenyl		0.0438	mg/L	1	0.0800	55	10 - 199
2,4,6-Tribromophenol		0.0465	mg/L	1	0.0800	58	10 - 141
Terphenyl-d14		0.0548	mg/L	1	0.0800	68	10 - 160

Sample: 93201 - HGL GW27-008

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	27611	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24164	Sample Preparation:	2006-06-22	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27647	Date Analyzed:	2006-06-23	Analyzed By:	TP
Prep Batch:	24174	Sample Preparation:	2006-06-22	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.0110**	**0.0110**	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium		**0.0520**	**0.0520**	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000217	<0.000200	<0.0000217	mg/L	1	0.0000217	0.0002	2.17e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 93201 - HGL GW27-008

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	27477	Date Analyzed:	2006-06-20	Analyzed By:	JL

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Prep Batch: 24097 Sample Preparation: 2006-06-20 Prepared By: SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<0.106	<5.00	<0.106	mg/L	0.1	0.106	50	1.06

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.0	mg/L	0.1	150	107	50 - 150

Sample: 93201 - HGL GW27-008

Analysis: TPH GRO
QC Batch: 27486
Prep Batch: 24102

Analytical Method: S 8015B
Date Analyzed: 2006-06-20
Sample Preparation: 2006-06-20

Prep Method: S 5030B
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.0272	<0.100	<0.0272	mg/L	1	0.0272	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0925	mg/L	1	0.100	92	80 - 120
4-Bromofluorobenzene (4-BFB)		0.0867	mg/L	1	0.100	87	80 - 120

Sample: 93201 - HGL GW27-008

Analysis: Volatiles
QC Batch: 27581
Prep Batch: 24185

Analytical Method: S 8260B
Date Analyzed: 2006-06-22
Sample Preparation: 2006-06-22

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	2.30	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888

continued . . .

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sample 93201 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	J	~~0.750~~	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	1.0 U
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	J	**0.170**	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	J
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	~~0.420~~	<1.00	0.180	µg/L	1	0.0736	1	0.0736	1.0 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	0.220	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	JB	~~0.0400~~	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	1.0 U
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	JB	~~0.400~~	<1.00	0.140	µg/L	1	0.0566	1	0.0566	1.0 U
m,p-Xylene	JB	~~0.290~~	<1.00	0.310	µg/L	1	0.0363	1	0.0363	1.0 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	JB	~~0.100~~	<1.00	0.130	µg/L	1	0.0504	1	0.0504	1.0 U
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	JB	~~0.0700~~	<1.00	0.200	µg/L	1	0.0406	1	0.0406	1.0 U
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	JB	~~0.130~~	<1.00	0.280	µg/L	1	0.0423	1	0.0423	1.0 U
1,3,5-Trimethylbenzene	JB	~~0.0700~~	<1.00	0.240	µg/L	1	0.0557	1	0.0557	1.0 U
tert-Butylbenzene	U	<0.0770	<1.00	0.250	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	~~0.100~~	<1.00	0.220	µg/L	1	0.0336	1	0.0336	1.0 U
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	~~0.0700~~	<1.00	0.280	µg/L	1	0.0439	1	0.0439	1.0 U
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	0.270	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	JB	~~0.0600~~	<1.00	0.270	µg/L	1	0.0513	1	0.0513	1.0 U
4-Chlorotoluene	U	<0.0460	<1.00	0.190	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	0.270	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	U	<0.0400	<1.00	0.330	µg/L	1	0.0400	1	0.04	
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.620	µg/L	1	0.417	5	0.4166	

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sample 93201 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachlorobutadiene	U	<0.176	<5.00	1.94	µg/L	1	0.176	5	0.1758

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.7	µg/L	1	50.0	103	70 - 130
Toluene-d8		49.1	µg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		46.2	µg/L	1	50.0	92	70 - 130

Sample: 93204 - HGL RBGW061506

Analysis: Semivolatiles
QC Batch: 27651
Prep Batch: 24152

Analytical Method: S 8270C
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-22

Prep Method: S 3510C
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476

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sample 93204 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529

continued . . .

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sample 93204 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol	[1]	0.00580	mg/L	1	0.0800	7	10 - 84.7
Phenol-d5		0.00820	mg/L	1	0.0800	10	10 - 54.9
Nitrobenzene-d5		0.0568	mg/L	1	0.0800	71	10 - 202
2-Fluorobiphenyl		0.0661	mg/L	1	0.0800	83	10 - 199
2,4,6-Tribromophenol		0.0205	mg/L	1	0.0800	26	10 - 141
Terphenyl-d14		0.0661	mg/L	1	0.0800	83	10 - 160

Sample: 93204 - HGL RBGW061506

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	27611	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24164	Sample Preparation:	2006-06-22	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27647	Date Analyzed:	2006-06-23	Analyzed By:	TP
Prep Batch:	24174	Sample Preparation:	2006-06-22	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium	J	**0.00400**	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000217	<0.000200	<0.0000217	mg/L	1	0.0000217	0.0002	2.17e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 93204 - HGL RBGW061506

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	27477	Date Analyzed:	2006-06-20	Analyzed By:	JL
Prep Batch:	24097	Sample Preparation:	2006-06-20	Prepared By:	SP

[1] 8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<0.106	<5.00	<0.106	mg/L	0.1	0.106	50	1.06

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.8	mg/L	0.1	150	105	50 - 150

Sample: 93204 - HGL RBGW061506

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	27486	Date Analyzed:	2006-06-20	Analyzed By:	KB
Prep Batch:	24102	Sample Preparation:	2006-06-20	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.0272	<0.100	<0.0272	mg/L	1	0.0272	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0996	mg/L	1	0.100	100	80 - 120
4-Bromofluorobenzene (4-BFB)		0.0898	mg/L	1	0.100	90	80 - 120

Sample: 93204 - HGL RBGW061506

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	27581	Date Analyzed:	2006-06-22	Analyzed By:	JG
Prep Batch:	24185	Sample Preparation:	2006-06-22	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	2.30	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	J	~~0.850~~	<5.00	<0.689	µg/L	1	0.689	5	0.6888 5.0 U
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598

continued ...

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sample 93204 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	J	~~0.200~~	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	1.0 U
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	~~0.410~~	<1.00	0.180	µg/L	1	0.0736	1	0.0736	1.0 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	0.220	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	JB	~~0.250~~	<1.00	0.140	µg/L	1	0.0566	1	0.0566	1.0 U
m,p-Xylene	JB	~~0.230~~	<1.00	0.310	µg/L	1	0.0363	1	0.0363	1.0 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	0.130	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	JB	~~0.0600~~	<1.00	0.200	µg/L	1	0.0406	1	0.0406	1.0 U
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	JB	~~0.100~~	<1.00	0.280	µg/L	1	0.0423	1	0.0423	1.0 U
1,3,5-Trimethylbenzene	JB	~~0.0600~~	<1.00	0.240	µg/L	1	0.0557	1	0.0557	1.0 U
tert-Butylbenzene	U	<0.0770	<1.00	0.250	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	~~0.130~~	<1.00	0.220	µg/L	1	0.0336	1	0.0336	1.0 U
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	~~0.0600~~	<1.00	0.280	µg/L	1	0.0439	1	0.0439	1.0 U
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	0.270	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	JB	~~0.0700~~	<1.00	0.270	µg/L	1	0.0513	1	0.0513	1.0 U
4-Chlorotoluene	U	<0.0460	<1.00	0.190	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	0.270	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	JB	~~0.100~~	<1.00	0.330	µg/L	1	0.0400	1	0.04	1.0 U
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.620	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	1.94	µg/L	1	0.176	5	0.1758	

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.2	µg/L	1	50.0	106	70 - 130
Toluene-d8		50.0	µg/L	1	50.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)		48.1	µg/L	1	50.0	96	70 - 130

Sample: 93221 - HGLTB061606

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	27486	Date Analyzed:	2006-06-20	Analyzed By:	KB
Prep Batch:	24102	Sample Preparation:	2006-06-20	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.0272	<0.100	<0.0272	mg/L	1	0.0272	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0946	mg/L	1	0.100	95	80 - 120
4-Bromofluorobenzene (4-BFB)		0.0873	mg/L	1	0.100	87	80 - 120

Sample: 93221 - HGLTB061606

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	27581	Date Analyzed:	2006-06-22	Analyzed By:	JG
Prep Batch:	24185	Sample Preparation:	2006-06-22	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	2.30	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	J	**0.980**	<5.00	<0.689	µg/L	1	0.689	5	0.6888
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665

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sample 93221 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	J	**0.160**	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	J
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	**0.250**	<1.00	0.180	µg/L	1	0.0736	1	0.0736	J
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	0.220	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	JB	**0.180**	<1.00	0.140	µg/L	1	0.0566	1	0.0566	J
m,p-Xylene	JB	**0.180**	<1.00	0.310	µg/L	1	0.0363	1	0.0363	J
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	JB	**0.0800**	<1.00	0.130	µg/L	1	0.0504	1	0.0504	J
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	0.200	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	JB	**0.0900**	<1.00	0.280	µg/L	1	0.0423	1	0.0423	J
1,3,5-Trimethylbenzene	JB	**0.0600**	<1.00	0.240	µg/L	1	0.0557	1	0.0557	J
tert-Butylbenzene	U	<0.0770	<1.00	0.250	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	**0.100**	<1.00	0.220	µg/L	1	0.0336	1	0.0336	J
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	**0.0600**	<1.00	0.280	µg/L	1	0.0439	1	0.0439	J
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	0.270	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	U	<0.0513	<1.00	0.270	µg/L	1	0.0513	1	0.0513	
4-Chlorotoluene	U	<0.0460	<1.00	0.190	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	0.270	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	U	<0.0400	<1.00	0.330	µg/L	1	0.0400	1	0.04	
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.620	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	1.94	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.8	µg/L	1	50.0	106	70 - 130

continued...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		49.2	µg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		48.0	µg/L	1	50.0	96	70 - 130

Sample: 93247 - HGLRBSB-061706

Analysis: Semivolatiles
QC Batch: 27651
Prep Batch: 24152

Analytical Method: S 8270C
Date Analyzed: 2006-06-26
Sample Preparation: 2006-06-22

Prep Method: S 3510C
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143

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sample 93247 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548

continued...

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sample 93247 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0208	mg/L	1	0.0800	26	10 - 84.7
Phenol-d5		0.0120	mg/L	1	0.0800	15	10 - 54.9
Nitrobenzene-d5		0.0506	mg/L	1	0.0800	63	10 - 202
2-Fluorobiphenyl		0.0575	mg/L	1	0.0800	72	10 - 199
2,4,6-Tribromophenol		0.0635	mg/L	1	0.0800	79	10 - 141
Terphenyl-d14		0.0614	mg/L	1	0.0800	77	10 - 160

Sample: 93247 - HGLRBSB-061706

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	27611	Date Analyzed:	2006-06-26	Analyzed By:	RR
Prep Batch:	24164	Sample Preparation:	2006-06-22	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27647	Date Analyzed:	2006-06-23	Analyzed By:	TP
Prep Batch:	24174	Sample Preparation:	2006-06-22	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium	J	**0.00500**	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000217	<0.000200	<0.0000217	mg/L	1	0.0000217	0.0002	2.17e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 93247 - HGLRBSB-061706

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	27477	Date Analyzed:	2006-06-20	Analyzed By:	JL
Prep Batch:	24097	Sample Preparation:	2006-06-20	Prepared By:	SP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<0.106	<5.00	<0.106	mg/L	0.1	0.106	50	1.06

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.0	mg/L	0.1	150	107	50 - 150

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Sample: 93247 - HGLRBSB-061706

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	27486	Date Analyzed:	2006-06-20	Analyzed By:	KB
Prep Batch:	24102	Sample Preparation:	2006-06-20	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.0272	<0.100	<0.0272	mg/L	1	0.0272	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0963	mg/L	1	0.100	96	80 - 120
4-Bromofluorobenzene (4-BFB)		0.0877	mg/L	1	0.100	88	80 - 120

Sample: 93247 - HGLRBSB-061706

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	27581	Date Analyzed:	2006-06-22	Analyzed By:	JG
Prep Batch:	24185	Sample Preparation:	2006-06-22	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	2.30	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557
Chloroform	J	**0.0600**	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423
Benzene	J	**0.110**	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495

continued . . .

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sample 93247 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	~~0.230~~	<1.00	0.180	µg/L	1	0.0736	1	0.0736	1.0 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	0.220	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	JB	~~0.120~~	<1.00	0.140	µg/L	1	0.0566	1	0.0566	1.0 U
m,p-Xylene	JB	~~0.120~~	<1.00	0.310	µg/L	1	0.0363	1	0.0363	1.0 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	0.130	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	0.200	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	JB	~~0.0700~~	<1.00	0.280	µg/L	1	0.0423	1	0.0423	1.0 U
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.240	µg/L	1	0.0557	1	0.0557	
tert-Butylbenzene	U	<0.0770	<1.00	0.250	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	~~0.0800~~	<1.00	0.220	µg/L	1	0.0336	1	0.0336	1.0 U
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	JB	~~0.0500~~	<1.00	0.280	µg/L	1	0.0439	1	0.0439	1.0 U
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	0.270	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	JB	~~0.0600~~	<1.00	0.270	µg/L	1	0.0513	1	0.0513	1.0 U
4-Chlorotoluene	U	<0.0460	<1.00	0.190	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	0.270	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	JB	~~0.0700~~	<1.00	0.330	µg/L	1	0.0400	1	0.04	1.0 U
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.620	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	1.94	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.0	µg/L	1	50.0	106	70 - 130
Toluene-d8		49.3	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		48.4	µg/L	1	50.0	97	70 - 130

Sample: 93248 - HGLLTB-061706

Analysis: TPH GRO
QC Batch: 27486

Analytical Method: S 8015B
Date Analyzed: 2006-06-20

Prep Method: S 5030B
Analyzed By: KB

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sample 93248 continued...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
Toluene	JB	**0.120**	<1.00	0.180	µg/L	1	0.0736	1	0.0736
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046
Tetrachloroethene (PCE)	U	<0.0696	<1.00	0.220	µg/L	1	0.0696	1	0.0696
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253
Ethylbenzene	JB	**0.0600**	<1.00	0.140	µg/L	1	0.0566	1	0.0566
m,p-Xylene	JB	**0.0500**	<1.00	0.310	µg/L	1	0.0363	1	0.0363
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394
o-Xylene	U	<0.0504	<1.00	0.130	µg/L	1	0.0504	1	0.0504
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
2-Chlorotoluene	U	<0.0283	<1.00	<0.0283	µg/L	1	0.0283	1	0.0283
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679
Isopropylbenzene	U	<0.0406	<1.00	0.200	µg/L	1	0.0406	1	0.0406
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033
n-Propylbenzene	U	<0.0423	<1.00	0.280	µg/L	1	0.0423	1	0.0423
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.240	µg/L	1	0.0557	1	0.0557
tert-Butylbenzene	U	<0.0770	<1.00	0.250	µg/L	1	0.0770	1	0.077
1,2,4-Trimethylbenzene	JB	**0.0400**	<1.00	0.220	µg/L	1	0.0336	1	0.0336
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
sec-Butylbenzene	U	<0.0439	<1.00	0.280	µg/L	1	0.0439	1	0.0439
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	0.270	µg/L	1	0.0672	1	0.0672
p-Isopropyltoluene	U	<0.0513	<1.00	0.270	µg/L	1	0.0513	1	0.0513
4-Chlorotoluene	U	<0.0460	<1.00	0.190	µg/L	1	0.0460	1	0.046
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	0.270	µg/L	1	0.0629	1	0.0629
n-Butylbenzene	U	<0.0400	<1.00	0.330	µg/L	1	0.0400	1	0.04
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663
Naphthalene	U	<0.417	<5.00	0.620	µg/L	1	0.417	5	0.4166
Hexachlorobutadiene	U	<0.176	<5.00	1.94	µg/L	1	0.176	5	0.1758

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.9	µg/L	1	50.0	108	70 - 130
Toluene-d8		49.4	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		48.4	µg/L	1	50.0	97	70 - 130

Method Blank (1)

QC Batch: 27477
Prep Batch: 24097

Date Analyzed: 2006-06-20
QC Preparation: 2006-06-20

Analyzed By: JL
Prepared By: JL

Parameter	Flag	Result	Units	Reporting Limits
DRO		<0.106	mg/L	1.06

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Prep Batch: 24102 Sample Preparation: 2006-06-20 Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.136	<0.500	<0.136	mg/L	5	0.136	0.1	0.0272

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.487	mg/L	5	0.100	97	80 - 120
4-Bromofluorobenzene (4-BFB)		0.441	mg/L	5	0.100	88	80 - 120

Sample: 93248 - HGLLTB-061706

Analysis: Volatiles
QC Batch: 27581
Prep Batch: 24185

Analytical Method: S 8260B
Date Analyzed: 2006-06-22
Sample Preparation: 2006-06-22

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699	
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298	
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902	
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402	
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952	
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16	
Acetone	U	<0.854	<10.0	2.30	µg/L	1	0.854	10	0.8536	
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119	
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764	
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837	
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941	
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484	
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975	
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207	
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	
Methylene chloride	J	**1.09**	<5.00	<0.689	µg/L	1	0.689	5	0.6888	4
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	J	**0.0700**	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	4
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	

continued ...

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Quality by Design

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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Type of Samples: Water
Dates of Sampling: July 11-12, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. D6G180345
Purchase Order No. P0000715
QBD Job No. 1296X

Reviewed and approved,

T Thomas Davis 1/17/07

Thomas S. Davis, Principal Date

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A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package of a 70-page laboratory report from Severn Trent Laboratory in Denver, Colorado, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

All results were acceptable, although some received qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 8321A
95019 (HGLMW29-07)	D6G180345-001	Water	X
95020 (HGLMW29-02)	D6G180345-002	Water	X
95021 (HGLMW29-05)	D6G180345-003	Water	X
95022 (HGLMW29-01)	D6G180345-004	Water	X
95023 (HGLMW29-06)	D6G180345-005	Water	X
95024 (HGLMW29-08)	D6G180345-006	Water	X
95025 (HGLGWDUP-09)	D6G180345-007	Water	X
95026 (HGLMW29-04)	D6G180345-008	Water	X
95027 (HGLMW29-03)	D6G180345-009	Water	X
95029 (HGLMW39-07)	D6G180345-010	Water	X

Key:

Method 8321A = Perchlorate by LCMS

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
8321A	D6G180345	Debbie Copsey	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The date and time relinquished and the date and time received by the laboratory do not match on the COC form and the shipping waybill was not referenced. However, the laboratory noted that custody seals were present and unbroken, indicating that appropriate physical custody was maintained, so no data qualifier flags are recommended.

E. Review of Perchlorate Analyses by LC/MS

EPA Method 8321A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value as listed in Table 3.

Table 3. Perchlorate Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
95020 (HGLMW29-02)	Perchlorate	Value < RL	Value=1.9	RL=2.0	1.9	J
95021 (HGLMW29-05)	Perchlorate	Value < RL	Value=0.29	RL=2.0	0.29	J
95023 (HGLMW29-06)	Perchlorate	Value < RL	Value=1.1	RL=2.0	1.1	J
95024 (HGLMW29-08)	Perchlorate	Value < RL	Value=1.1	RL=2.0	1.1	J
95025 (HGLGWDUP-09)	Perchlorate	Value < RL	Value=1.3	RL=2.0	1.3	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample 95025 (HGLGWDUP-09) is a duplicate of Sample 95024 (HGLMW29-08). Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 4, were reported as non-detect.

Table 4. Perchlorate Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	95024 (HGLMW29-08)	95025 (HGLGWDUP-09)	
Perchlorate	1.1	1.3	16.7

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Type of Samples: Water
Dates of Sampling: July 11-12, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
95020 (HGLMW29-02)	Perchlorate	Value < RL	Value=1.9	RL=2.0	1.9	J
95021 (HGLMW29-05)	Perchlorate	Value < RL	Value=0.29	RL=2.0	0.29	J
95023 (HGLMW29-06)	Perchlorate	Value < RL	Value=1.1	RL=2.0	1.1	J
95024 (HGLMW29-08)	Perchlorate	Value < RL	Value=1.1	RL=2.0	1.1	J
95025 (HGLGWDUP-09)	Perchlorate	Value < RL	Value=1.3	RL=2.0	1.3	J

Attachment 3 Reviewed/Revised Laboratory Forms

Trace Analysis Inc

Client Sample ID: 95019

HPLC

Lot-Sample #...: D6G180345-001	Work Order #...: H9HG11AA	Matrix.....: WATER	
Date Sampled...: 07/11/06	Date Received..: 07/18/06		
Prep Date.....: 07/24/06	Analysis Date..: 07/25/06		
Prep Batch #...: 6205322	Analysis Time..: 13:52		
Dilution Factor: 10			
	Method.....: SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	2.1	2.0	ug/L	0.27

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January 17, 2007

Trace Analysis Inc

Client Sample ID: 95020

HPLC

Lot-Sample #...:	D6G180345-002	**Work Order #...:**	H9HG21AA	**Matrix.....:**	WATER
Date Sampled...:	07/11/06	**Date Received..:**	07/18/06		
Prep Date.....:	07/24/06	**Analysis Date..:**	07/25/06		
Prep Batch #...:	6205322	**Analysis Time..:**	14:55		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**1.9 J**	**2.0**	**ug/L**	**0.27**

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95021

HPLC

Lot-Sample #...:	D6G180345-003	Work Order #...:	H9HG5iAA	Matrix.....:	WATER
Date Sampled...:	07/11/06	Date Received..:	07/18/06		
Prep Date.....:	07/24/06	Analysis Date..:	07/25/06		
Prep Batch #...:	6205322	Analysis Time..:	15:11		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Perchlorate	0.29 J	2.0	ug/L	0.27	J

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

FO

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95022

HPLC

Lot-Sample #...:	D6G180345-004	**Work Order #...:**	H9HG61AA	**Matrix.....:**	WATER
Date Sampled...:	07/11/06	**Date Received..:**	07/18/06		
Prep Date.....:	07/24/06	**Analysis Date..:**	07/25/06		
Prep Batch #...:	6205322	**Analysis Time..:**	15:43		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**4.9**	**2.0**	**ug/L**	**0.27**

VALIDATED Level 3

FO

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95023

HPLC

Lot-Sample #...:	D6G180345-005	Work Order #...:	H9HG81AA	Matrix.....:	WATER
Date Sampled...:	07/11/06	Date Received..:	07/18/06		
Prep Date.....:	07/24/06	Analysis Date..:	07/25/06		
Prep Batch #...:	6205322	Analysis Time..:	15:59		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Perchlorate	1.1 J	2.0	ug/L	0.27	J

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

FD

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95024

HPLC

Lot-Sample #...: D6G180345-006	**Work Order #...:** H9HHA1AA	**Matrix.....:** WATER
Date Sampled...: 07/11/06	**Date Received..:** 07/18/06	
Prep Date.....: 07/24/06	**Analysis Date..:** 07/25/06	
Prep Batch #...: 6205322	**Analysis Time..:** 16:15	
Dilution Factor: 10		
	Method.....: SW846 8321A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Perchlorate	**1.1 J**	**2.0**	**ug/L**	**0.27**	J

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

FO

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95025

HPLC

Lot-Sample #...:	D6G180345-007	Work Order #...:	H9HHD1AA	Matrix.....:	WATER
Date Sampled...:	07/11/06	Date Received..:	07/18/06		
Prep Date.....:	07/24/06	Analysis Date..:	07/25/06		
Prep Batch #...:	6205322	Analysis Time..:	16:31		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Perchlorate	1.3 J	2.0	ug/L	0.27	J

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

FD

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95026

HPLC

Lot-Sample #...:	D6G180345-008	**Work Order #...:**	H9HHE1AA	**Matrix.....:**	WATER
Date Sampled...:	07/11/06	**Date Received..:**	07/18/06		
Prep Date.....:	07/24/06	**Analysis Date..:**	07/25/06		
Prep Batch #...:	6205322	**Analysis Time..:**	16:47		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	2.0	ug/L	0.27

VALIDATED Level 3

FO

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95027

HPLC

Lot-Sample #...:	D6G180345-009	**Work Order #...:**	H9HHG1AA	**Matrix.....:**	WATER
Date Sampled...:	07/11/06	**Date Received..:**	07/18/06		
Prep Date.....:	07/24/06	**Analysis Date..:**	07/25/06		
Prep Batch #...:	6205322	**Analysis Time..:**	17:04		
Dilution Factor:	10				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	2.0	ug/L	0.27

VALIDATED Level 3

FO

Quality by Design
January 17, 2007

Trace Analysis Inc

Client Sample ID: 95029

HPLC

Lot-Sample #...:	D6G180345-010	**Work Order #...:**	H9HHJ1AA	**Matrix.....:**	WATER
Date Sampled...:	07/12/06	**Date Received..:**	07/18/06		
Prep Date.....:	07/24/06	**Analysis Date..:**	07/26/06		
Prep Batch #...:	6205322	**Analysis Time..:**	10:48		
Dilution Factor:	20				
		Method.....:	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**100**	**4.0**	**ug/L**	**0.54**

VALIDATED Level 3

FD

Quality by Design
January 17, 2007

Quality by Design

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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils
Dates of Sampling: May 17-20, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. D6E240388
Purchase Order No. P0000715
QBD Job No. 1296O

Reviewed and approved,

Thomas S. Davis, Principal — 12/19/06 Date

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A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package in PDF format of a 2,221-page laboratory report that was subcontracted from Trace Analysis, Inc. to Severn Trent Laboratories in Denver, Colorado, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

No results were flagged as unusable due to QC failures but samples with multiple results were flagged "X" to indicate that more technically valid results were available. All other results were acceptable, although some received less severe qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Sample Matrix	Method 8141A	Method 1311/8151A	Method 8151A	Hydrazine
91000 (HGLSB33-07-0203)	D6E240388-001	Soil		X		
91001 (HGLSB33-07-0405)	D6E240388-002	Soil	X		X	
91002 (HGLSB33-08-0405)	D6E240388-003	Soil		X		
91003 (HGLSB33-08-1012)	D6E240388-004	Soil	X		X	
91004 (HGLSB33-10-0405)	D6E240388-005	Soil		X		
91005 (HGLSB33-11-0607)	D6E240388-006	Soil	X		X	
91006 (HGLSBDup-04)	D6E240388-007	Soil	X		X	
91007 (HGLSBDup-05)	D6E240388-008	Soil		X		
91009 (HGLRB06-051806-AL)	D6E240388-009	Soil	X		X	
91011 (HGLHA3901R-0204)	D6E240388-010	Water				X
91012 (HGLHA3901R-0708)	D6E240388-011	Soil				X
91013 (HGLHA3902R-0204)	D6E240388-012	Soil				X
91014(HGLHA3902R-0809)	D6E240388-013	Soil				X
91015 (HGLSB3902R-0204)	D6E240388-014	Soil				X
91016 (HGLSB3902R-0910)	D6E240388-015	Soil				X
91017 (HGLSBDup06)	D6E240388-016	Soil				X
91018 (HGLSB3901R-02-04)	D6E240388-017	Soil				X
91019 (HGLSB3901R-0810)	D6E240388-018	Soil				X
91020 (HGLSB3917-0204)	D6E240388-019	Soil				X
91036 (HGLSB3011-0309)	D6E240388-020	Soil		X		
91039 (HGLSB3016-0910)	D6E240388-021	Soil	X		X	
91040 (HGLSB3013-0507)	D6E240388-022	Soil		X		
91041 (HGLSB3013-1012)	D6E240388-023	Soil	X		X	
91042 (HGLSB3012-0306)	D6E240388-024	Soil		X		
91043 (HGLSB3012-0709)	D6E240388-025	Soil	X		X	
91044 (HGLSB30-01-0809)	D6E240388-026	Soil	X		X	
91045 (HGLSB30-02-0305)	D6E240388-027	Soil	X		X	
91046 (HGLSB30-08-0809)	D6E240388-028	Soil	X		X	
91047 (HGLSB30-03-0203)	D6E240388-029	Soil	X		X	
91048 (HGLSB30-04-0204)	D6E240388-030	Soil	X		X	
91049 (HGLSB30-05-0709)	D6E240388-031	Soil	X		X	

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Sample Matrix	Method 8141A	Method 1311/8151A	Method 8151A	Hydrazine
91050 (HGLSB30-06-0809)	D6E240388-032	Soil	X		X	
91051 (HGLSB30-07-0304)	D6E240388-033	Soil	X		X	
91052 (HGLSD39-01-0001)	D6E240388-034	Soil				X
91053 (HGLSB30-20-0708)	D6E240388-035	Soil		X		
91054 (HGLSB3020-0809)	D6E240388-036	Soil	X		X	
91055 (HGLSB3017-0607)	D6E240388-037	Soil		X		
91056 (HGLSB3017-0809)	D6E240388-038	Soil	X		X	
91057 (HGLSBDup-07)	D6E240388-039	Soil	X		X	
91058 (HGLSB3018-0506)	D6E240388-040	Soil		X		
91059 (HGLSB3018-0709)	D6E240388-041	Soil	X		X	
91062 (HGLRB07-052006-AL)	D6E240388-042	Water		X		
91021 (HGLSB3917-0910)	D6E240388-043	Soil				X

Key:

Method 8141A	=	Organophosphate Pesticides by Gas Chromatography
Method 1311/8151A	=	TCLP Herbicides by Gas Chromatography
Method 8151A	=	Herbicides by Gas Chromatography
Hydrazine	=	Hydrazine by Ion Chromatography, (STL In-House SOP)

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
8141A	D6E240388	D. Copsey	T. Davis
1311/8151A	D6E240388	D. Copsey	T. Davis
8151A	D6E240388	D. Copsey	T. Davis
Hydrazine	D6E240388	D. Copsey	T. Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The dates and times relinquished and the dates and times received by the laboratory do not match on the COC form. This is most likely due to the transfer to and from the shipping courier not being recorded. However, the shipping waybill was not documented and the shipment could not be traced by the reviewer.

In the laboratory's case narrative regarding receipt of the samples, there is an incomplete sentence: "The client was informed that Samples 91023, 91024, and 91025".

In the laboratory's case narrative regarding receipt of the samples, it stated that the samples were received under chain-of-custody and with custody seals. On the Sample Receipt Checklist, it stated that cooler seals were not intact and that chain-of-custody does not agree with the samples and labels. In both cases, the corrective action was to be documented on a CUR (Condition Upon Receipt Anomaly Report), but a CUR was not included in the data package.

QBD contacted the laboratory by fax on November 9, 2006 regarding these issues, and the laboratory e-mailed three PDF files in response. One file was a copy of the shipping waybills, which completed the chain-of-custody trail, one file was a copy of the completed CUR, and one file was a revision of the laboratory's case narrative. These three files completes the missing information and no data qualifier flags are recommended. Copies of all written correspondence have been attached to this report.

E. Review of Organophosphate Pesticide Analyses by GC

EPA Method 8141A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable, except as noted below.

Discussion: The samples in Preparation Batches 6149033 and 6151496 were re-extracted because the LCS results were out of criteria. The re-extracted samples in Preparation Batch 6157599 exceeded the holding time of 14 days by three to five days. Due to these exceedences, the associated positive results have been flagged "J" to indicate an estimated value and the non-detect values have been flagged "UJ" to indicate an estimated reporting limit, as summarized in Table 3.

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91003 (HGLSB33-08-1012) RE	Azinphos-methyl	Holding time	HT=19 dy	HT=14 dy	3.5	UJ
91003 (HGLSB33-08-1012) RE	Bolstar	Holding time	HT=19 dy	HT=14 dy	4.2	UJ
91003 (HGLSB33-08-1012) RE	Chlorpyrifos	Holding time	HT=19 dy	HT=14 dy	6.5	UJ
91003 (HGLSB33-08-1012) RE	Coumaphos	Holding time	HT=19 dy	HT=14 dy	2.8	UJ
91003 (HGLSB33-08-1012) RE	Demeton (total)	Holding time	HT=19 dy	HT=14 dy	7.5	UJ
91003 (HGLSB33-08-1012) RE	Demeton-O	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91003 (HGLSB33-08-1012) RE	Demeton-S	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91003 (HGLSB33-08-1012) RE	Diazinon	Holding time	HT=19 dy	HT=14 dy	7.3	UJ
91003 (HGLSB33-08-1012) RE	Dichlorvos	Holding time	HT=19 dy	HT=14 dy	7.4	UJ
91003 (HGLSB33-08-1012) RE	Dimethoate	Holding time	HT=19 dy	HT=14 dy	11	J
91003 (HGLSB33-08-1012) RE	Disulfoton	Holding time	HT=19 dy	HT=14 dy	7.7	UJ
91003 (HGLSB33-08-1012) RE	EPN	Holding time	HT=19 dy	HT=14 dy	3.7	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91003 (HGLSB33-08-1012) RE	Ethoprop	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91003 (HGLSB33-08-1012) RE	Ethyl parathion	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91003 (HGLSB33-08-1012) RE	Famphur	Holding time	HT=19 dy	HT=14 dy	3.2	UJ
91003 (HGLSB33-08-1012) RE	Fensulfothion	Holding time	HT=19 dy	HT=14 dy	2.9	UJ
91003 (HGLSB33-08-1012) RE	Fenthion	Holding time	HT=19 dy	HT=14 dy	11	UJ
91003 (HGLSB33-08-1012) RE	Malathion	Holding time	HT=19 dy	HT=14 dy	4.6	UJ
91003 (HGLSB33-08-1012) RE	Merphos	Holding time	HT=19 dy	HT=14 dy	9.4	UJ
91003 (HGLSB33-08-1012) RE	Methyl parathion	Holding time	HT=19 dy	HT=14 dy	6.4	UJ
91003 (HGLSB33-08-1012) RE	Mevinphos	Holding time	HT=19 dy	HT=14 dy	4.6	UJ
91003 (HGLSB33-08-1012) RE	Naled	Holding time	HT=19 dy	HT=14 dy	6	UJ
91003 (HGLSB33-08-1012) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=19 dy	HT=14 dy	7.8	UJ
91003 (HGLSB33-08-1012) RE	Phorate	Holding time	HT=19 dy	HT=14 dy	5.7	UJ
91003 (HGLSB33-08-1012) RE	Ronnel	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91003 (HGLSB33-08-1012) RE	Sulfotepp	Holding time	HT=19 dy	HT=14 dy	6.3	UJ
91003 (HGLSB33-08-1012) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=19 dy	HT=14 dy	4.4	UJ
91003 (HGLSB33-08-1012) RE	Thionazin	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91003 (HGLSB33-08-1012) RE	Tokuthion	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91003 (HGLSB33-08-1012) RE	Trichloronate	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91005 (HGLSB33-11-0607) RE	Azinphos-methyl	Holding time	HT=19 dy	HT=14 dy	3.5	UJ
91005 (HGLSB33-11-0607) RE	Bolstar	Holding time	HT=19 dy	HT=14 dy	4.2	UJ
91005 (HGLSB33-11-0607) RE	Chlorpyrifos	Holding time	HT=19 dy	HT=14 dy	6.5	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91005 (HGLSB33-11-0607) RE	Coumaphos	Holding time	HT=19 dy	HT=14 dy	2.8	UJ
91005 (HGLSB33-11-0607) RE	Demeton (total)	Holding time	HT=19 dy	HT=14 dy	7.5	UJ
91005 (HGLSB33-11-0607) RE	Demeton-O	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91005 (HGLSB33-11-0607) RE	Demeton-S	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91005 (HGLSB33-11-0607) RE	Diazinon	Holding time	HT=19 dy	HT=14 dy	7.3	UJ
91005 (HGLSB33-11-0607) RE	Dichlorvos	Holding time	HT=19 dy	HT=14 dy	7.4	UJ
91005 (HGLSB33-11-0607) RE	Dimethoate	Holding time	HT=19 dy	HT=14 dy	22	UJ
91005 (HGLSB33-11-0607) RE	Disulfoton	Holding time	HT=19 dy	HT=14 dy	7.7	UJ
91005 (HGLSB33-11-0607) RE	EPN	Holding time	HT=19 dy	HT=14 dy	3.7	UJ
91005 (HGLSB33-11-0607) RE	Ethoprop	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91005 (HGLSB33-11-0607) RE	Ethyl parathion	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91005 (HGLSB33-11-0607) RE	Famphur	Holding time	HT=19 dy	HT=14 dy	3.2	UJ
91005 (HGLSB33-11-0607) RE	Fensulfothion	Holding time	HT=19 dy	HT=14 dy	2.9	UJ
91005 (HGLSB33-11-0607) RE	Fenthion	Holding time	HT=19 dy	HT=14 dy	11	UJ
91005 (HGLSB33-11-0607) RE	Malathion	Holding time	HT=19 dy	HT=14 dy	4.6	UJ
91005 (HGLSB33-11-0607) RE	Merphos	Holding time	HT=19 dy	HT=14 dy	9.4	UJ
91005 (HGLSB33-11-0607) RE	Methyl parathion	Holding time	HT=19 dy	HT=14 dy	6.4	UJ
91005 (HGLSB33-11-0607) RE	Mevinphos	Holding time	HT=19 dy	HT=14 dy	4.6	UJ
91005 (HGLSB33-11-0607) RE	Naled	Holding time	HT=19 dy	HT=14 dy	6	UJ
91005 (HGLSB33-11-0607) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=19 dy	HT=14 dy	7.8	UJ
91005 (HGLSB33-11-0607) RE	Phorate	Holding time	HT=19 dy	HT=14 dy	5.7	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91005 (HGLSB33-11-0607) RE	Ronnel	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91005 (HGLSB33-11-0607) RE	Sulfotepp	Holding time	HT=19 dy	HT=14 dy	6.3	UJ
91005 (HGLSB33-11-0607) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=19 dy	HT=14 dy	4.4	UJ
91005 (HGLSB33-11-0607) RE	Thionazin	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91005 (HGLSB33-11-0607) RE	Tokuthion	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91005 (HGLSB33-11-0607) RE	Trichloronate	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91039 (HGLSB3016-0910) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91039 (HGLSB3016-0910) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91039 (HGLSB3016-0910) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91039 (HGLSB3016-0910) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91039 (HGLSB3016-0910) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91039 (HGLSB3016-0910) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91039 (HGLSB3016-0910) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91039 (HGLSB3016-0910) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91039 (HGLSB3016-0910) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91039 (HGLSB3016-0910) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91039 (HGLSB3016-0910) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91039 (HGLSB3016-0910) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ
91039 (HGLSB3016-0910) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91039 (HGLSB3016-0910) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91039 (HGLSB3016-0910) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91039 (HGLSB3016-0910) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91039 (HGLSB3016-0910) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91039 (HGLSB3016-0910) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91039 (HGLSB3016-0910) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91039 (HGLSB3016-0910) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91039 (HGLSB3016-0910) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91039 (HGLSB3016-0910) RE	Naled	Holding time	HT=17 dy	HT=14 dy	6	UJ
91039 (HGLSB3016-0910) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91039 (HGLSB3016-0910) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91039 (HGLSB3016-0910) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91039 (HGLSB3016-0910) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91039 (HGLSB3016-0910) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91039 (HGLSB3016-0910) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91039 (HGLSB3016-0910) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91039 (HGLSB3016-0910) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91041 (HGLSB3013-1012) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91041 (HGLSB3013-1012) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91041 (HGLSB3013-1012) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91041 (HGLSB3013-1012) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91041 (HGLSB3013-1012) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91041 (HGLSB3013-1012) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91041 (HGLSB3013-1012) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91041 (HGLSB3013-1012) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91041 (HGLSB3013-1012) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91041 (HGLSB3013-1012) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91041 (HGLSB3013-1012) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91041 (HGLSB3013-1012) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ
91041 (HGLSB3013-1012) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91041 (HGLSB3013-1012) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91041 (HGLSB3013-1012) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91041 (HGLSB3013-1012) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91041 (HGLSB3013-1012) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91041 (HGLSB3013-1012) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91041 (HGLSB3013-1012) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91041 (HGLSB3013-1012) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91041 (HGLSB3013-1012) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91041 (HGLSB3013-1012) RE	Naled	Holding time	HT=17 dy	HT=14 dy	25	J
91041 (HGLSB3013-1012) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91041 (HGLSB3013-1012) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91041 (HGLSB3013-1012) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91041 (HGLSB3013-1012) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91041 (HGLSB3013-1012) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91041 (HGLSB3013-1012) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91041 (HGLSB3013-1012) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91041 (HGLSB3013-1012) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91045 (HGLSB30-02-0305) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91045 (HGLSB30-02-0305) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91045 (HGLSB30-02-0305) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91045 (HGLSB30-02-0305) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91045 (HGLSB30-02-0305) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91045 (HGLSB30-02-0305) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91045 (HGLSB30-02-0305) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91045 (HGLSB30-02-0305) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91045 (HGLSB30-02-0305) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91045 (HGLSB30-02-0305) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91045 (HGLSB30-02-0305) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91045 (HGLSB30-02-0305) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ
91045 (HGLSB30-02-0305) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91045 (HGLSB30-02-0305) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91045 (HGLSB30-02-0305) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91045 (HGLSB30-02-0305) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91045 (HGLSB30-02-0305) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91045 (HGLSB30-02-0305) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91045 (HGLSB30-02-0305) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91045 (HGLSB30-02-0305) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91045 (HGLSB30-02-0305) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91045 (HGLSB30-02-0305) RE	Naled	Holding time	HT=17 dy	HT=14 dy	6	UJ
91045 (HGLSB30-02-0305) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91045 (HGLSB30-02-0305) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91045 (HGLSB30-02-0305) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91045 (HGLSB30-02-0305) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91045 (HGLSB30-02-0305) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91045 (HGLSB30-02-0305) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91045 (HGLSB30-02-0305) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91045 (HGLSB30-02-0305) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91046 (HGLSB30-08-0809) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91046 (HGLSB30-08-0809) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91046 (HGLSB30-08-0809) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91046 (HGLSB30-08-0809) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91046 (HGLSB30-08-0809) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91046 (HGLSB30-08-0809) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91046 (HGLSB30-08-0809) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91046 (HGLSB30-08-0809) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91046 (HGLSB30-08-0809) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91046 (HGLSB30-08-0809) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91046 (HGLSB30-08-0809) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91046 (HGLSB30-08-0809) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ
91046 (HGLSB30-08-0809) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91046 (HGLSB30-08-0809) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91046 (HGLSB30-08-0809) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91046 (HGLSB30-08-0809) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91046 (HGLSB30-08-0809) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91046 (HGLSB30-08-0809) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91046 (HGLSB30-08-0809) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91046 (HGLSB30-08-0809) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91046 (HGLSB30-08-0809) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91046 (HGLSB30-08-0809) RE	Naled	Holding time	HT=17 dy	HT=14 dy	6	UJ
91046 (HGLSB30-08-0809) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91046 (HGLSB30-08-0809) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91046 (HGLSB30-08-0809) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91046 (HGLSB30-08-0809) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91046 (HGLSB30-08-0809) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91046 (HGLSB30-08-0809) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91046 (HGLSB30-08-0809) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91046 (HGLSB30-08-0809) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91047 (HGLSB30-03-0203) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91047 (HGLSB30-03-0203) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91047 (HGLSB30-03-0203) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91047 (HGLSB30-03-0203) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91047 (HGLSB30-03-0203) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91047 (HGLSB30-03-0203) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91047 (HGLSB30-03-0203) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91047 (HGLSB30-03-0203) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91047 (HGLSB30-03-0203) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91047 (HGLSB30-03-0203) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91047 (HGLSB30-03-0203) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91047 (HGLSB30-03-0203) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ
91047 (HGLSB30-03-0203) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91047 (HGLSB30-03-0203) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91047 (HGLSB30-03-0203) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91047 (HGLSB30-03-0203) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91047 (HGLSB30-03-0203) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91047 (HGLSB30-03-0203) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91047 (HGLSB30-03-0203) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91047 (HGLSB30-03-0203) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91047 (HGLSB30-03-0203) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91047 (HGLSB30-03-0203) RE	Naled	Holding time	HT=17 dy	HT=14 dy	6	UJ
91047 (HGLSB30-03-0203) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91047 (HGLSB30-03-0203) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91047 (HGLSB30-03-0203) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91047 (HGLSB30-03-0203) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91047 (HGLSB30-03-0203) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91047 (HGLSB30-03-0203) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91047 (HGLSB30-03-0203) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91047 (HGLSB30-03-0203) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91050 (HGLSB30-06-0809) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91050 (HGLSB30-06-0809) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91050 (HGLSB30-06-0809) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91050 (HGLSB30-06-0809) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91050 (HGLSB30-06-0809) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91050 (HGLSB30-06-0809) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91050 (HGLSB30-06-0809) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91050 (HGLSB30-06-0809) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91050 (HGLSB30-06-0809) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91050 (HGLSB30-06-0809) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91050 (HGLSB30-06-0809) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91050 (HGLSB30-06-0809) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91050 (HGLSB30-06-0809) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91050 (HGLSB30-06-0809) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91050 (HGLSB30-06-0809) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91050 (HGLSB30-06-0809) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91050 (HGLSB30-06-0809) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91050 (HGLSB30-06-0809) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91050 (HGLSB30-06-0809) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91050 (HGLSB30-06-0809) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91050 (HGLSB30-06-0809) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91050 (HGLSB30-06-0809) RE	Naled	Holding time	HT=17 dy	HT=14 dy	6	UJ
91050 (HGLSB30-06-0809) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91050 (HGLSB30-06-0809) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91050 (HGLSB30-06-0809) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91050 (HGLSB30-06-0809) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91050 (HGLSB30-06-0809) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91050 (HGLSB30-06-0809) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91050 (HGLSB30-06-0809) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91050 (HGLSB30-06-0809) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91054 (HGLSB3020-0809) RE	Azinphos-methyl	Holding time	HT=17 dy	HT=14 dy	3.5	UJ
91054 (HGLSB3020-0809) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91054 (HGLSB3020-0809) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91054 (HGLSB3020-0809) RE	Coumaphos	Holding time	HT=17 dy	HT=14 dy	2.8	UJ
91054 (HGLSB3020-0809) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91054 (HGLSB3020-0809) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91054 (HGLSB3020-0809) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91054 (HGLSB3020-0809) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91054 (HGLSB3020-0809) RE	Dichlorvos	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91054 (HGLSB3020-0809) RE	Dimethoate	Holding time	HT=17 dy	HT=14 dy	7.4	UJ
91054 (HGLSB3020-0809) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91054 (HGLSB3020-0809) RE	EPN	Holding time	HT=17 dy	HT=14 dy	3.7	UJ
91054 (HGLSB3020-0809) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91054 (HGLSB3020-0809) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91054 (HGLSB3020-0809) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91054 (HGLSB3020-0809) RE	Fensulfothion	Holding time	HT=17 dy	HT=14 dy	2.9	UJ
91054 (HGLSB3020-0809) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91054 (HGLSB3020-0809) RE	Malathion	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91054 (HGLSB3020-0809) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91054 (HGLSB3020-0809) RE	Methyl parathion	Holding time	HT=17 dy	HT=14 dy	6.4	UJ
91054 (HGLSB3020-0809) RE	Mevinphos	Holding time	HT=17 dy	HT=14 dy	4.6	UJ
91054 (HGLSB3020-0809) RE	Naled	Holding time	HT=17 dy	HT=14 dy	6	UJ
91054 (HGLSB3020-0809) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91054 (HGLSB3020-0809) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91054 (HGLSB3020-0809) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91054 (HGLSB3020-0809) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91054 (HGLSB3020-0809) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91054 (HGLSB3020-0809) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91054 (HGLSB3020-0809) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91054 (HGLSB3020-0809) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable, except as noted below.

Discussion: The laboratory's case narrative stated that for the continuing calibration associated with Preparation Batch 6157599, the laboratory stated that the "overall mean %D is slightly outside of control limits at 15.7% as a result of matrix interference from the samples". This statement is nonsensical because the continuing calibration standards were not samples and should be matrix-free. If there was carry-over from the samples, then the proper corrective action should have been to re-analyze the continuing calibration standards and affected samples. Alternatively, since the overall mean %D was out of criteria, the proper corrective action should have been to re-analyze the entire batch. Since this data review is a Level 3, the chromatograms were not reviewed and it could not be determined if the proper corrective action was taken.

The case narrative also stated that the continuing calibrations associated with the samples in Preparation Batches 6149033 and 6151496 had several analytes with percent differences greater than the acceptance criteria of less than 15 percent. However, these samples were re-extracted and the results for the samples in these batches have been flagged "X" elsewhere in this report, and no additional data qualifiers are recommended.

The continuing calibration associated with the samples that were analyzed in Preparation Batch 6145529 for azinphos-methyl and demeton-s had percent

differences greater than the acceptance criteria of less than 15 percent at 22.0 and 16.8 percent, respectively. Since the exceedences indicated a low bias, the associated results, which were not detected, have been flagged "UJ" to indicate an estimated reporting limit as listed in Table 4.

The continuing calibration associated with the samples that were analyzed in Preparation Batch 6157599 had percent differences greater than the acceptance criteria of less than 15 percent for 11 analytes. Since the exceedences indicated a low bias, the associated results, which were not detected, have been flagged "UJ" to indicate an estimated reporting limit as listed in Table 4.

Table 4. OP Pesticide Data Qualifiers Due to Calibration Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91009 (HGLRB06-051806-AL)	Azinphos-methyl	Continuing calibration	%D=22.0	%D<15	0.45	UJ
91009 (HGLRB06-051806-AL)	Demeton-S	Continuing calibration	%D=16.8	%D<15	0.15	UJ
91003 (HGLSB33-08-1012) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91003 (HGLSB33-08-1012) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91003 (HGLSB33-08-1012) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91003 (HGLSB33-08-1012) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	11	J
91003 (HGLSB33-08-1012) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91003 (HGLSB33-08-1012) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91003 (HGLSB33-08-1012) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91003 (HGLSB33-08-1012) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91003 (HGLSB33-08-1012) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91003 (HGLSB33-08-1012) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91003 (HGLSB33-08-1012) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91005 (HGLSB33-11-0607) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91005 (HGLSB33-11-0607) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ

Table 4. OP Pesticide Data Qualifiers Due to Calibration Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91005 (HGLSB33-11-0607) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91005 (HGLSB33-11-0607) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	22	UJ
91005 (HGLSB33-11-0607) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91005 (HGLSB33-11-0607) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91005 (HGLSB33-11-0607) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91005 (HGLSB33-11-0607) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91005 (HGLSB33-11-0607) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91005 (HGLSB33-11-0607) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91005 (HGLSB33-11-0607) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91039 (HGLSB3016-0910) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91039 (HGLSB3016-0910) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91039 (HGLSB3016-0910) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91039 (HGLSB3016-0910) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91039 (HGLSB3016-0910) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91039 (HGLSB3016-0910) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91039 (HGLSB3016-0910) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91039 (HGLSB3016-0910) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91039 (HGLSB3016-0910) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ

Table 4. OP Pesticide Data Qualifiers Due to Calibration Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91039 (HGLSB3016-0910) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91039 (HGLSB3016-0910) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91041 (HGLSB3013-1012) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91041 (HGLSB3013-1012) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91041 (HGLSB3013-1012) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91041 (HGLSB3013-1012) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91041 (HGLSB3013-1012) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91041 (HGLSB3013-1012) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91041 (HGLSB3013-1012) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91041 (HGLSB3013-1012) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91041 (HGLSB3013-1012) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91041 (HGLSB3013-1012) RE	Naled	Continuing calibration	%D=32.1	%D<15	25	J
91041 (HGLSB3013-1012) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91045 (HGLSB30-02-0305) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91045 (HGLSB30-02-0305) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91045 (HGLSB30-02-0305) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ

Table 4. OP Pesticide Data Qualifiers Due to Calibration Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91045 (HGLSB30-02-0305) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91045 (HGLSB30-02-0305) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91045 (HGLSB30-02-0305) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91045 (HGLSB30-02-0305) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91045 (HGLSB30-02-0305) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91045 (HGLSB30-02-0305) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91045 (HGLSB30-02-0305) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91045 (HGLSB30-02-0305) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91046 (HGLSB30-08-0809) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91046 (HGLSB30-08-0809) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91046 (HGLSB30-08-0809) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91046 (HGLSB30-08-0809) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91046 (HGLSB30-08-0809) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91046 (HGLSB30-08-0809) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91046 (HGLSB30-08-0809) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91046 (HGLSB30-08-0809) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91046 (HGLSB30-08-0809) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91046 (HGLSB30-08-0809) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91046 (HGLSB30-08-0809) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91047 (HGLSB30-03-0203) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91047 (HGLSB30-03-0203) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ

Table 4. OP Pesticide Data Qualifiers Due to Calibration Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91047 (HGLSB30-03-0203) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91047 (HGLSB30-03-0203) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91047 (HGLSB30-03-0203) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91047 (HGLSB30-03-0203) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91047 (HGLSB30-03-0203) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91047 (HGLSB30-03-0203) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91047 (HGLSB30-03-0203) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91047 (HGLSB30-03-0203) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91047 (HGLSB30-03-0203) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91050 (HGLSB30-06-0809) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ
91050 (HGLSB30-06-0809) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91050 (HGLSB30-06-0809) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91050 (HGLSB30-06-0809) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91050 (HGLSB30-06-0809) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91050 (HGLSB30-06-0809) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91050 (HGLSB30-06-0809) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91050 (HGLSB30-06-0809) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91050 (HGLSB30-06-0809) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91050 (HGLSB30-06-0809) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91050 (HGLSB30-06-0809) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91054 (HGLSB3020-0809) RE	Azinphos-methyl	Continuing calibration	%D=40.5	%D<15	3.5	UJ

Table 4. OP Pesticide Data Qualifiers Due to Calibration Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91054 (HGLSB3020-0809) RE	Coumaphos	Continuing calibration	%D=42.7	%D<15	2.8	UJ
91054 (HGLSB3020-0809) RE	Dichlorvos	Continuing calibration	%D=17.2	%D<15	7.4	UJ
91054 (HGLSB3020-0809) RE	Dimethoate	Continuing calibration	%D=42.1	%D<15	7.4	J
91054 (HGLSB3020-0809) RE	EPN	Continuing calibration	%D=29.2	%D<15	3.7	UJ
91054 (HGLSB3020-0809) RE	Fensulfothion	Continuing calibration	%D=20.7	%D<15	2.9	UJ
91054 (HGLSB3020-0809) RE	Malathion	Continuing calibration	%D=28.6	%D<15	4.6	UJ
91054 (HGLSB3020-0809) RE	Methyl parathion	Continuing calibration	%D=17.1	%D<15	6.4	UJ
91054 (HGLSB3020-0809) RE	Mevinphos	Continuing calibration	%D=21.3	%D<15	4.6	UJ
91054 (HGLSB3020-0809) RE	Naled	Continuing calibration	%D=32.1	%D<15	6	UJ
91054 (HGLSB3020-0809) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: The surrogate percent recovery for triphenyl phosphate was out of the criteria of 50 to 150 percent at 47 percent in Sample 91051 (HGLSB30-07-0304). Although the recovery indicated a low bias, the referenced method only requires the successful analysis of a single surrogate, and the other surrogate was acceptable, so no data qualifier flags are recommended.

Both surrogates were out of criteria in Sample 91057 (HGLSBDup-07). Since the recoveries indicate a low bias, the associated results, all of which were not detected, have been flagged "UJ" to indicate an estimated reporting limit, as listed in Table 5.

Table 5. OP Pesticide Data Qualifiers Due to Surrogate Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91057 (HGLSBDup-07)	Azinphos-methyl	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Bolstar	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Chlorpyrifos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Coumaphos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Demeton (total)	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	39	UJ
91057 (HGLSBDup-07)	Demeton-O	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	39	UJ
91057 (HGLSBDup-07)	Demeton-S	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Diazinon	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	22	UJ
91057 (HGLSBDup-07)	Dichlorvos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	23	UJ
91057 (HGLSBDup-07)	Dimethoate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	22	UJ
91057 (HGLSBDup-07)	Disulfoton	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	48	UJ
91057 (HGLSBDup-07)	EPN	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Ethoprop	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Ethyl parathion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	18	UJ

Table 5. OP Pesticide Data Qualifiers Due to Surrogate Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91057 (HGLSBDup-07)	Famphur	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Fensulfothion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Fenthion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	33	UJ
91057 (HGLSBDup-07)	Malathion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Merphos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	30	UJ
91057 (HGLSBDup-07)	Methyl parathion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Mevinphos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Naled	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	33	UJ
91057 (HGLSBDup-07)	O,O,O-Triethyl phosphorothioate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	39	UJ
91057 (HGLSBDup-07)	Phorate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Ronnel	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	18	UJ
91057 (HGLSBDup-07)	Sulfotepp	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Tetrachlorvinphos (Stirophos)	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Thionazin	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	18	UJ
91057 (HGLSBDup-07)	Tokuthion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Trichloronate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: A MS/MSD pair was not analyzed with the re-extracted samples in Preparation Batch 6157599 due to insufficient sample volume. The laboratory analyzed a BS/BSD pair to measure precision and accuracy. All percent recoveries and RPDs were within laboratory, method, or QAPP criteria.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable, except as noted below.

Discussion: The recoveries for all six analytes were low and out of the criteria listed below in the LCS associated with Preparation Batch 6149033, and five of the six analytes were low and out of criteria in the LCS associated with Preparation Batch 6151496.

Analyte	%R in Preparation Batch 6149033	%R in Preparation Batch 6151496	%R Acceptance Criteria
Demeton	13	Acceptable	27 to 104
Diazinon	32	38	60 to 135
Ethyl parathion	53	44	74 to 127
Malathion	57	47	64 to 138
Methyl parathion	46	39	72 to 108
Phorate	14	48	58 to 106

The samples were re-extracted three to five days after the holding time had expired. Because the holding times are based upon the gradual loss of analyte over time and the holding times were only slightly exceeded, the reviewer's opinion is that the error introduced by the holding time exceedence is less than the error introduced by the poor recoveries that were documented by the LCS, so the samples in the first two preparation batches have been flagged "X" to indicate that a more technically sound value is available, as listed in Table 6. The samples that were re-extracted have been flagged for the holding time exceedence elsewhere in this report.

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91003 (HGLSB33-08-1012)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91003 (HGLSB33-08-1012)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91003 (HGLSB33-08-1012)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91003 (HGLSB33-08-1012)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91003 (HGLSB33-08-1012)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91003 (HGLSB33-08-1012)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91003 (HGLSB33-08-1012)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91003 (HGLSB33-08-1012)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91003 (HGLSB33-08-1012)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91003 (HGLSB33-08-1012)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91003 (HGLSB33-08-1012)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91003 (HGLSB33-08-1012)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91003 (HGLSB33-08-1012)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91003 (HGLSB33-08-1012)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91003 (HGLSB33-08-1012)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91003 (HGLSB33-08-1012)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91003 (HGLSB33-08-1012)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91003 (HGLSB33-08-1012)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91003 (HGLSB33-08-1012)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91003 (HGLSB33-08-1012)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91003 (HGLSB33-08-1012)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91003 (HGLSB33-08-1012)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91003 (HGLSB33-08-1012)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91003 (HGLSB33-08-1012)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91003 (HGLSB33-08-1012)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91003 (HGLSB33-08-1012)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91003 (HGLSB33-08-1012)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91003 (HGLSB33-08-1012)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91003 (HGLSB33-08-1012)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91003 (HGLSB33-08-1012)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91005 (HGLSB33-11-0607)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91005 (HGLSB33-11-0607)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91005 (HGLSB33-11-0607)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91005 (HGLSB33-11-0607)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91005 (HGLSB33-11-0607)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91005 (HGLSB33-11-0607)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91005 (HGLSB33-11-0607)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91005 (HGLSB33-11-0607)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91005 (HGLSB33-11-0607)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91005 (HGLSB33-11-0607)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91005 (HGLSB33-11-0607)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91005 (HGLSB33-11-0607)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91005 (HGLSB33-11-0607)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91005 (HGLSB33-11-0607)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91005 (HGLSB33-11-0607)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91005 (HGLSB33-11-0607)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91005 (HGLSB33-11-0607)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91005 (HGLSB33-11-0607)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91005 (HGLSB33-11-0607)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91005 (HGLSB33-11-0607)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91005 (HGLSB33-11-0607)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91005 (HGLSB33-11-0607)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91005 (HGLSB33-11-0607)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91005 (HGLSB33-11-0607)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91005 (HGLSB33-11-0607)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91005 (HGLSB33-11-0607)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91005 (HGLSB33-11-0607)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91005 (HGLSB33-11-0607)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91005 (HGLSB33-11-0607)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91005 (HGLSB33-11-0607)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91039 (HGLSB3016-0910)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	12	JX
91039 (HGLSB3016-0910)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91039 (HGLSB3016-0910)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91039 (HGLSB3016-0910)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91039 (HGLSB3016-0910)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91039 (HGLSB3016-0910)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91039 (HGLSB3016-0910)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91039 (HGLSB3016-0910)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91039 (HGLSB3016-0910)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91039 (HGLSB3016-0910)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91039 (HGLSB3016-0910)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91039 (HGLSB3016-0910)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91039 (HGLSB3016-0910)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91039 (HGLSB3016-0910)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91039 (HGLSB3016-0910)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91039 (HGLSB3016-0910)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91039 (HGLSB3016-0910)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91039 (HGLSB3016-0910)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91039 (HGLSB3016-0910)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91039 (HGLSB3016-0910)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91039 (HGLSB3016-0910)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91039 (HGLSB3016-0910)	Naled	LCS	All analytes low	All analytes in criteria	79	X
91039 (HGLSB3016-0910)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91039 (HGLSB3016-0910)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91039 (HGLSB3016-0910)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91039 (HGLSB3016-0910)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91039 (HGLSB3016-0910)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91039 (HGLSB3016-0910)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91039 (HGLSB3016-0910)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91039 (HGLSB3016-0910)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91041 (HGLSB3013-1012)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91041 (HGLSB3013-1012)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91041 (HGLSB3013-1012)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91041 (HGLSB3013-1012)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91041 (HGLSB3013-1012)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91041 (HGLSB3013-1012)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91041 (HGLSB3013-1012)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91041 (HGLSB3013-1012)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91041 (HGLSB3013-1012)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91041 (HGLSB3013-1012)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91041 (HGLSB3013-1012)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91041 (HGLSB3013-1012)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91041 (HGLSB3013-1012)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91041 (HGLSB3013-1012)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91041 (HGLSB3013-1012)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91041 (HGLSB3013-1012)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91041 (HGLSB3013-1012)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91041 (HGLSB3013-1012)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91041 (HGLSB3013-1012)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91041 (HGLSB3013-1012)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91041 (HGLSB3013-1012)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91041 (HGLSB3013-1012)	Naled	LCS	All analytes low	All analytes in criteria	33	X
91041 (HGLSB3013-1012)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91041 (HGLSB3013-1012)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91041 (HGLSB3013-1012)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91041 (HGLSB3013-1012)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91041 (HGLSB3013-1012)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91041 (HGLSB3013-1012)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91041 (HGLSB3013-1012)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91041 (HGLSB3013-1012)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91045 (HGLSB30-02-0305)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91045 (HGLSB30-02-0305)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91045 (HGLSB30-02-0305)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91045 (HGLSB30-02-0305)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91045 (HGLSB30-02-0305)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91045 (HGLSB30-02-0305)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91045 (HGLSB30-02-0305)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91045 (HGLSB30-02-0305)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91045 (HGLSB30-02-0305)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91045 (HGLSB30-02-0305)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91045 (HGLSB30-02-0305)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91045 (HGLSB30-02-0305)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91045 (HGLSB30-02-0305)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91045 (HGLSB30-02-0305)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91045 (HGLSB30-02-0305)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91045 (HGLSB30-02-0305)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91045 (HGLSB30-02-0305)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91045 (HGLSB30-02-0305)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91045 (HGLSB30-02-0305)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91045 (HGLSB30-02-0305)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91045 (HGLSB30-02-0305)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91045 (HGLSB30-02-0305)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91045 (HGLSB30-02-0305)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91045 (HGLSB30-02-0305)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91045 (HGLSB30-02-0305)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91045 (HGLSB30-02-0305)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91045 (HGLSB30-02-0305)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91045 (HGLSB30-02-0305)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91045 (HGLSB30-02-0305)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91045 (HGLSB30-02-0305)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91046 (HGLSB30-08-0809)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91046 (HGLSB30-08-0809)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91046 (HGLSB30-08-0809)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91046 (HGLSB30-08-0809)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91046 (HGLSB30-08-0809)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91046 (HGLSB30-08-0809)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91046 (HGLSB30-08-0809)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91046 (HGLSB30-08-0809)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91046 (HGLSB30-08-0809)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91046 (HGLSB30-08-0809)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91046 (HGLSB30-08-0809)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91046 (HGLSB30-08-0809)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91046 (HGLSB30-08-0809)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91046 (HGLSB30-08-0809)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91046 (HGLSB30-08-0809)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91046 (HGLSB30-08-0809)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91046 (HGLSB30-08-0809)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91046 (HGLSB30-08-0809)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91046 (HGLSB30-08-0809)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91046 (HGLSB30-08-0809)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91046 (HGLSB30-08-0809)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91046 (HGLSB30-08-0809)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91046 (HGLSB30-08-0809)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91046 (HGLSB30-08-0809)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91046 (HGLSB30-08-0809)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91046 (HGLSB30-08-0809)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91046 (HGLSB30-08-0809)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91046 (HGLSB30-08-0809)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91046 (HGLSB30-08-0809)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91046 (HGLSB30-08-0809)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91047 (HGLSB30-03-0203)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91047 (HGLSB30-03-0203)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91047 (HGLSB30-03-0203)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91047 (HGLSB30-03-0203)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91047 (HGLSB30-03-0203)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91047 (HGLSB30-03-0203)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91047 (HGLSB30-03-0203)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91047 (HGLSB30-03-0203)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91047 (HGLSB30-03-0203)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91047 (HGLSB30-03-0203)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91047 (HGLSB30-03-0203)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91047 (HGLSB30-03-0203)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91047 (HGLSB30-03-0203)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91047 (HGLSB30-03-0203)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91047 (HGLSB30-03-0203)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91047 (HGLSB30-03-0203)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91047 (HGLSB30-03-0203)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91047 (HGLSB30-03-0203)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91047 (HGLSB30-03-0203)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91047 (HGLSB30-03-0203)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91047 (HGLSB30-03-0203)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91047 (HGLSB30-03-0203)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91047 (HGLSB30-03-0203)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91047 (HGLSB30-03-0203)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91047 (HGLSB30-03-0203)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91047 (HGLSB30-03-0203)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91047 (HGLSB30-03-0203)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91047 (HGLSB30-03-0203)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91047 (HGLSB30-03-0203)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91047 (HGLSB30-03-0203)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91050 (HGLSB30-06-0809)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91050 (HGLSB30-06-0809)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91050 (HGLSB30-06-0809)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91050 (HGLSB30-06-0809)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91050 (HGLSB30-06-0809)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91050 (HGLSB30-06-0809)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91050 (HGLSB30-06-0809)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91050 (HGLSB30-06-0809)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91050 (HGLSB30-06-0809)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91050 (HGLSB30-06-0809)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91050 (HGLSB30-06-0809)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91050 (HGLSB30-06-0809)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91050 (HGLSB30-06-0809)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91050 (HGLSB30-06-0809)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91050 (HGLSB30-06-0809)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91050 (HGLSB30-06-0809)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91050 (HGLSB30-06-0809)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91050 (HGLSB30-06-0809)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91050 (HGLSB30-06-0809)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91050 (HGLSB30-06-0809)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91050 (HGLSB30-06-0809)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91050 (HGLSB30-06-0809)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91050 (HGLSB30-06-0809)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91050 (HGLSB30-06-0809)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91050 (HGLSB30-06-0809)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91050 (HGLSB30-06-0809)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91050 (HGLSB30-06-0809)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91050 (HGLSB30-06-0809)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91050 (HGLSB30-06-0809)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91050 (HGLSB30-06-0809)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91054 (HGLSB3020-0809)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	11	JX
91054 (HGLSB3020-0809)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91054 (HGLSB3020-0809)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91054 (HGLSB3020-0809)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91054 (HGLSB3020-0809)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91054 (HGLSB3020-0809)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91054 (HGLSB3020-0809)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91054 (HGLSB3020-0809)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91054 (HGLSB3020-0809)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91054 (HGLSB3020-0809)	Dimethoate	LCS	All analytes low	All analytes in criteria	28	X
91054 (HGLSB3020-0809)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91054 (HGLSB3020-0809)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91054 (HGLSB3020-0809)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91054 (HGLSB3020-0809)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91054 (HGLSB3020-0809)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

Table 6. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91054 (HGLSB3020-0809)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91054 (HGLSB3020-0809)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91054 (HGLSB3020-0809)	Malathion	LCS	All analytes low	All analytes in criteria	6.2	JX
91054 (HGLSB3020-0809)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91054 (HGLSB3020-0809)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91054 (HGLSB3020-0809)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91054 (HGLSB3020-0809)	Naled	LCS	All analytes low	All analytes in criteria	80	X
91054 (HGLSB3020-0809)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91054 (HGLSB3020-0809)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91054 (HGLSB3020-0809)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91054 (HGLSB3020-0809)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91054 (HGLSB3020-0809)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91054 (HGLSB3020-0809)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91054 (HGLSB3020-0809)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91054 (HGLSB3020-0809)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value as listed in Table 7.

The laboratory failed to obtain the reporting limits listed in the QAPP for Samples 91041 (HGLSB3013-1012), 91051 (HGLSB30-07-0304), and 91057 (HGLSBDup-07). Undiluted samples with no matrix interference were reported at levels up to a factor of three (3X) higher than the other samples. No follow-up is recommended because the reporting limit is less than the project decision-making thresholds that are listed in the QAPP.

The laboratory flagged some results as not confirming quantitatively (i.e., within a RPD of 40) as described in EPA Method 8000B, Section 7.9. Some of these results have been flagged "X" elsewhere in this report and no additional data qualifier flags are recommended. For Sample 91001 (HGLSB33-07-0405), the result has been flagged "JN" to indicate an estimated value and a tentative identification as listed in Table 7.

Table 7. OP Pesticide Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91003 (HGLSB33-08-1012) RE	Dimethoate	Value < RL	Value=11	RL=22	11	J
91041 (HGLSB3013-1012) RE	Naled	Value < RL	Value=25	RL=33	25	J
91001 (HGLSB33-07-0405)	Dimethoate	Not quantitatively confirmed	Confirm. Column's RPD>40	Confirm. Column's RPD<40	72	NJ

8. Field Duplicates

Field duplicates were collected and analyzed. Sample 91006 (HGLSBDup-04) is a duplicate of Sample 91003 (HGLSB33-08-1012), Sample 91007 (HGLSBDup-05) is a duplicate of Sample 91004 (HGLSB33-10-0405), Sample 91017 (HGLSBDup06) is a duplicate of Sample 91016 (HGLSB3902R-0910), and Sample 91057 (HGLSBDup-07) is a duplicate of Sample 91056

(HGLSB3017-0809). Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in the table below, were reported as not detected.

Table 8. OP Pesticide Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	91003 (HGLSB33-08-1012)	91006 (HGLSBDup-04)	
Dimethoate	11	ND	NC

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The analytes qualified with an "R" or a "X" are unusable for the reasons listed herein. All other data, as qualified, are acceptable fore use. The analyses were generally within the requirements of the referenced method. All flags are summarized at the end of this report.

F. Review of TCLP Chlorphenoxy Herbicides by GC

EPA Methods 1311/8151A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable, except as noted below.

Discussion: A continuing calibration associated with the samples in Preparation Batch 6160096 for 2,4-D had a percent difference that was out of the criteria of less than 15 percent at 17.1 percent. Since the response indicated a high bias and the sample results were all not detected, no data qualifier flags are recommended.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample 91006 (HGLSBDup-04) is a duplicate of Sample 91003 (HGLSB33-08-1012), Sample 91007 (HGLSBDup-05) is a duplicate of Sample 91004 (HGLSB33-10-0405), Sample 91017 (HGLSBDup06) is a duplicate of Sample 91016 (HGLSB3902R-0910), and Sample 91057 (HGLSBDup-07) is a duplicate of Sample 91056 (HGLSB3017-0809). Test results were reviewed and all analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

G. Review of Chlorphenoxy Herbicides by GC

EPA Method 8151A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: A MS/MSD pair was not analyzed with this set of analyses due to insufficient sample volume. The laboratory analyzed a BS/BSD pair to measure precision and accuracy. Except as noted, all percent recoveries and RPDs were within laboratory, method, or QAPP criteria.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Due to insufficient volume, the laboratory failed to obtain the reporting limits listed in the QAPP for Samples 91041 (HGLSB3013-1012), 91051 (HGLSB30-07-0304), and 91057 (HGLSBDup-07). Undiluted samples with no matrix interference were reported at levels up to a factor of three (3X) higher than the other samples. No follow-up is recommended because the reporting limit is less than the project decision-making thresholds that are listed in the QAPP.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample 91006 (HGLSBDup-04) is a duplicate of Sample 91003 (HGLSB33-08-1012), Sample 91007 (HGLSBDup-05) is a duplicate of Sample 91004 (HGLSB33-10-0405), Sample 91017 (HGLSBDup06) is a duplicate of Sample 91016 (HGLSB3902R-0910), and Sample 91057 (HGLSBDup-07) is a duplicate of Sample 91056 (HGLSB3017-0809). Test results were reviewed and all analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

H. Review of Hydrazine Analyses

Ion Chromatography (Laboratory In-House SOP[1])

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that the proper number of standards were used and the correlation coefficient criteria was met. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

5. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

6. Sample Duplicates

Sample duplicates were analyzed as required by the referenced method and all RPDs were within laboratory or method criteria.

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[1] This is an in-house laboratory method and is not an EPA promulgated method. These analyses were developed by the laboratory and were evaluated using Table C.1 in the QAPP Addendum that was referenced in the Introduction.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and preparation procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample 91006 (HGLSBDup-04) is a duplicate of Sample 91003 (HGLSB33-08-1012), Sample 91007 (HGLSBDup-05) is a duplicate of Sample 91004 (HGLSB33-10-0405), Sample 91017 (HGLSBDup06) is a duplicate of Sample 91016 (HGLSB3902R-0910), and Sample 91057 (HGLSBDup-07) is a duplicate of Sample 91056 (HGLSB3017-0809). Test results were reviewed and all analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soil
Dates of Sampling: May 17-20, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
Phosphate Pesticide Data Qualifiers						
91001 (HGLSB33-07-0405)	Dimethoate	Not quantitatively confirmed	Confirm. Column's RPD>40	Confirm. Column's RPD<40	72	NJ
91003 (HGLSB33-08-1012)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91003 (HGLSB33-08-1012)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91003 (HGLSB33-08-1012)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91003 (HGLSB33-08-1012)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91003 (HGLSB33-08-1012)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91003 (HGLSB33-08-1012)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91003 (HGLSB33-08-1012)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91003 (HGLSB33-08-1012)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91003 (HGLSB33-08-1012)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91003 (HGLSB33-08-1012)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91003 (HGLSB33-08-1012)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91003 (HGLSB33-08-1012)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91003 (HGLSB33-08-1012)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91003 (HGLSB33-08-1012)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91003 (HGLSB33-08-1012)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX

91003 (HGLSB33-08-1012) RE	Diazinon	Holding time	HT=19 dy	HT=14 dy	7.3	UJ
91003 (HGLSB33-08-1012) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=19 dy	%D<15 HT=14 dy	7.4	UJ
91003 (HGLSB33-08-1012) RE	Dimethoate	Continuing calibration Holding time Value < RL	%D=42.1 HT=19 dy Value=11	%D<15 HT=14 dy RL=22	11	J
91003 (HGLSB33-08-1012) RE	Disulfoton	Holding time	HT=19 dy	HT=14 dy	7.7	UJ
91003 (HGLSB33-08-1012) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=19 dy	%D<15 HT=14 dy	3.7	UJ
91003 (HGLSB33-08-1012) RE	Ethoprop	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91003 (HGLSB33-08-1012) RE	Ethyl parathion	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91003 (HGLSB33-08-1012) RE	Famphur	Holding time	HT=19 dy	HT=14 dy	3.2	UJ
91003 (HGLSB33-08-1012) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=19 dy	%D<15 HT=14 dy	2.9	UJ
91003 (HGLSB33-08-1012) RE	Fenthion	Holding time	HT=19 dy	HT=14 dy	11	UJ
91003 (HGLSB33-08-1012) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=19 dy	%D<15 HT=14 dy	4.6	UJ
91003 (HGLSB33-08-1012) RE	Merphos	Holding time	HT=19 dy	HT=14 dy	9.4	UJ
91003 (HGLSB33-08-1012) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=19 dy	%D<15 HT=14 dy	6.4	UJ
91003 (HGLSB33-08-1012) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=19 dy	%D<15 HT=14 dy	4.6	UJ
91003 (HGLSB33-08-1012) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=19 dy	%D<15 HT=14 dy	6	UJ
91003 (HGLSB33-08-1012) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=19 dy	HT=14 dy	7.8	UJ
91003 (HGLSB33-08-1012) RE	Phorate	Holding time	HT=19 dy	HT=14 dy	5.7	UJ
91003 (HGLSB33-08-1012) RE	Ronnel	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91003 (HGLSB33-08-1012) RE	Sulfotepp	Holding time	HT=19 dy	HT=14 dy	6.3	UJ

91003 (HGLSB33-08-1012)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91003 (HGLSB33-08-1012)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91003 (HGLSB33-08-1012)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91003 (HGLSB33-08-1012)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91003 (HGLSB33-08-1012)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91003 (HGLSB33-08-1012)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91003 (HGLSB33-08-1012)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91003 (HGLSB33-08-1012)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91003 (HGLSB33-08-1012)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91003 (HGLSB33-08-1012)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91003 (HGLSB33-08-1012)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91003 (HGLSB33-08-1012)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91003 (HGLSB33-08-1012)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91003 (HGLSB33-08-1012)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91003 (HGLSB33-08-1012)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91003 (HGLSB33-08-1012) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=19 dy	%D<15 HT=14 dy	3.5	UJ
91003 (HGLSB33-08-1012) RE	Bolstar	Holding time	HT=19 dy	HT=14 dy	4.2	UJ
91003 (HGLSB33-08-1012) RE	Chlorpyrifos	Holding time	HT=19 dy	HT=14 dy	6.5	UJ
91003 (HGLSB33-08-1012) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=19 dy	%D<15 HT=14 dy	2.8	UJ
91003 (HGLSB33-08-1012) RE	Demeton (total)	Holding time	HT=19 dy	HT=14 dy	7.5	UJ
91003 (HGLSB33-08-1012) RE	Demeton-O	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91003 (HGLSB33-08-1012) RE	Demeton-S	Holding time	HT=19 dy	HT=14 dy	4.9	UJ

91003 (HGLSB33-08-1012) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=19 dy	%D<15 HT=14 dy	4.4	UJ
91003 (HGLSB33-08-1012) RE	Thionazin	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91003 (HGLSB33-08-1012) RE	Tokuthion	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91003 (HGLSB33-08-1012) RE	Trichloronate	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91005 (HGLSB33-11-0607)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91005 (HGLSB33-11-0607)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91005 (HGLSB33-11-0607)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91005 (HGLSB33-11-0607)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91005 (HGLSB33-11-0607)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91005 (HGLSB33-11-0607)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91005 (HGLSB33-11-0607)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91005 (HGLSB33-11-0607)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91005 (HGLSB33-11-0607)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91005 (HGLSB33-11-0607)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91005 (HGLSB33-11-0607)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91005 (HGLSB33-11-0607)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91005 (HGLSB33-11-0607)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91005 (HGLSB33-11-0607)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91005 (HGLSB33-11-0607)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91005 (HGLSB33-11-0607)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91005 (HGLSB33-11-0607)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91005 (HGLSB33-11-0607)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91005 (HGLSB33-11-0607)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX

91005 (HGLSB33-11-0607)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91005 (HGLSB33-11-0607)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91005 (HGLSB33-11-0607)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91005 (HGLSB33-11-0607)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91005 (HGLSB33-11-0607)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91005 (HGLSB33-11-0607)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91005 (HGLSB33-11-0607)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91005 (HGLSB33-11-0607)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91005 (HGLSB33-11-0607)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91005 (HGLSB33-11-0607)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91005 (HGLSB33-11-0607)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91005 (HGLSB33-11-0607) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=19 dy	%D<15 HT=14 dy	3.5	UJ
91005 (HGLSB33-11-0607) RE	Bolstar	Holding time	HT=19 dy	HT=14 dy	4.2	UJ
91005 (HGLSB33-11-0607) RE	Chlorpyrifos	Holding time	HT=19 dy	HT=14 dy	6.5	UJ
91005 (HGLSB33-11-0607) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=19 dy	%D<15 HT=14 dy	2.8	UJ
91005 (HGLSB33-11-0607) RE	Demeton (total)	Holding time	HT=19 dy	HT=14 dy	7.5	UJ
91005 (HGLSB33-11-0607) RE	Demeton-O	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91005 (HGLSB33-11-0607) RE	Demeton-S	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91005 (HGLSB33-11-0607) RE	Diazinon	Holding time	HT=19 dy	HT=14 dy	7.3	UJ
91005 (HGLSB33-11-0607) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=19 dy	%D<15 HT=14 dy	7.4	UJ
91005 (HGLSB33-11-0607) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=19 dy	%D<15 HT=14 dy	22	UJ

91005 (HGLSB33-11-0607) RE	Disulfoton	Holding time	HT=19 dy	HT=14 dy	7.7	UJ
91005 (HGLSB33-11-0607) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=19 dy	%D<15 HT=14 dy	3.7	UJ
91005 (HGLSB33-11-0607) RE	Ethoprop	Holding time	HT=19 dy	HT=14 dy	4.9	UJ
91005 (HGLSB33-11-0607) RE	Ethyl parathion	Holding time	HT=19 dy	HT=14 dy	5.3	UJ
91005 (HGLSB33-11-0607) RE	Famphur	Holding time	HT=19 dy	HT=14 dy	3.2	UJ
91005 (HGLSB33-11-0607) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=19 dy	%D<15 HT=14 dy	2.9	UJ
91005 (HGLSB33-11-0607) RE	Fenthion	Holding time	HT=19 dy	HT=14 dy	11	UJ
91005 (HGLSB33-11-0607) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=19 dy	%D<15 HT=14 dy	4.6	UJ
91005 (HGLSB33-11-0607) RE	Merphos	Holding time	HT=19 dy	HT=14 dy	9.4	UJ
91005 (HGLSB33-11-0607) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=19 dy	%D<15 HT=14 dy	6.4	UJ
91005 (HGLSB33-11-0607) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=19 dy	%D<15 HT=14 dy	4.6	UJ
91005 (HGLSB33-11-0607) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=19 dy	%D<15 HT=14 dy	6	UJ
91005 (HGLSB33-11-0607) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=19 dy	HT=14 dy	7.8	UJ
91005 (HGLSB33-11-0607) RE	Phorate	Holding time	HT=19 dy	HT=14 dy	5.7	UJ
91005 (HGLSB33-11-0607) RE	Ronnel	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91005 (HGLSB33-11-0607) RE	Sulfotepp	Holding time	HT=19 dy	HT=14 dy	6.3	UJ
91005 (HGLSB33-11-0607) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=19 dy	%D<15 HT=14 dy	4.4	UJ
91005 (HGLSB33-11-0607) RE	Thionazin	Holding time	HT=19 dy	HT=14 dy	5.6	UJ
91005 (HGLSB33-11-0607) RE	Tokuthion	Holding time	HT=19 dy	HT=14 dy	6.2	UJ
91005 (HGLSB33-11-0607) RE	Trichloronate	Holding time	HT=19 dy	HT=14 dy	6.2	UJ

91009 (HGLRB06-051806-AL)	Azinphos-methyl	Continuing calibration	%D=22.0	%D<15	0.45	UJ
91009 (HGLRB06-051806-AL)	Demeton-S	Continuing calibration	%D=16.8	%D<15	0.15	UJ
91039 (HGLSB3016-0910)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	12	JX
91039 (HGLSB3016-0910)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91039 (HGLSB3016-0910)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91039 (HGLSB3016-0910)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91039 (HGLSB3016-0910)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91039 (HGLSB3016-0910)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91039 (HGLSB3016-0910)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91039 (HGLSB3016-0910)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91039 (HGLSB3016-0910)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91039 (HGLSB3016-0910)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91039 (HGLSB3016-0910)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91039 (HGLSB3016-0910)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91039 (HGLSB3016-0910)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91039 (HGLSB3016-0910)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91039 (HGLSB3016-0910)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91039 (HGLSB3016-0910)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91039 (HGLSB3016-0910)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91039 (HGLSB3016-0910)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91039 (HGLSB3016-0910)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91039 (HGLSB3016-0910)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91039 (HGLSB3016-0910)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91039 (HGLSB3016-0910)	Naled	LCS	All analytes low	All analytes in criteria	79	X

91039 (HGLSB3016-0910)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91039 (HGLSB3016-0910)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91039 (HGLSB3016-0910)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91039 (HGLSB3016-0910)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91039 (HGLSB3016-0910)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91039 (HGLSB3016-0910)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91039 (HGLSB3016-0910)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91039 (HGLSB3016-0910)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91039 (HGLSB3016-0910) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91039 (HGLSB3016-0910) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91039 (HGLSB3016-0910) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91039 (HGLSB3016-0910) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91039 (HGLSB3016-0910) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91039 (HGLSB3016-0910) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91039 (HGLSB3016-0910) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91039 (HGLSB3016-0910) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91039 (HGLSB3016-0910) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91039 (HGLSB3016-0910) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91039 (HGLSB3016-0910) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91039 (HGLSB3016-0910) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91039 (HGLSB3016-0910) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91039 (HGLSB3016-0910) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91039 (HGLSB3016-0910) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91039 (HGLSB3016-0910) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91039 (HGLSB3016-0910) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ

91039 (HGLSB3016-0910) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91039 (HGLSB3016-0910) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91039 (HGLSB3016-0910) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91039 (HGLSB3016-0910) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91039 (HGLSB3016-0910) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=17 dy	%D<15 HT=14 dy	6	UJ
91039 (HGLSB3016-0910) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91039 (HGLSB3016-0910) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91039 (HGLSB3016-0910) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91039 (HGLSB3016-0910) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91039 (HGLSB3016-0910) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=17 dy	%D<15 HT=14 dy	4.4	UJ
91039 (HGLSB3016-0910) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91039 (HGLSB3016-0910) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91039 (HGLSB3016-0910) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91041 (HGLSB3013-1012)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91041 (HGLSB3013-1012)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91041 (HGLSB3013-1012)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91041 (HGLSB3013-1012)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91041 (HGLSB3013-1012)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91041 (HGLSB3013-1012)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91041 (HGLSB3013-1012)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91041 (HGLSB3013-1012)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91041 (HGLSB3013-1012)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91041 (HGLSB3013-1012)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91041 (HGLSB3013-1012)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX

91041 (HGLSB3013-1012)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91041 (HGLSB3013-1012)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91041 (HGLSB3013-1012)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91041 (HGLSB3013-1012)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91041 (HGLSB3013-1012)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91041 (HGLSB3013-1012)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91041 (HGLSB3013-1012)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91041 (HGLSB3013-1012)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91041 (HGLSB3013-1012)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91041 (HGLSB3013-1012)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91041 (HGLSB3013-1012)	Naled	LCS	All analytes low	All analytes in criteria	33	X
91041 (HGLSB3013-1012)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91041 (HGLSB3013-1012)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91041 (HGLSB3013-1012)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91041 (HGLSB3013-1012)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91041 (HGLSB3013-1012)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91041 (HGLSB3013-1012)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91041 (HGLSB3013-1012)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91041 (HGLSB3013-1012)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91041 (HGLSB3013-1012) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91041 (HGLSB3013-1012) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91041 (HGLSB3013-1012) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91041 (HGLSB3013-1012) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91041 (HGLSB3013-1012) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ

91041 (HGLSB3013-1012) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91041 (HGLSB3013-1012) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91041 (HGLSB3013-1012) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91041 (HGLSB3013-1012) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91041 (HGLSB3013-1012) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91041 (HGLSB3013-1012) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91041 (HGLSB3013-1012) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91041 (HGLSB3013-1012) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91041 (HGLSB3013-1012) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91041 (HGLSB3013-1012) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91041 (HGLSB3013-1012) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91041 (HGLSB3013-1012) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91041 (HGLSB3013-1012) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91041 (HGLSB3013-1012) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91041 (HGLSB3013-1012) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91041 (HGLSB3013-1012) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91041 (HGLSB3013-1012) RE	Naled	Continuing calibration Holding time Value < RL	%D=32.1 HT=17 dy Value=25	%D<15 HT=14 dy RL=33	25	J
91041 (HGLSB3013-1012) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91041 (HGLSB3013-1012) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91041 (HGLSB3013-1012) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91041 (HGLSB3013-1012) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91041 (HGLSB3013-1012) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=17 dy	%D<15 HT=14 dy	4.4	UJ
91041 (HGLSB3013-1012) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91041 (HGLSB3013-1012) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ

91041 (HGLSB3013-1012) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91045 (HGLSB30-02-0305)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91045 (HGLSB30-02-0305)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91045 (HGLSB30-02-0305)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91045 (HGLSB30-02-0305)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91045 (HGLSB30-02-0305)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91045 (HGLSB30-02-0305)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91045 (HGLSB30-02-0305)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91045 (HGLSB30-02-0305)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91045 (HGLSB30-02-0305)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91045 (HGLSB30-02-0305)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91045 (HGLSB30-02-0305)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91045 (HGLSB30-02-0305)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91045 (HGLSB30-02-0305)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91045 (HGLSB30-02-0305)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91045 (HGLSB30-02-0305)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91045 (HGLSB30-02-0305)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91045 (HGLSB30-02-0305)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91045 (HGLSB30-02-0305)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91045 (HGLSB30-02-0305)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91045 (HGLSB30-02-0305)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91045 (HGLSB30-02-0305)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91045 (HGLSB30-02-0305)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91045 (HGLSB30-02-0305)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX

91045 (HGLSB30-02-0305)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91045 (HGLSB30-02-0305)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91045 (HGLSB30-02-0305)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91045 (HGLSB30-02-0305)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91045 (HGLSB30-02-0305)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91045 (HGLSB30-02-0305)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91045 (HGLSB30-02-0305)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91045 (HGLSB30-02-0305) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91045 (HGLSB30-02-0305) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91045 (HGLSB30-02-0305) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91045 (HGLSB30-02-0305) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91045 (HGLSB30-02-0305) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91045 (HGLSB30-02-0305) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91045 (HGLSB30-02-0305) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91045 (HGLSB30-02-0305) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91045 (HGLSB30-02-0305) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91045 (HGLSB30-02-0305) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91045 (HGLSB30-02-0305) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91045 (HGLSB30-02-0305) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91045 (HGLSB30-02-0305) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91045 (HGLSB30-02-0305) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ

91045 (HGLSB30-02-0305) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91045 (HGLSB30-02-0305) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91045 (HGLSB30-02-0305) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91045 (HGLSB30-02-0305) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91045 (HGLSB30-02-0305) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91045 (HGLSB30-02-0305) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91045 (HGLSB30-02-0305) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91045 (HGLSB30-02-0305) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=17 dy	%D<15 HT=14 dy	6	UJ
91045 (HGLSB30-02-0305) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91045 (HGLSB30-02-0305) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91045 (HGLSB30-02-0305) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91045 (HGLSB30-02-0305) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91045 (HGLSB30-02-0305) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=17 dy	%D<15 HT=14 dy	4.4	UJ
91045 (HGLSB30-02-0305) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91045 (HGLSB30-02-0305) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91045 (HGLSB30-02-0305) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91046 (HGLSB30-08-0809)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91046 (HGLSB30-08-0809)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91046 (HGLSB30-08-0809)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91046 (HGLSB30-08-0809)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX

91046 (HGLSB30-08-0809)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91046 (HGLSB30-08-0809)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91046 (HGLSB30-08-0809)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91046 (HGLSB30-08-0809)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91046 (HGLSB30-08-0809)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91046 (HGLSB30-08-0809)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91046 (HGLSB30-08-0809)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91046 (HGLSB30-08-0809)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91046 (HGLSB30-08-0809)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91046 (HGLSB30-08-0809)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91046 (HGLSB30-08-0809)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91046 (HGLSB30-08-0809)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91046 (HGLSB30-08-0809)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91046 (HGLSB30-08-0809)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91046 (HGLSB30-08-0809)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91046 (HGLSB30-08-0809)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91046 (HGLSB30-08-0809)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91046 (HGLSB30-08-0809)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91046 (HGLSB30-08-0809)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91046 (HGLSB30-08-0809)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91046 (HGLSB30-08-0809)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91046 (HGLSB30-08-0809)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91046 (HGLSB30-08-0809)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91046 (HGLSB30-08-0809)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX

91046 (HGLSB30-08-0809)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91046 (HGLSB30-08-0809)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91046 (HGLSB30-08-0809) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91046 (HGLSB30-08-0809) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91046 (HGLSB30-08-0809) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91046 (HGLSB30-08-0809) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91046 (HGLSB30-08-0809) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91046 (HGLSB30-08-0809) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91046 (HGLSB30-08-0809) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91046 (HGLSB30-08-0809) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91046 (HGLSB30-08-0809) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91046 (HGLSB30-08-0809) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91046 (HGLSB30-08-0809) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91046 (HGLSB30-08-0809) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91046 (HGLSB30-08-0809) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91046 (HGLSB30-08-0809) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91046 (HGLSB30-08-0809) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91046 (HGLSB30-08-0809) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91046 (HGLSB30-08-0809) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91046 (HGLSB30-08-0809) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ

91046 (HGLSB30-08-0809) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91046 (HGLSB30-08-0809) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91046 (HGLSB30-08-0809) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91046 (HGLSB30-08-0809) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=17 dy	%D<15 HT=14 dy	6	UJ
91046 (HGLSB30-08-0809) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91046 (HGLSB30-08-0809) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91046 (HGLSB30-08-0809) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91046 (HGLSB30-08-0809) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91046 (HGLSB30-08-0809) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=17 dy	%D<15 HT=14 dy	4.4	UJ
91046 (HGLSB30-08-0809) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91046 (HGLSB30-08-0809) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91046 (HGLSB30-08-0809) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91047 (HGLSB30-03-0203)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91047 (HGLSB30-03-0203)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91047 (HGLSB30-03-0203)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91047 (HGLSB30-03-0203)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91047 (HGLSB30-03-0203)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91047 (HGLSB30-03-0203)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91047 (HGLSB30-03-0203)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91047 (HGLSB30-03-0203)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91047 (HGLSB30-03-0203)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX

91047 (HGLSB30-03-0203)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91047 (HGLSB30-03-0203)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91047 (HGLSB30-03-0203)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91047 (HGLSB30-03-0203)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91047 (HGLSB30-03-0203)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91047 (HGLSB30-03-0203)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91047 (HGLSB30-03-0203)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91047 (HGLSB30-03-0203)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91047 (HGLSB30-03-0203)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91047 (HGLSB30-03-0203)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91047 (HGLSB30-03-0203)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91047 (HGLSB30-03-0203)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91047 (HGLSB30-03-0203)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91047 (HGLSB30-03-0203)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91047 (HGLSB30-03-0203)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91047 (HGLSB30-03-0203)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91047 (HGLSB30-03-0203)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91047 (HGLSB30-03-0203)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91047 (HGLSB30-03-0203)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91047 (HGLSB30-03-0203)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91047 (HGLSB30-03-0203)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91047 (HGLSB30-03-0203) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91047 (HGLSB30-03-0203) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ

91047 (HGLSB30-03-0203) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91047 (HGLSB30-03-0203) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91047 (HGLSB30-03-0203) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91047 (HGLSB30-03-0203) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91047 (HGLSB30-03-0203) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91047 (HGLSB30-03-0203) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91047 (HGLSB30-03-0203) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91047 (HGLSB30-03-0203) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91047 (HGLSB30-03-0203) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91047 (HGLSB30-03-0203) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91047 (HGLSB30-03-0203) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91047 (HGLSB30-03-0203) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91047 (HGLSB30-03-0203) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91047 (HGLSB30-03-0203) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91047 (HGLSB30-03-0203) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91047 (HGLSB30-03-0203) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91047 (HGLSB30-03-0203) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91047 (HGLSB30-03-0203) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91047 (HGLSB30-03-0203) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ

91047 (HGLSB30-03-0203) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=17 dy	%D<15 HT=14 dy	6	UJ
91047 (HGLSB30-03-0203) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91047 (HGLSB30-03-0203) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91047 (HGLSB30-03-0203) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91047 (HGLSB30-03-0203) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91047 (HGLSB30-03-0203) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=17 dy	%D<15 HT=14 dy	4.4	UJ
91047 (HGLSB30-03-0203) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91047 (HGLSB30-03-0203) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91047 (HGLSB30-03-0203) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91050 (HGLSB30-06-0809)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	3.5	UX
91050 (HGLSB30-06-0809)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91050 (HGLSB30-06-0809)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91050 (HGLSB30-06-0809)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91050 (HGLSB30-06-0809)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91050 (HGLSB30-06-0809)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91050 (HGLSB30-06-0809)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91050 (HGLSB30-06-0809)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91050 (HGLSB30-06-0809)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91050 (HGLSB30-06-0809)	Dimethoate	LCS	All analytes low	All analytes in criteria	22	UX
91050 (HGLSB30-06-0809)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91050 (HGLSB30-06-0809)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91050 (HGLSB30-06-0809)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX

91050 (HGLSB30-06-0809)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91050 (HGLSB30-06-0809)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91050 (HGLSB30-06-0809)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91050 (HGLSB30-06-0809)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX
91050 (HGLSB30-06-0809)	Malathion	LCS	All analytes low	All analytes in criteria	4.6	UX
91050 (HGLSB30-06-0809)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91050 (HGLSB30-06-0809)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91050 (HGLSB30-06-0809)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91050 (HGLSB30-06-0809)	Naled	LCS	All analytes low	All analytes in criteria	6	UX
91050 (HGLSB30-06-0809)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91050 (HGLSB30-06-0809)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91050 (HGLSB30-06-0809)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91050 (HGLSB30-06-0809)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91050 (HGLSB30-06-0809)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91050 (HGLSB30-06-0809)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91050 (HGLSB30-06-0809)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91050 (HGLSB30-06-0809)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91050 (HGLSB30-06-0809) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91050 (HGLSB30-06-0809) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91050 (HGLSB30-06-0809) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91050 (HGLSB30-06-0809) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91050 (HGLSB30-06-0809) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ

91050 (HGLSB30-06-0809) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91050 (HGLSB30-06-0809) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91050 (HGLSB30-06-0809) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91050 (HGLSB30-06-0809) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91050 (HGLSB30-06-0809) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91050 (HGLSB30-06-0809) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ
91050 (HGLSB30-06-0809) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91050 (HGLSB30-06-0809) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91050 (HGLSB30-06-0809) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91050 (HGLSB30-06-0809) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91050 (HGLSB30-06-0809) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91050 (HGLSB30-06-0809) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91050 (HGLSB30-06-0809) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91050 (HGLSB30-06-0809) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91050 (HGLSB30-06-0809) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91050 (HGLSB30-06-0809) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91050 (HGLSB30-06-0809) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=17 dy	%D<15 HT=14 dy	6	UJ
91050 (HGLSB30-06-0809) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91050 (HGLSB30-06-0809) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ

91050 (HGLSB30-06-0809) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91050 (HGLSB30-06-0809) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91050 (HGLSB30-06-0809) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration	%D=41.2	%D<15	4.4	UJ
91050 (HGLSB30-06-0809) RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=17 dy	HT=14 dy	4.4	UJ
91050 (HGLSB30-06-0809) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91050 (HGLSB30-06-0809) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91050 (HGLSB30-06-0809) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91054 (HGLSB3020-0809)	Azinphos-methyl	LCS	All analytes low	All analytes in criteria	11	JX
91054 (HGLSB3020-0809)	Bolstar	LCS	All analytes low	All analytes in criteria	4.2	UX
91054 (HGLSB3020-0809)	Chlorpyrifos	LCS	All analytes low	All analytes in criteria	6.5	UX
91054 (HGLSB3020-0809)	Coumaphos	LCS	All analytes low	All analytes in criteria	2.8	UX
91054 (HGLSB3020-0809)	Demeton (total)	LCS	All analytes low	All analytes in criteria	7.5	UX
91054 (HGLSB3020-0809)	Demeton-O	LCS	All analytes low	All analytes in criteria	5.3	UX
91054 (HGLSB3020-0809)	Demeton-S	LCS	All analytes low	All analytes in criteria	4.9	UX
91054 (HGLSB3020-0809)	Diazinon	LCS	All analytes low	All analytes in criteria	7.3	UX
91054 (HGLSB3020-0809)	Dichlorvos	LCS	All analytes low	All analytes in criteria	7.4	UX
91054 (HGLSB3020-0809)	Dimethoate	LCS	All analytes low	All analytes in criteria	28	X
91054 (HGLSB3020-0809)	Disulfoton	LCS	All analytes low	All analytes in criteria	7.7	UX
91054 (HGLSB3020-0809)	EPN	LCS	All analytes low	All analytes in criteria	3.7	UX
91054 (HGLSB3020-0809)	Ethoprop	LCS	All analytes low	All analytes in criteria	4.9	UX
91054 (HGLSB3020-0809)	Ethyl parathion	LCS	All analytes low	All analytes in criteria	5.3	UX
91054 (HGLSB3020-0809)	Famphur	LCS	All analytes low	All analytes in criteria	3.2	UX
91054 (HGLSB3020-0809)	Fensulfothion	LCS	All analytes low	All analytes in criteria	2.9	UX
91054 (HGLSB3020-0809)	Fenthion	LCS	All analytes low	All analytes in criteria	11	UX

91054 (HGLSB3020-0809)	Malathion	LCS	All analytes low	All analytes in criteria	6.2	JX
91054 (HGLSB3020-0809)	Merphos	LCS	All analytes low	All analytes in criteria	9.4	UX
91054 (HGLSB3020-0809)	Methyl parathion	LCS	All analytes low	All analytes in criteria	6.4	UX
91054 (HGLSB3020-0809)	Mevinphos	LCS	All analytes low	All analytes in criteria	4.6	UX
91054 (HGLSB3020-0809)	Naled	LCS	All analytes low	All analytes in criteria	80	X
91054 (HGLSB3020-0809)	O,O,O-Triethyl phosphorothioate	LCS	All analytes low	All analytes in criteria	7.8	UX
91054 (HGLSB3020-0809)	Phorate	LCS	All analytes low	All analytes in criteria	5.7	UX
91054 (HGLSB3020-0809)	Ronnel	LCS	All analytes low	All analytes in criteria	5.6	UX
91054 (HGLSB3020-0809)	Sulfotepp	LCS	All analytes low	All analytes in criteria	6.3	UX
91054 (HGLSB3020-0809)	Tetrachlorvinphos (Stirophos)	LCS	All analytes low	All analytes in criteria	4.4	UX
91054 (HGLSB3020-0809)	Thionazin	LCS	All analytes low	All analytes in criteria	5.6	UX
91054 (HGLSB3020-0809)	Tokuthion	LCS	All analytes low	All analytes in criteria	6.2	UX
91054 (HGLSB3020-0809)	Trichloronate	LCS	All analytes low	All analytes in criteria	6.2	UX
91054 (HGLSB3020-0809) RE	Azinphos-methyl	Continuing calibration Holding time	%D=40.5 HT=17 dy	%D<15 HT=14 dy	3.5	UJ
91054 (HGLSB3020-0809) RE	Bolstar	Holding time	HT=17 dy	HT=14 dy	4.2	UJ
91054 (HGLSB3020-0809) RE	Chlorpyrifos	Holding time	HT=17 dy	HT=14 dy	6.5	UJ
91054 (HGLSB3020-0809) RE	Coumaphos	Continuing calibration Holding time	%D=42.7 HT=17 dy	%D<15 HT=14 dy	2.8	UJ
91054 (HGLSB3020-0809) RE	Demeton (total)	Holding time	HT=17 dy	HT=14 dy	7.5	UJ
91054 (HGLSB3020-0809) RE	Demeton-O	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91054 (HGLSB3020-0809) RE	Demeton-S	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91054 (HGLSB3020-0809) RE	Diazinon	Holding time	HT=17 dy	HT=14 dy	7.3	UJ
91054 (HGLSB3020-0809) RE	Dichlorvos	Continuing calibration Holding time	%D=17.2 HT=17 dy	%D<15 HT=14 dy	7.4	UJ
91054 (HGLSB3020-0809) RE	Dimethoate	Continuing calibration Holding time	%D=42.1 HT=17 dy	%D<15 HT=14 dy	7.4	J
91054 (HGLSB3020-0809) RE	Disulfoton	Holding time	HT=17 dy	HT=14 dy	7.7	UJ

91054 (HGLSB3020-0809) RE	EPN	Continuing calibration Holding time	%D=29.2 HT=17 dy	%D<15 HT=14 dy	3.7	UJ
91054 (HGLSB3020-0809) RE	Ethoprop	Holding time	HT=17 dy	HT=14 dy	4.9	UJ
91054 (HGLSB3020-0809) RE	Ethyl parathion	Holding time	HT=17 dy	HT=14 dy	5.3	UJ
91054 (HGLSB3020-0809) RE	Famphur	Holding time	HT=17 dy	HT=14 dy	3.2	UJ
91054 (HGLSB3020-0809) RE	Fensulfothion	Continuing calibration Holding time	%D=20.7 HT=17 dy	%D<15 HT=14 dy	2.9	UJ
91054 (HGLSB3020-0809) RE	Fenthion	Holding time	HT=17 dy	HT=14 dy	11	UJ
91054 (HGLSB3020-0809) RE	Malathion	Continuing calibration Holding time	%D=28.6 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91054 (HGLSB3020-0809) RE	Merphos	Holding time	HT=17 dy	HT=14 dy	9.4	UJ
91054 (HGLSB3020-0809) RE	Methyl parathion	Continuing calibration Holding time	%D=17.1 HT=17 dy	%D<15 HT=14 dy	6.4	UJ
91054 (HGLSB3020-0809) RE	Mevinphos	Continuing calibration Holding time	%D=21.3 HT=17 dy	%D<15 HT=14 dy	4.6	UJ
91054 (HGLSB3020-0809) RE	Naled	Continuing calibration Holding time	%D=32.1 HT=17 dy	%D<15 HT=14 dy	6	UJ
91054 (HGLSB3020-0809) RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=17 dy	HT=14 dy	7.8	UJ
91054 (HGLSB3020-0809) RE	Phorate	Holding time	HT=17 dy	HT=14 dy	5.7	UJ
91054 (HGLSB3020-0809) RE	Ronnel	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91054 (HGLSB3020-0809) RE	Sulfotepp	Holding time	HT=17 dy	HT=14 dy	6.3	UJ
91054 (HGLSB3020-0809) RE	Tetrachlorvinphos (Stirophos)	Continuing calibration Holding time	%D=41.2 HT=17 dy	%D<15 HT=14 dy	4.4	UJ
91054 (HGLSB3020-0809) RE	Thionazin	Holding time	HT=17 dy	HT=14 dy	5.6	UJ
91054 (HGLSB3020-0809) RE	Tokuthion	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91054 (HGLSB3020-0809) RE	Trichloronate	Holding time	HT=17 dy	HT=14 dy	6.2	UJ
91057 (HGLSBDup-07)	Azinphos-methyl	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Bolstar	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Chlorpyrifos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Coumaphos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ

91057 (HGLSBDup-07)	Demeton (total)	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	39	UJ
91057 (HGLSBDup-07)	Demeton-O	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	39	UJ
91057 (HGLSBDup-07)	Demeton-S	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Diazinon	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	22	UJ
91057 (HGLSBDup-07)	Dichlorvos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	23	UJ
91057 (HGLSBDup-07)	Dimethoate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	22	UJ
91057 (HGLSBDup-07)	Disulfoton	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	48	UJ
91057 (HGLSBDup-07)	EPN	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Ethoprop	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Ethyl parathion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	18	UJ
91057 (HGLSBDup-07)	Famphur	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Fensulfothion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	13	UJ
91057 (HGLSBDup-07)	Fenthion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	33	UJ
91057 (HGLSBDup-07)	Malathion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Merphos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	30	UJ
91057 (HGLSBDup-07)	Methyl parathion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Mevinphos	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Naled	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	33	UJ
91057 (HGLSBDup-07)	O,O,O-Triethyl phosphorothioate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	39	UJ
91057 (HGLSBDup-07)	Phorate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ

91057 (HGLSBDup-07)	Ronnel	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	18	UJ
91057 (HGLSBDup-07)	Sulfotepp	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Tetrachlorvinphos (Stirophos)	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	15	UJ
91057 (HGLSBDup-07)	Thionazin	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	18	UJ
91057 (HGLSBDup-07)	Tokuthion	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
91057 (HGLSBDup-07)	Trichloronate	Surrogates	%R=23 %R-44	%R=37-124 %R=50-150	20	UJ
Chlorphenoxy Herbicide Data Qualifiers						
	None					
TCLP Chlorphenoxy Herbicide Data Qualifiers						
	None					
UDMH Data Qualifiers						
	None					

Attachment 3 Communications with the Laboratory

Quality by Design
97 Puhili Street
Hilo, Hawaii 96720
Phone: (808) 969-9424 Fax: (808) 969-9094
e-mail: qbd-hilo@hawaiiantel.net

FACSIMILE TRANSMISSION SHEET

DATE: November 9, 2006	FAX NUMBER: (303) 431-7171
TO: STL Denver	FROM: Tom Davis
ATTENTION: Patrick McEntee	TOTAL NUMBER OF PAGES INCLUDING COVER: 3
CC: Sarah Gillette, HGL	FAX NUMBER: (703) 471-4180
QBD FILE: HGL1296O	SENDING HARD COPY? __ YES XXX NO

Mr. McEntee –

I don't think that we've met or talked before, but we have been reviewing some data for HydroGeoLogic's Holloman AFB project, which were analyzed at your laboratory as Job No. D6E240388 under subcontract to Trace Analysis, Inc. in June, 2006, and signed by you. If there are any questions about our relationship with HGL or Trace Analysis, please give Ken Rapuano or Sarah Gillette a call at the HGL office in Herndon, Virginia at (703) 326-7823.

I'm faxing a copy of the COC and the Sample Receipt form from STL Denver. Could you check out some issues for me?

1. The dates and times relinquished and the dates and times received by the laboratory do not match on the COC form. This is almost always likely due to the shipping courier not being recorded. However, the shipping waybill was not documented, so we cannot trace the shipment. Would you have a copy of the waybill or the waybill number?

2. In the case narrative regarding receipt of the samples, there is an incomplete sentence: "The client was informed that Samples 91023, 91024, and 91025". Does this refer to anything that a data validator needs to know about?

3. In the case narrative regarding receipt of the samples, it states that the samples were received under chain-of-custody and with custody seals. On the Sample Receipt Checklist, it states that cooler seals were not intact and that chain-of-custody does not agree with the samples and labels. In both cases, the corrective action is to be documented on a CUR (Condition Upon Receipt Anomaly Report), but a CUR is not included in the data package that addresses both issues. Could you rustle up a copy of this CUR for both items?

Please give me a call if you foresee any problems. We can accept this data in any fashion that is easiest for you: fax, PDF by e-mail, or hard copy. Thank you for your help.

Case Narrative

The results included in this report have been reviewed for compliance with STL's Quality Assurance/Quality Control (QA/QC) plan. The test results shown in this report meet all requirements of NELAC and any exceptions are noted below.

Dilution factors and footnotes have been provided to assist in the interpretation of the results. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interferences or analytes present at concentrations above the linear calibration curve, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the analytical methods summary page in accordance with the methods indicated. A summary of quality control parameters is provided below.

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Quality Control Summary for Lot D6E240388

Sample Receiving

STL Denver received fourty-one solid samples and two aqueous samples under chain of custody on May 24, 2006.

The cooler temperatures at receipt were acceptable at 2.4°C and 3.0°C.

The client was informed that samples 91023, 91024 and 91025.

The cooler was received with custody seals.

Organophosphorous Pesticides by GC, Method SW846 8141A

The LCS for prep batch 6149033 exhibited recoveries below the acceptance limits for all analytes and one of two surrogates (chlormefos). With the exception of samples 91001, 91006, 91043, 91048 and 91049 for which insufficient sample volume remained, the batch was re-extracted (prep batch 6157599) and reanalyzed (unavoidably) outside the recommended sample holding time. Upon reanalysis, the LCS was in control. The original (prep batch 6149033) and the re-extract/reanalysis (prep batch 6157599) data have been reported per client request.

The LCS for prep batch 6151496 exhibited recoveries below the acceptance limits for all but one analyte and one of two surrogates (chlormefos). In addition, surrogate triphenyl phosphate recovered low in sample 91051 and chlormefos and triphenyl phosphate recovered low in sample 91057. With the exception of samples 91051, 91056, 91057 and 91059 for which insufficient sample volume remained, sample 91054 batch was re-extracted (prep batch 6157599) and reanalyzed (unavoidably) outside the recommended sample holding time. Upon reanalysis, the LCS was in control. The original (prep batch 615496) and the re-extract/reanalysis (prep batch 6157599) data have been reported per client request.

STL Denver

Sample Receiving Checklist

Lot #: D6E240388 Date/Time Received: 5.24.06 0900

Company Name & Sampling Site: Trace Analysis

PM to Complete This Section:	*Yes*	*No*		*Yes*	*No*
Residual chlorine check required:	☐	☑	Quarantined :	☐	☑

Quote #: 69763

Special Instructions:

Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): 2

Temperatures (°C): 2.4 3.6

N/A	*Yes*	*No*		*Initials*
☐	☐	☑	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	
☐	☐	☐	2. Chain of custody present? If no, document on CUR.	
☐	☐	☑	3. Bottles broken and/or are leaking? If yes, document on CUR.	
☐	☐	☑	4. Multiphasic samples obvious? If yes, document on CUR.	
☐	☑	☐	5. Proper container & preservatives used? (ref. Attachment D of SOP# DEN-QA-0003) If no, document on CUR.	
☐	☐	☐	6. pH of all samples checked and meet requirements? If no, document on CUR.	
☐	☑	☐	7. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DEN-QA-0003) If no, document on CUR, and contact PM before proceeding.	
☐	☐	☑	8. Did chain of custody agree with labels ID and samples received? If no, document on CUR.	
☐	☐	☐	9. Were VOA samples without headspace? If no, document on CUR.	
☐	☐	☐	10. Were VOA vials preserved? Preservative ☐HCl ☐4±2°C ☐Sodium Thiosulfate ☐ Ascorbic Acid	
☐	☑	☐	11. Did samples require preservation with sodium thiosulfate?	
☐	☐	☐	12. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.	
☐	☐	☐	13. Sediment present in dissolved/filtered bottles? If yes, document on CUR.	
☐	☐	☐	14. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
☐	☐	☐	15. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
☐	☐	☐	16. Are analyses with short holding times requested?	
☐	☐	☐	17. Was a quick Turn Around (TAT) requested?	

TRANSMISSION VERIFICATION REPORT

TIME : 11/09/2006 19:30
NAME : QUALITY BY DESIGN
FAX : 8089699094
TEL : 8089699424
SER.# : 000M5J357360

DATE,TIME	11/09 19:29
FAX NO./NAME	13034317171
DURATION	00:00:55
PAGE(S)	03
RESULT	OK
MODE	FINE ECM

Quality by Design
97 Puhili Street
Hilo, Hawaii 96720
Phone: (808) 969-9424 Fax: (808) 969-9094
e-mail: qbd-hilo@hawaiiantel.net

FACSIMILE TRANSMISSION SHEET

DATE: November 9, 2006	FAX NUMBER: (303) 431-7171
TO: STL Denver	FROM: Tom Davis
ATTENTION: Patrick McEntee	TOTAL NUMBER OF PAGES INCLUDING COVER: 3
CC: Sarah Gillette, HGL	FAX NUMBER: (703) 471-4180
QBD FILE: HGL1296O	SENDING HARD COPY? __ YES XXX NO

Mr. McEntee –

I don't think that we've met or talked before, but we have been reviewing some data for HydroGeoLogic's Holloman AFB project, which were analyzed at your laboratory as Job No. D6E240388 under subcontract to Trace Analysis, Inc. in June, 2006, and signed by you. If there are any questions about our relationship with HGL or Trace Analysis, please give Ken Rapuano or Sarah Gillette a call at the HGL office in Herndon, Virginia at (703) 326-7823.

I'm faxing a copy of the COC and the Sample Receipt form from STL Denver. Could you check out some issues for me?

1. The dates and times relinquished and the dates and times received by the laboratory do not match on the COC form. This is almost always likely due to the shipping courier not being recorded. However, the shipping waybill was not documented, so we cannot trace the shipment. Would you have a copy of the waybill or the waybill number?

TRANSMISSION VERIFICATION REPORT

TIME : 11/09/2006 19:31
NAME : QUALITY BY DESIGN
FAX : 8089699094
TEL : 8089699424
SER.# : 000M5J357360

DATE,TIME	11/09 19:30
FAX NO./NAME	17034714180
DURATION	00:01:06
PAGE(S)	03
RESULT	OK
MODE	FINE ECM

Quality by Design
97 Puhili Street
Hilo, Hawaii 96720
Phone: (808) 969-9424 Fax: (808) 969-9094
e-mail: qbd-hilo@hawaiiantel.net

FACSIMILE TRANSMISSION SHEET

DATE: November 9, 2006	FAX NUMBER: (303) 431-7171
TO: STL Denver	FROM: Tom Davis
ATTENTION: Patrick McEntee	TOTAL NUMBER OF PAGES INCLUDING COVER: 3
CC: Sarah Gillette, HGL	FAX NUMBER: (703) 471-4180
QBD FILE: HGL1296O	SENDING HARD COPY? __ YES XXX NO

Mr. McEntee –

I don't think that we've met or talked before, but we have been reviewing some data for HydroGeoLogic's Holloman AFB project, which were analyzed at your laboratory as Job No. D6E240388 under subcontract to Trace Analysis, Inc. in June, 2006, and signed by you. If there are any questions about our relationship with HGL or Trace Analysis, please give Ken Rapuano or Sarah Gillette a call at the HGL office in Herndon, Virginia at (703) 326-7823.

I'm faxing a copy of the COC and the Sample Receipt form from STL Denver. Could you check out some issues for me?

1. The dates and times relinquished and the dates and times received by the laboratory do not match on the COC form. This is almost always likely due to the shipping courier not being recorded. However, the shipping waybill was not documented, so we cannot trace the shipment. Would you have a copy of the waybill or the waybill number?

>
>>From: "McEntee, Pat" <PMcEntee@stl-inc.com>
>>To: <qbd-hilo@hawaiiantel.net>
>>Subject: Holloman Response: STL Denver Lot D6E240388
>>Date: Thu, 16 Nov 2006 10:38:08 -0700
>>
>>Tom, I think I covered all your questions. Please see attached. Thanks!
>>
>>
>>
>>Patrick J. McEntee
>>Project Manager
>>Severn Trent Laboratories, Inc.
>>4955 Yarrow Street
>>Arvada, CO 80002
>>
>>Main (303) 736-0100 x107
>>Direct (303) 736-0107
>>Fax (303) 432-8925
>>pmcentee@stl-inc.com
>>Leaders in Environmental Testing
>>
>>
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>>intended only for the use of the addressee, and may be confidential
>>and/or privileged. If the reader of this message is not the intended
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>>intended recipient, you are hereby notified that any dissemination,
>>distribution or copying of this communication is strictly prohibited.
>>If you have received this communication in error, please notify the
>>sender immediately.
>>
>
>_____
>Dave vs. Carl: The Insignificant Championship Series. Who will win?
>http://clk.atdmt.com/MSN/go/msnnkwsp0070000001msn/direct/01/?href=http://da
>vevscarl.spaces.live.com/?icid=T001MSN38C07001

STL Denver
Condition Upon Receipt Anomaly Report (CUR)

Lot No : D6E240388 Date/Time: 5.24.06

Client : TRACO Initiated by: SM

Affected Samples COC# _____

Client ID	Lab ID	Analyses Requested

CONDITION/ANOMALY/VARIANCE (CHECK ALL THAT APPLY):

☐COOLERS ☐Received, No Chain of Custody (COC) ☐Not Received but COC(s) Available ☐Leaking ☐Other: _____	☐CUSTODY SEALS (COOLER(S)/CONTAINER(S) ☒None ☐ Not Intact ☐Other: _____
☐ TEMPERATURE (greater than 6° C) ☐Cooler Temp _____ ☐Temperature Blank _____	☐CHAIN OF CUSTODY (COCs) ☐Not relinquished by Client; No date/time Relinq. ☐ Incomplete Information ☐Other: _____
☐CONTAINERS ☐Leaking ☐Broken ☐Extra ☐Without Labels ☐VOA Vials with Headspace _____mm ☐Other: _____	☐ CONTAINER LABELS ☐Not the same ID/info as in COC ☐ Incomplete ☐ID COLLECTION ☐Time ☐Date ☐PRESERVATIVE ☐ Markings/Info smeared or illegible ☐Torn ☐Other: _____
☐ SAMPLES ☐Samples NOT RECEIVED but listed on COC ----- ☐Samples received but NOT LISTED on COC ☐Logged based on Label Information ☐Logged based on info from other samples on COC ☐ Logged according to Work Plan ☐Logged on HOLD UNTIL FURTHER NOTICE ☐ Other: _____	☐will be noted on COC Client to send samples with new COC ☐ Trip Blank received, not on COC, _____vials received ☐ Mislabeled as to tests, preservatives, etc. ☐Holding time expired ☐ Improper container used ☐Not preserved / Improper preservative used ☐ Improper pH _____ ☐ Lab to preserve sample ☐ Insufficient quantities for analysis

Comments: PAGE 3 91023, 91024, 91025 NOT RECEIVED
NO SEALS ON COOLERS

Corrective Action:

☑ Client Informed: verbally on: _____ By: _____ : In writing on: 5/25/06 By: [illegible]

☑ Sample(s) processed "as is". narrate

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: _____ Date: 5.24.06

Project Management Review: _____ Date: 5/25/06

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

FROM: VICKI HENSLEY
TRACE ANALYSIS, INC.
SUITE 9
6701 ABERDEEN AVE.
LUBBOCK, TX 79424
806-794-1296

WEIGHT (Lbs)
1

PIECES
2 of 4

TO:
STL DENVER

4955 YARROW ST.

ARVADA, CO 80002
Attn: STL DENVER
Ref:
Phone: 806-794-1296

ZIPCODE
80002

ORIGIN SHIPMENT NO SHIP DATE
LBB 16293145256 2006-05-23

DHL

DESCRIPTION:

SERVICE
EXP

SPECIAL HANDLING SERVICES
1030

WDNH 9E

16293145256

International Shipping Notice - Carriage hereunder may be subject to the rules relating to liability and other terms and/or conditions established by the Convention for the Unification of Certain Rules Relating to International Carriage by Air (the "Warsaw Convention") and/or the Convention on the Contract for the International Carriage of Goods by Road (the "CMR Convention"). These commodities, technology or software were exported from the U.S. in accordance with the Export Administration Regulations. Diversion contrary to U.S. law prohibited. For shipping place, call 1-800-782-7892.
United Parcel Service, Louisville, KY

FROM: VICKI HENSLEY
TRACE ANALYSIS, INC
SUITE 9
6701 ABERDEEN AVE.
LUBBOCK, TX 79424
806-794-1296
WEIGHT(Lbs)
1
PIECES
1 of 4
ZIPCODE
80002
TO:
STL DENVER
4955 YARROW ST.
ARVADA, CO 80002
Attn: STL DENVER
Ref:
Phone: 806-794-1296
SHIP DATE
2006-05-23
DHL
ORIGIN SHIPMENT NO
LBB 16293144350
DESCRIPTION:
SPECIAL HANDLING SERVICES
SERVICE
EXP
1030
WDNH 9E
16293144350

SEVERN TRENT STL

STL Denver
4955 Yarrow Street
Arvada, CO 80002

Tel: 303 736 0100 Fax: 303 431 7171
www.stl-inc.com

Revised
ANALYTICAL REPORT

STL Denver Lot: D6E240388

Nell Green

Trace Analysis, Inc.
6701 Aberdeen Avenue
Lubbock, TX 79424

Patrick J. McEntee
Project Manager

June 19, 2006
Revision Date: November 16, 2006

Case Narrative

The results included in this report have been reviewed for compliance with STL's Quality Assurance/Quality Control (QA/QC) plan. The test results shown in this report meet all requirements of NELAC and any exceptions are noted below.

Dilution factors and footnotes have been provided to assist in the interpretation of the results. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interferences or analytes present at concentrations above the linear calibration curve, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the analytical methods summary page in accordance with the methods indicated. A summary of quality control parameters is provided below.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Quality Control Summary for Lot D6E240388

Sample Receiving
STL Denver received fourty-one solid samples and two aqueous samples under chain of custody on May 24, 2006.

The cooler temperatures at receipt were acceptable at 2.4°C and 3.0°C.

The client was informed that samples 91023, 91024 and 91025 were not received.

The cooler was received without custody seals.

Organophosphorous Pesticides by GC, Method SW846 8141A
The LCS for prep batch 6149033 exhibited recoveries below the acceptance limits for all analytes and one of two surrogates (chlormefos). With the exception of samples 91001, 91006, 91043, 91048 and 91049 for which insufficient sample volume remained, the batch was re-extracted (prep batch 6157599) and reanalyzed (unavoidably) outside the recommended sample holding time. Upon reanalysis, the LCS was in control. The original (prep batch 6149033) and the re-extract/reanalysis (prep batch 6157599) data have been reported per client request.

The LCS for prep batch 6151496 exhibited recoveries below the acceptance limits for all but one analyte and one of two surrogates (chlormefos). In addition, surrogate triphenyl phosphate recovered low in sample 91051 and chlormefos and triphenyl phosphate recovered low in sample 91057. With the exception of samples 91051, 91056, 91057 and 91059 for which insufficient sample volume remained, sample 91054 batch was re-extracted (prep batch 6157599) and reanalyzed (unavoidably) outside the recommended sample holding time. Upon reanalysis, the LCS was in control. The original (prep batch 615496) and the re-extract/reanalysis (prep batch 6157599) data have been reported per client request.

Quality Control Summary for Lot D6E240388

Due to insufficient sample volume provided by the client, samples 91001, the reprep of sample 91050 and the re-prep of sample 91054 are reported at a dilution. The reporting limits are elevated relative to the dilution.

The Continuing Calibration Verification (CCV) standard(s) associated with the sample in prep batch 6145529 exhibited %Difference (%D) values out of range, bias low, for azinphos-methyl and demeton-S. The overall mean %D is within control limits; therefore, method criteria have been met and corrective action is deemed unnecessary.

A MS/MSD could not be performed for prep batches 6145529, 615496 and 6157599 due to insufficient sample volume submitted.

The Continuing Calibration Verification (CCV) standard(s) associated with the sample in prep batch 6157599 exhibited %Difference (%D) values out of range, bias low, for fensulfothion, methyl parathion, azinophos-methyl, coumaphos, dichlorvos, dimethoate, malthion, mevinphos, naled, EPN and tetrachlorovinphos. The overall mean %D is slightly outside of control limits at 15.7% as a result of matrix interference from the samples.

The Continuing Calibration Verification (CCV) standard(s) associated with the sample in prep batch 6151496 exhibited %Difference (%D) values out of range, bias low, for methyl parathion, runnel, fenthion, trichloronate, tokuthion and EPN. The overall mean %D is within control limits; therefore, method criteria have been met and corrective action is deemed unnecessary.

The Continuing Calibration Verification (CCV) standard(s) associated with the sample in prep batch 6149033 exhibited %Difference (%D) values out of range, bias low, for fensulfothion and biased high for naled. The overall mean %D is within control limits; therefore, method criteria have been met and corrective action is deemed unnecessary.

No other anomalies were observed.

Chlorinated Herbicides by GC, Method SW846 8151A

A MS/MSD could not be performed for prep batches 6145598, 6150117 and 6152231, due to insufficient sample volume submitted. The acceptable LCS analyte recoveries provide evidence that the laboratory is performing the method within acceptable guidelines.

Due to insufficient sample volume submitted by the client, samples 91049, 91051 and 91057 were analyzed at a dilution. The reporting limits are elevated as a result.

No other anomalies were observed.

TCLP Chlorinated Herbicides by GC, Method SW846 8151A

The Continuing Calibration Verification (CCV) standard(s) associated with the sample in prep batch 6160096 exhibited %Difference (%D) values out of range, bias high for 2,4-D. The overall mean %D is within control limits; therefore, method criteria have been met and corrective action is deemed unnecessary.

No other anomalies were observed.

Quality Control Summary for Lot D6E240388

UDMH, Method STL-SOP UDMH
No anomalies were observed.

Revision changes
The statement in the Case Narrative "The client was informed that samples 91023, 91024 and 91025." was changed to read "The client was informed that samples 91023, 91024 and 91025 were not received."

The statement in the Case Narrative "The cooler was received with custody seals." was changed to "The cooler was received without custody seals".

McEntee, Pat

From: pmcentee@stl-inc.com
Sent: Thursday, May 25, 2006 9:20 AM
To: mabel@traceanalysis.com; ngreen@traceanalysis.com
Subject: Information for D6E240388

Sample
ifirmation for D6E2

* *

Lot ID: D6E240388
Project Name/Site: Trace Analysis

Nell, we did not receive samples 91023, 91024 and 91025. Please confirm that the login is correct. I assumed that STL Denver Quote 69763 applies to this work. Please correct me if I made the wrong assumption.

Also, we will not run moisture on the soils unless it is requested on the COC.

Per quote 69763, raw data will be provided. Thanks

This message and any files transmitted with it are confidential and intended solely for the use of the addressee. If you have received this message in error please notify the sender and destroy your copies of the message and any attached files.

[00264062]
Version: 2.1.10

Attachment 4 Revised/Reviewed Laboratory Forms

Trace Analysis Inc

Client Sample ID: 91001

GC Semivolatiles

Lot-Sample #...: D6E240388-002	**Work Order #...:** H544F1AD	**Matrix.....:** SOLID	
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06		
Prep Date.....: 05/29/06	**Analysis Date..:** 06/04/06		
Prep Batch #...: 6149033	**Analysis Time..:** 02:59		
Dilution Factor: 2.72			
	Method.....: SW846 8141A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Azinphos-methyl	ND	35	ug/kg	9.5	
Bolstar	ND	35	ug/kg	12	
Chlorpyrifos	ND	54	ug/kg	18	
Coumaphos	ND	35	ug/kg	7.6	
Demeton (total)	ND	110	ug/kg	20	
Diazinon	ND	60	ug/kg	20	
Dichlorvos	ND	63	ug/kg	20	
Dimethoate	**72 CHI**	**60**	**ug/kg**	**19**	NF
Disulfoton	ND	130	ug/kg	21	
Ethoprop	ND	41	ug/kg	13	
Ethyl parathion	ND	49	ug/kg	14	
Famphur	ND	35	ug/kg	8.8	
Fensulfothion	ND	35	ug/kg	7.9	
Fenthion	ND	90	ug/kg	29	
Malathion	ND	41	ug/kg	13	
Merphos	ND	82	ug/kg	26	
Methyl parathion	ND	54	ug/kg	17	
Mevinphos	ND	41	ug/kg	13	
Naled	ND	90	ug/kg	16	
O,O,O-Triethylphosphoro-thioate	ND	110	ug/kg	7.8	
Phorate	ND	54	ug/kg	16	
Ronnel	ND	49	ug/kg	15	
Sulfotepp	ND	54	ug/kg	17	
Thionazin	ND	49	ug/kg	15	
Tokuthion	ND	54	ug/kg	17	
Trichloronate	ND	54	ug/kg	17	
EPN	ND	35	ug/kg	10	
Demeton-O	ND	110	ug/kg	14	
Demeton-S	ND	41	ug/kg	13	
Tetrachlorvinphos (Stirophos)	ND	41	ug/kg	4.4	

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	45	(37 - 124)
Triphenyl phosphate	100	(50 - 150)

NOTE(S):

CHI More than 40% RPD between primary and confirmation column results. The higher of the two results is reported.

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91003

GC Semivolatiles

Lot-Sample #...: D6E240388-004 **Work Order #...:** H544H1AD **Matrix.....:** SOLID
Date Sampled...: 05/17/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 03:31
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	49	(37 - 124)
Triphenyl phosphate	111	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91003

GC Semivolatiles

Lot-Sample #...: D6E240388-004 **Work Order #...:** H544H2AD **Matrix.....:** SOLID
Date Sampled...: 05/17/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 05:14
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	**11 J**	**22**	**ug/kg**	**7.1**
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	68	(37 - 124)
Triphenyl phosphate	107	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91005

GC Semivolatiles

Lot-Sample #...: D6E240388-006 **Work Order #...:** H544K1AD **Matrix.....:** SOLID
Date Sampled...: 05/17/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 04:03
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	60	(37 - 124)
Triphenyl phosphate	95	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91005

GC Semivolatiles

Lot-Sample #...: D6E240388-006 **Work Order #...:** H544K2AD **Matrix.....:** SOLID
Date Sampled...: 05/17/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 05:46
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	68	(37 - 124)
Triphenyl phosphate	105	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91006

GC Semivolatiles

Lot-Sample #...: D6E240388-007 **Work Order #...:** H544L1AD **Matrix.....:** SOLID
Date Sampled...: 05/17/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 04:35
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	63	(37 - 124)
Triphenyl phosphate	102	(50 - 150)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91009

GC Semivolatiles

Lot-Sample #...: D6E240388-009 **Work Order #...:** H544Q1AC **Matrix.....:** WATER
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/03/06
Prep Batch #...: 6145529 **Analysis Time..:** 12:08
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Azinphos-methyl	ND	2.5	ug/L	0.45	UJ
Bolstar	ND	1.0	ug/L	0.31	
Chlorpyrifos	ND	0.50	ug/L	0.16	
Coumaphos	ND	1.0	ug/L	0.28	
Demeton (total)	ND	1.0	ug/L	0.22	
Diazinon	ND	0.50	ug/L	0.15	
Dichlorvos	ND	0.50	ug/L	0.16	
Dimethoate	ND	0.50	ug/L	0.16	
Disulfoton	ND	0.50	ug/L	0.14	
Ethoprop	ND	0.50	ug/L	0.13	
Ethyl parathion	ND	1.0	ug/L	0.29	
Famphur	ND	1.0	ug/L	0.18	
Fensulfothion	ND	2.5	ug/L	0.54	
Fenthion	ND	2.5	ug/L	0.78	
Malathion	ND	1.2	ug/L	0.096	
Merphos	ND	5.0	ug/L	0.30	
Methyl parathion	ND	4.0	ug/L	1.3	
Mevinphos	ND	6.2	ug/L	0.12	
Naled	ND	0.80	ug/L	0.21	
O,O,O-Triethylphosphoro-thioate	ND	0.50	ug/L	0.14	
Phorate	ND	1.2	ug/L	0.072	
Ronnel	ND	10	ug/L	0.068	
Sulfotepp	ND	1.5	ug/L	0.50	
Thionazin	ND	0.50	ug/L	0.063	
Tokuthion	ND	1.6	ug/L	0.52	
Trichloronate	ND	0.50	ug/L	0.16	
EPN	ND	1.2	ug/L	0.38	
Demeton-O	ND	1.0	ug/L	0.84	
Demeton-S	ND	1.0	ug/L	0.15	UJ
Tetrachlorvinphos (Stirophos)	ND	3.5	ug/L	1.2	

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	103	(45 - 186)
Triphenyl phosphate	97	(50 - 150)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91039

GC Semivolatiles

Lot-Sample #...: D6E240388-021 **Work Order #...:** H54481AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 05:06
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	**12 J**	**13**	**ug/kg**	**3.5**
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	**79 COL**	**33**	**ug/kg**	**6.0**
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	68	(37 - 124)
Triphenyl phosphate	103	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

COL More than 40% RPD between primary and confirmation column results. The lower of the two results is reported.

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91039

GC Semivolatiles

Lot-Sample #...: D6E240388-021	**Work Order #...:** H54482AD	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Prep Date.....: 06/06/06	**Analysis Date..:** 06/14/06	
Prep Batch #...: 6157599	**Analysis Time..:** 06:17	
Dilution Factor: 1		
	Method.....: SW846 8141A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	64	(37 - 124)
Triphenyl phosphate	91	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91041

GC Semivolatiles

Lot-Sample #...: D6E240388-023 **Work Order #...:** H545A1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 05:38
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Azinphos-methyl	ND	13	ug/kg	3.5	X
Bolstar	ND	13	ug/kg	4.2	
Chlorpyrifos	ND	20	ug/kg	6.5	
Coumaphos	ND	13	ug/kg	2.8	
Demeton (total)	ND	39	ug/kg	7.5	
Diazinon	ND	22	ug/kg	7.3	
Dichlorvos	ND	23	ug/kg	7.4	
Dimethoate	ND	22	ug/kg	7.1	
Disulfoton	ND	48	ug/kg	7.7	
Ethoprop	ND	15	ug/kg	4.9	
Ethyl parathion	ND	18	ug/kg	5.3	
Famphur	ND	13	ug/kg	3.2	
Fensulfothion	ND	13	ug/kg	2.9	
Fenthion	ND	33	ug/kg	11	
Malathion	ND	15	ug/kg	4.6	
Merphos	ND	30	ug/kg	9.4	
Methyl parathion	ND	20	ug/kg	6.4	
Mevinphos	ND	15	ug/kg	4.6	
Naled	**76**	**33**	**ug/kg**	**6.0**	
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8	
Phorate	ND	20	ug/kg	5.7	
Ronnel	ND	18	ug/kg	5.6	
Sulfotepp	ND	20	ug/kg	6.3	
Thionazin	ND	18	ug/kg	5.6	
Tokuthion	ND	20	ug/kg	6.2	
Trichloronate	ND	20	ug/kg	6.2	
EPN	ND	13	ug/kg	3.7	
Demeton-O	ND	39	ug/kg	5.3	
Demeton-S	ND	15	ug/kg	4.9	
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4	

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	67	(37 - 124)
Triphenyl phosphate	108	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91041

GC Semivolatiles

Lot-Sample #...: D6E240388-023 **Work Order #...:** H545A2AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 06:49
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	**25 J**	**33**	**ug/kg**	**6.0**
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	82	(37 - 124)
Triphenyl phosphate	106	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91043

GC Semivolatiles

Lot-Sample #...: D6E240388-025 **Work Order #...:** H545F1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 06:10
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	**88**	**33**	**ug/kg**	**6.0**
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	56	(37 - 124)
Triphenyl phosphate	109	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91044

GC Semivolatiles

Lot-Sample #...: D6E240388-026 **Work Order #...:** H545G1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 06:42
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	74	(37 - 124)
Triphenyl phosphate	96	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91045

GC Semivolatiles

Lot-Sample #...: D6E240388-027 **Work Order #...:** H545H1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 07:45
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	66	(37 - 124)
Triphenyl phosphate	98	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91045

GC Semivolatiles

Lot-Sample #...: D6E240388-027 **Work Order #...:** H545H2AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 07:21
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	81	(37 - 124)
Triphenyl phosphate	95	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91046

GC Semivolatiles

Lot-Sample #...: D6E240388-028 **Work Order #...:** H545J1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 08:17
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	62	(37 - 124)
Triphenyl phosphate	96	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91046

GC Semivolatiles

Lot-Sample #...: D6E240388-028 **Work Order #...:** H545J2AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 07:53
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	60	(37 - 124)
Triphenyl phosphate	90	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91047

GC Semivolatiles

Lot-Sample #...: D6E240388-029 **Work Order #...:** H545M1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 08:49
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	61	(37 - 124)
Triphenyl phosphate	97	(50 - 150)

VALIDATED Level 3

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91047

GC Semivolatiles

Lot-Sample #...: D6E240388-029 **Work Order #...:** H545M2AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 08:24
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	82	(37 - 124)
Triphenyl phosphate	88	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91048

GC Semivolatiles

Lot-Sample #...: D6E240388-030 **Work Order #...:** H545N1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 09:20
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	79	(37 - 124)
Triphenyl phosphate	98	(50 - 150)

VALIDATED Level 3

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91049

GC Semivolatiles

Lot-Sample #...: D6E240388-031 **Work Order #...:** H545P1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 09:52
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	62	(37 - 124)
Triphenyl phosphate	93	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91050

GC Semivolatiles

Lot-Sample #...: D6E240388-032 **Work Order #...:** H545R1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/29/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6149033 **Analysis Time..:** 11:27
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	53	(37 - 124)
Triphenyl phosphate	95	(50 - 150)

VALIDATED Level 3

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91050

GC Semivolatiles

Lot-Sample #...: D6E240388-032 **Work Order #...:** H545R2AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 08:56
Dilution Factor: 1.36

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	18	ug/kg	4.8
Bolstar	ND	18	ug/kg	5.8
Chlorpyrifos	ND	27	ug/kg	8.8
Coumaphos	ND	18	ug/kg	3.8
Demeton (total)	ND	53	ug/kg	10
Diazinon	ND	30	ug/kg	9.9
Dichlorvos	ND	31	ug/kg	10
Dimethoate	ND	30	ug/kg	9.6
Disulfoton	ND	65	ug/kg	11
Ethoprop	ND	20	ug/kg	6.7
Ethyl parathion	ND	24	ug/kg	7.2
Famphur	ND	18	ug/kg	4.4
Fensulfothion	ND	18	ug/kg	4.0
Fenthion	ND	45	ug/kg	15
Malathion	ND	20	ug/kg	6.3
Merphos	ND	41	ug/kg	13
Methyl parathion	ND	27	ug/kg	8.7
Mevinphos	ND	20	ug/kg	6.3
Naled	ND	45	ug/kg	8.1
O,O,O-Triethylphosphoro-thioate	ND	53	ug/kg	7.8
Phorate	ND	27	ug/kg	7.8
Ronnel	ND	24	ug/kg	7.7
Sulfotepp	ND	27	ug/kg	8.5
Thionazin	ND	24	ug/kg	7.6
Tokuthion	ND	27	ug/kg	8.4
Trichloronate	ND	27	ug/kg	8.5
EPN	ND	18	ug/kg	5.0
Demeton-O	ND	53	ug/kg	7.2
Demeton-S	ND	20	ug/kg	6.6
Tetrachlorvinphos (Stirophos)	ND	20	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	99	(37 - 124)
Triphenyl phosphate	97	(50 - 150)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91051

GC Semivolatiles

Lot-Sample #...: D6E240388-033 **Work Order #...:** H545T1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/31/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6151496 **Analysis Time..:** 20:46
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	42	(37 - 124)
Triphenyl phosphate	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91054

GC Semivolatiles

Lot-Sample #...: D6E240388-036 **Work Order #...:** H545X1AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/31/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6151496 **Analysis Time..:** 21:17
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	**11 J**	**13**	**ug/kg**	**3.5**
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	**28 CHI**	**22**	**ug/kg**	**7.1**
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	**6.2 J,COL**	**15**	**ug/kg**	**4.6**
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	**80 COL**	**33**	**ug/kg**	**6.0**
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	54	(37 - 124)
Triphenyl phosphate	55	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

CHI More than 40% RPD between primary and confirmation column results. The higher of the two results is reported.

COL More than 40% RPD between primary and confirmation column results. The lower of the two results is reported.

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91054

GC Semivolatiles

Lot-Sample #...: D6E240388-036 **Work Order #...:** H545X2AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/06/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6157599 **Analysis Time..:** 10:00
Dilution Factor: 1.63

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	21	ug/kg	5.7
Bolstar	ND	21	ug/kg	6.9
Chlorpyrifos	ND	33	ug/kg	11
Coumaphos	ND	21	ug/kg	4.6
Demeton (total)	ND	64	ug/kg	12
Diazinon	ND	36	ug/kg	12
Dichlorvos	ND	37	ug/kg	12
Dimethoate	ND	36	ug/kg	12
Disulfoton	ND	78	ug/kg	13
Ethoprop	ND	24	ug/kg	8.0
Ethyl parathion	ND	29	ug/kg	8.6
Famphur	ND	21	ug/kg	5.2
Fensulfothion	ND	21	ug/kg	4.8
Fenthion	ND	54	ug/kg	18
Malathion	ND	24	ug/kg	7.6
Merphos	ND	49	ug/kg	15
Methyl parathion	ND	33	ug/kg	10
Mevinphos	ND	24	ug/kg	7.5
Naled	ND	54	ug/kg	9.7
O,O,O-Triethylphosphoro-thioate	ND	64	ug/kg	7.8
Phorate	ND	33	ug/kg	9.3
Ronnel	ND	29	ug/kg	9.2
Sulfotepp	ND	33	ug/kg	10
Thionazin	ND	29	ug/kg	9.1
Tokuthion	ND	33	ug/kg	10
Trichloronate	ND	33	ug/kg	10
EPN	ND	21	ug/kg	6.0
Demeton-O	ND	64	ug/kg	8.6
Demeton-S	ND	24	ug/kg	7.9
Tetrachlorvinphos (Stirophos)	ND	24	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	75	(37 - 124)
Triphenyl phosphate	107	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91056

GC Semivolatiles

Lot-Sample #...: D6E240388-038 **Work Order #...:** H54531AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/31/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6151496 **Analysis Time..:** 21:49
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	80	(37 - 124)
Triphenyl phosphate	98	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91057

GC Semivolatiles

Lot-Sample #...: D6E240388-039 **Work Order #...:** H54541AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/31/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6151496 **Analysis Time..:** 22:21
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	23 *	(37 - 124)
Triphenyl phosphate	44 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91059

GC Semivolatiles

Lot-Sample #...: D6E240388-041 **Work Order #...:** H54571AD **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/31/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6151496 **Analysis Time..:** 22:53
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	63	(37 - 124)
Triphenyl phosphate	79	(50 - 150)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91000

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-001	**Work Order #...:** H54391AA	**Matrix.....:** SOLID
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/30/06	**Analysis Date..:** 06/03/06
Leach Batch #..: P614604	**Prep Batch #...:** 6150096	**Analysis Time..:** 21:29
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	58	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91001

GC Semivolatiles

Lot-Sample #...: D6E240388-002 **Work Order #...:** H544F1AC **Matrix.....:** SOLID
Date Sampled...: 05/17/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6145598 **Analysis Time..:** 03:34
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	82	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91002

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-003	**Work Order #...:** H544G1AA	**Matrix.....:** SOLID
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/30/06	**Analysis Date..:** 06/04/06
Leach Batch #..: P614604	**Prep Batch #...:** 6150096	**Analysis Time..:** 00:12
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	60	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91003

GC Semivolatiles

Lot-Sample #...: D6E240388-004	**Work Order #...:** H544H1AC	**Matrix.....:** SOLID
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06	
Prep Date.....: 05/25/06	**Analysis Date..:** 06/04/06	
Prep Batch #...: 6145598	**Analysis Time..:** 04:14	
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	57	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91004

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-005	**Work Order #...:** H544J1AA	**Matrix.....:** SOLID
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/30/06	**Analysis Date..:** 06/04/06
Leach Batch #..: P614604	**Prep Batch #...:** 6150096	**Analysis Time..:** 00:52
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	65	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91005

GC Semivolatiles

Lot-Sample #...: D6E240388-006	**Work Order #...:** H544K1AC	**Matrix.....:** SOLID
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06	
Prep Date.....: 05/25/06	**Analysis Date..:** 06/04/06	
Prep Batch #...: 6145598	**Analysis Time..:** 04:55	
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	85	(30 - 138)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91006

GC Semivolatiles

Lot-Sample #...: D6E240388-007 Work Order #...: H544L1AC Matrix.....: SOLID
Date Sampled...: 05/17/06 Date Received..: 05/24/06
Prep Date.....: 05/25/06 Analysis Date..: 06/04/06
Prep Batch #...: 6145598 Analysis Time..: 05:35
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	76	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91007

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-008	**Work Order #...:** H544M1AA	**Matrix.....:** SOLID
Date Sampled...: 05/17/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/30/06	**Analysis Date..:** 06/04/06
Leach Batch #..: P614604	**Prep Batch #...:** 6150096	**Analysis Time..:** 01:33
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	92	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91009

GC Semivolatiles

Lot-Sample #...: D6E240388-009	**Work Order #...:** H544Q1AA	**Matrix.....:** WATER	
Date Sampled...: 05/18/06	**Date Received..:** 05/24/06		
Prep Date.....: 05/30/06	**Analysis Date..:** 06/03/06		
Prep Batch #...: 6150117	**Analysis Time..:** 09:04		
Dilution Factor: 1			
	Method.....: SW846 8151A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.74
2,4,5-T	ND	1.0	ug/L	0.19
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.11
Dinoseb	ND	0.60	ug/L	0.24

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	75	(46 - 152)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91036

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-020	**Work Order #...:** H54471AA	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/31/06	**Analysis Date..:** 06/06/06
Leach Batch #..: P614603	**Prep Batch #...:** 6151088	**Analysis Time..:** 01:20
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	61	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91039

GC Semivolatiles

Lot-Sample #...: D6E240388-021	**Work Order #...:** H54481AC	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Prep Date.....: 05/25/06	**Analysis Date..:** 06/04/06	
Prep Batch #...: 6145598	**Analysis Time..:** 06:15	
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	59	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91040

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-022	**Work Order #...:** H54491AA	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/31/06	**Analysis Date..:** 06/06/06
Leach Batch #..: P614603	**Prep Batch #...:** 6151088	**Analysis Time..:** 03:22
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	60	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91041

GC Semivolatiles

Lot-Sample #...: D6E240388-023	**Work Order #...:** H545A1AC	**Matrix.....:** SOLID	
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06		
Prep Date.....: 05/25/06	**Analysis Date..:** 06/04/06		
Prep Batch #...: 6145598	**Analysis Time..:** 07:36		
Dilution Factor: 1			
	Method.....: SW846 8151A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	79	(30 - 138)

VALIDATED Level 3

JD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91042

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-024	**Work Order #...:** H545E1AA	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/31/06	**Analysis Date..:** 06/06/06
Leach Batch #..: P614603	**Prep Batch #...:** 6151088	**Analysis Time..:** 04:02
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	62	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91043

GC Semivolatiles

Lot-Sample #...: D6E240388-025 **Work Order #...:** H545F1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6145598 **Analysis Time..:** 08:17
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	70	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91044

GC Semivolatiles

Lot-Sample #...: D6E240388-026	**Work Order #...:** H545G1AC	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Prep Date.....: 05/25/06	**Analysis Date..:** 06/04/06	
Prep Batch #...: 6145598	**Analysis Time..:** 08:57	
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	80	(30 - 138)

VALIDATED Level 3

FO

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91045

GC Semivolatiles

Lot-Sample #...: D6E240388-027 **Work Order #...:** H545H1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6145598 **Analysis Time..:** 09:38
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	63	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91046

GC Semivolatiles

Lot-Sample #...: D6E240388-028 **Work Order #...:** H545J1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6145598 **Analysis Time..:** 10:18
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	90	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91047

GC Semivolatiles

Lot-Sample #...: D6E240388-029 **Work Order #...:** H545M1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6145598 **Analysis Time..:** 10:59
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	82	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91048

GC Semivolatiles

Lot-Sample #...: D6E240388-030 **Work Order #...:** H545N1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 05/25/06 **Analysis Date..:** 06/04/06
Prep Batch #...: 6145598 **Analysis Time..:** 11:39
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	73	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91049

GC Semivolatiles

Lot-Sample #...: D6E240388-031 **Work Order #...:** H545P1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 10:15
Dilution Factor: 2.22

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	180	ug/kg	11
2,4,5-T	ND	44	ug/kg	8.3
2,4,5-TP (Silvex)	ND	44	ug/kg	4.0
Dinoseb	ND	27	ug/kg	4.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	53	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91050

GC Semivolatiles

Lot-Sample #...: D6E240388-032 **Work Order #...:** H545R1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 10:59
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	59	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91051

GC Semivolatiles

Lot-Sample #...: D6E240388-033 **Work Order #...:** H545T1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 11:42
Dilution Factor: 3.01

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	240	ug/kg	15
2,4,5-T	ND	60	ug/kg	11
2,4,5-TP (Silvex)	ND	60	ug/kg	5.4
Dinoseb	ND	36	ug/kg	5.7

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	65	(30 - 138)

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91053

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-035	**Work Order #...:** H545W1AA	**Matrix.....:** SOLID
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/31/06	**Analysis Date..:** 06/06/06
Leach Batch #..: P614603	**Prep Batch #...:** 6151088	**Analysis Time..:** 04:43
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	64	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91054

GC Semivolatiles

Lot-Sample #...: D6E240388-036 **Work Order #...:** H545X1AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 12:28
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	49	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91055

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-037	**Work Order #...:** H54511AA	**Matrix.....:** SOLID	
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06		
Leach Date.....: 05/25/06	**Prep Date.....:** 05/31/06	**Analysis Date..:** 06/06/06	
Leach Batch #..: P614603	**Prep Batch #...:** 6151088	**Analysis Time..:** 05:23	
Dilution Factor: 1			
	Method.....: SW846 8151A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	57	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91056

GC Semivolatiles

Lot-Sample #...: D6E240388-038 **Work Order #...:** H54531AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 13:12
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	62	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91057

GC Semivolatiles

Lot-Sample #...: D6E240388-039 **Work Order #...:** H54541AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 13:59
Dilution Factor: 1.3

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	100	ug/kg	6.3
2,4,5-T	ND	26	ug/kg	4.9
2,4,5-TP (Silvex)	ND	26	ug/kg	2.3
Dinoseb	ND	16	ug/kg	2.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	69	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91058

TCLP GC Semivolatiles

Lot-Sample #...:	D6E240388-040	**Work Order #...:**	H54561AA	**Matrix.....:**	SOLID
Date Sampled...:	05/19/06	**Date Received..:**	05/24/06		
Leach Date.....:	05/25/06	**Prep Date.....:**	05/31/06	**Analysis Date..:**	06/06/06
Leach Batch #..:	P614603	**Prep Batch #...:**	6151088	**Analysis Time..:**	06:03
Dilution Factor:	1				
		Method.....:	SW846 8151A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	59	(10 - 131)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

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Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91059

GC Semivolatiles

Lot-Sample #...: D6E240388-041 **Work Order #...:** H54571AC **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 14:45
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	75	(30 - 138)

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Trace Analysis Inc

Client Sample ID: 91062

TCLP GC Semivolatiles

Lot-Sample #...: D6E240388-042	**Work Order #...:** H54591AA	**Matrix.....:** WATER
Date Sampled...: 05/19/06	**Date Received..:** 05/24/06	
Leach Date.....: 05/25/06	**Prep Date.....:** 05/31/06	**Analysis Date..:** 06/05/06
Leach Batch #..: P614516	**Prep Batch #...:** 6151090	**Analysis Time..:** 21:16
Dilution Factor: 1		
	Method.....: SW846 8151A	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	0.040	mg/L	0.0074
2,4,5-TP (Silvex)	ND	0.010	mg/L	0.0011

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	71	(39 - 142)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91011

General Chemistry

Lot-Sample #...: D6E240388-010 **Work Order #...:** H544R **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 03:17 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91012

General Chemistry

Lot-Sample #...: D6E240388-011 **Work Order #...:** H544T **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 05:37 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91013

General Chemistry

Lot-Sample #...: D6E240388-012 **Work Order #...:** H544V **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 06:33 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91014

General Chemistry

Lot-Sample #...: D6E240388-013 **Work Order #...:** H544W **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 08:25 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91015

General Chemistry

Lot-Sample #...: D6E240388-014 **Work Order #...:** H544X **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 09:21 MDL.....: 13

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Client Sample ID: 91016

General Chemistry

Lot-Sample #...: D6E240388-015 **Work Order #...:** H5442 **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 11:14 MDL.....: 13

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Trace Analysis Inc

Client Sample ID: 91017

General Chemistry

Lot-Sample #...: D6E240388-016 **Work Order #...:** H5443 **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 12:10 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91018

General Chemistry

Lot-Sample #...: D6E240388-017 **Work Order #...:** H5444 **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 14:02 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91019

General Chemistry

Lot-Sample #...: D6E240388-018 **Work Order #...:** H5445 **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 14:58 MDL.....: 13

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Trace Analysis Inc

Client Sample ID: 91020

General Chemistry

Lot-Sample #...: D6E240388-019 **Work Order #...:** H5446 **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 16:50 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91052

General Chemistry

Lot-Sample #...: D6E240388-034 **Work Order #...:** H545V **Matrix.....:** SOLID
Date Sampled...: 05/19/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 19:39 MDL.....: 13

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December 19, 2006

Trace Analysis Inc

Client Sample ID: 91021

General Chemistry

Lot-Sample #...: D6E240388-043 **Work Order #...:** H547V **Matrix.....:** SOLID
Date Sampled...: 05/18/06 **Date Received..:** 05/24/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
UDMH	ND	100	ug/kg	STL-SOP UDMH	05/31-06/07/06	6158583

Dilution Factor: 1 Analysis Time..: 17:46 MDL.....: 13

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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils and Waters
Dates of Sampling: May 18-19, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
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SDG No. 6052223
Purchase Order No. P0000715
QBD Job No. 1296B

Reviewed and approved,

Thomas S. Davis 2/28/07

Thomas S. Davis, Principal Date

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Attachments

Attachment 1 Data Qualifier Flag Definitions
Attachment 2 Summary Table of Data Qualifier Flags

Attachment 3 Reviewed/Revised Laboratory Forms

A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; *"Functional Guidelines for Evaluating Inorganics Analyses,"* as revised, 2004; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package of a nine-page case narrative, a 215-page laboratory report and a 929-page supporting data package from TraceAnalysis, Inc. of Lubbock, Texas, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

All results were acceptable, although some received qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 8260B	Method 8270C	Method 8081
TB-051706	90999	Water	X		
HGLSB33-07-0203	91000	Soil			
HGLSB33-07-0405	91001	Soil	X	X	X
HGLSB33-08-0405	91002	Soil			
HGLSB33-08-1012	91003	Soil	X	X	X
HGLSB33-10-0405	91004	Soil			
HGLSB33-11-0607	91005	Soil	X	X	X
HGLSBDup-04	91006	Soil	X	X	X
HGLSBDup-05	91007	Soil			
TB051806	91008	Water	X		
HGLRB06-051806-AL	91009	Water	X	X	X
HGLRB06-051806HA	91010	Water			
HGLHA3901R-0204	91011	Soil			
HGLHA3901R-0708	91012	Soil			
HGLHA3902R-0204	91013	Soil			
HGLHA3902R-0809	91014	Soil			
HGLSB3902R-0204	91015	Soil			
HGLSB3902R-0910	91016	Soil			
HGLSBDup06	91017	Soil			
HGLSB3901R-0204	91018	Soil			
HGLSB3901R-0810	91019	Soil			
HGLSB39-17-0204	91020	Soil			
HGLSB39-17-0910	91021	Soil			
HGLSB27-05-0708	91022	Soil	X	X	
HGLSB3301-0809	91023	Soil	X	X	X
HGLSB33-02-0809	91024	Soil	X	X	X
HGLSB33-03-0809	91025	Soil	X	X	X

Sample Identification	Laboratory Identification	Method 8082	Method 8141	Method 8151	Method 8015Mod
TB-051706	90999				
HGLSB33-07-0203	91000				
HGLSB33-07-0405	91001	X	NR	NR	X
HGLSB33-08-0405	91002				
HGLSB33-08-1012	91003	X	NR	NR	X
HGLSB33-10-0405	91004				
HGLSB33-11-0607	91005	X	NR	NR	X

Sample Identification	Laboratory Identification	Method 8082	Method 8141	Method 8151	Method 8015Mod
HGLSBDup-04	91006	X	NR	NR	X
HGLSBDup-05	91007				
TB051806	91008				
HGLRB06-051806-AL	91009	X	NR	NR	X
HGLRB06-051806HA	91010				
HGLHA3901R-0204	91011				
HGLHA3901R-0708	91012				
HGLHA3902R-0204	91013				
HGLHA3902R-0809	91014				
HGLSB3902R-0204	91015				
HGLSB3902R-0910	91016				
HGLSBDup06	91017				
HGLSB3901R-0204	91018				
HGLSB3901R-0810	91019				
HGLSB39-17-0204	91020				
HGLSB39-17-0910	91021				
HGLSB27-05-0708	91022				X
HGLSB3301-0809	91023	X			X
HGLSB33-02-0809	91024	X			X
HGLSB33-03-0809	91025	X			X

Sample Identification	Laboratory Identification	Methods 6010B/7471	Haz Waste Character-istics	Methods 1311/8260B	Methods 1311/8270 C
TB-051706	90999				
HGLSB33-07-0203	91000		X	X	X
HGLSB33-07-0405	91001	X			
HGLSB33-08-0405	91002		X	X	X
HGLSB33-08-1012	91003	X			
HGLSB33-10-0405	91004		X	X	X
HGLSB33-11-0607	91005	X			
HGLSBDup-04	91006	X			
HGLSBDup-05	91007		X	X	X
TB051806	91008				
HGLRB06-051806-AL	91009	X			
HGLRB06-051806HA	91010	X			
HGLHA3901R-0204	91011	X			
HGLHA3901R-0708	91012	X			
HGLHA3902R-0204	91013	X			

Sample Identification	Laboratory Identification	Methods 6010B/7471	Haz Waste Character-istics	Methods 1311/8260B	Methods 1311/8270 C
HGLHA3902R-0809	91014	X			
HGLSB3902R-0204	91015	X			
HGLSB3902R-0910	91016	X			
HGLSBDup06	91017	X			
HGLSB3901R-0204	91018	X			
HGLSB3901R-0810	91019	X			
HGLSB39-17-0204	91020	X			
HGLSB39-17-0910	91021	X			
HGLSB27-05-0708	91022	X			
HGLSB3301-0809	91023	X			
HGLSB33-02-0809	91024	X			
HGLSB33-03-0809	91025	X			

Sample Identification	Laboratory Identification	Methods 1311/8081	Methods 1311/8151	Methods 1311/6010B /7471	Aniline
TB-051706	90999				
HGLSB33-07-0203	91000	X	NR	X	
HGLSB33-07-0405	91001				
HGLSB33-08-0405	91002	X	NR	X	
HGLSB33-08-1012	91003				
HGLSB33-10-0405	91004	X	NR	X	
HGLSB33-11-0607	91005				
HGLSBDup-04	91006				
HGLSBDup-05	91007	X	NR	X	
TB051806	91008				
HGLRB06-051806-AL	91009				
HGLRB06-051806HA	91010				X
HGLHA3901R-0204	91011				X
HGLHA3901R-0708	91012				X
HGLHA3902R-0204	91013				X
HGLHA3902R-0809	91014				X
HGLSB3902R-0204	91015				X
HGLSB3902R-0910	91016				X
HGLSBDup06	91017				X
HGLSB3901R-0204	91018				X
HGLSB3901R-0810	91019				X
HGLSB39-17-0204	91020				X

Sample Identification	Laboratory Identification	Methods 1311/8081	Methods 1311/8151	Methods 1311/6010B /7471	Aniline
HGLSB39-17-0910	91021				X
HGLSB27-05-0708	91022				
HGLSB3301-0809	91023				
HGLSB33-02-0809	91024				
HGLSB33-03-0809	91025				

Sample Identification	Laboratory Identification	UDMH			
TB-051706	90999				
HGLSB33-07-0203	91000				
HGLSB33-07-0405	91001				
HGLSB33-08-0405	91002				
HGLSB33-08-1012	91003				
HGLSB33-10-0405	91004				
HGLSB33-11-0607	91005				
HGLSBDup-04	91006				
HGLSBDup-05	91007				
TB051806	91008				
HGLRB06-051806-AL	91009				
HGLRB06-051806HA	91010				
HGLHA3901R-0204	91011	NR			
HGLHA3901R-0708	91012	NR			
HGLHA3902R-0204	91013	NR			
HGLHA3902R-0809	91014	NR			
HGLSB3902R-0204	91015	NR			
HGLSB3902R-0910	91016	NR			
HGLSBDup06	91017	NR			
HGLSB3901R-0204	91018	NR			
HGLSB3901R-0810	91019	NR			
HGLSB39-17-0204	91020	NR			
HGLSB39-17-0910	91021	NR			
HGLSB27-05-0708	91022				
HGLSB3301-0809	91023				
HGLSB33-02-0809	91024				
HGLSB33-03-0809	91025				

Key:

Method 8260B	=	Volatile Organics by GC/MS
Method 8270C	=	Semivolatile Organics by GC/MS *
Method 8081	=	Chlorinated Pesticides by GC
Method 8082	=	Polychlorinated Biphenyls by GC
Method 8141	=	Organophosphorus Pesticides by GC
Method 8151	=	Chlorphenoxy Herbicides by GC
Method 8015 Mod	=	TPH-GRO and TPH-DRO by GC
Methods 6010B/7471	=	Metals by ICP and CVAA
Method 9045	=	pH by probe
Haz Waste Characteristics	=	Reactivity, Corrosivity, Ignitability by SW-846, Chapter 7
Methods 1311/8260B	=	TCLP Volatile Organics by GC/MS
Methods 1311/8270C	=	TCLP Semivolatile Organics by GC/MS
Methods 1311/8082	=	TCLP Polychlorinated Biphenyls by GC
Methods 1311/8141	=	TCLP Organophosphorus Pesticides by GC
Methods 1311/8151	=	TCLP Herbicides by GC
Methods 1311/6010B/7471	=	TCLP Metals by ICP and CVAA
Aniline	=	Aniline by EPA 8270C (GC/MS)
UDMH	=	1,1-Dimethyl hydrazine by ion chromatography
NR	=	Not reported – Requested on COC, reported by lab and validated by QBD under separate cover

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
Method 8260B	6052304	Debbie Copsey	Thomas Davis
Method 8270C	6052304	Debbie Copsey	Thomas Davis
Method 8081	6052304	Debbie Copsey	Thomas Davis
Method 8082	6052304	Debbie Copsey	Thomas Davis
Method 8015 MOD	6052304	Lorraine Davis	Thomas Davis
Methods 6010B/7471	6052304	Lorraine Davis	Thomas Davis
Method 9045	6052304	Lorraine Davis	Thomas Davis
Haz Waste Characteristics	6052304	Lorraine Davis	Thomas Davis
Methods 1311/8260B	6052304	Debbie Copsey	Thomas Davis
Methods 1311/8270C	6052304	Debbie Copsey	Thomas Davis
Methods 1311/8082	6052304	Debbie Copsey	Thomas Davis
Methods 1311/6010B/7471	6052304	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The date and time relinquished and the date and time received by the laboratory do not match on the COC form. However, the shipping waybill was referenced and appropriate physical custody could be documented by obtaining shipping information from the courier service, so no data qualifier flags are recommended.

The COC contained several corrections that were not dated and initialed. No data qualifier flags are recommended, however, GLP stipulate that all corrections be dated and initialed.

E. Review of Volatile Organic Analyses by GC/MS

EPA Method 8260B

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment, field, and trip blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Nine target analytes were detected in the method blank associated with the water samples in QC Batch No. 26849, of which only toluene was a common laboratory contaminant. Three target analytes were detected in the method blank for soil samples in QC Batch No. 26929, of which toluene and methylene chloride were common laboratory contaminants. Six other target analytes were detected in the trip blank TB-051706 and four target analytes were detected in trip blank TB051806. For the analytes that were not common laboratory contaminants, the samples were evaluated in accordance with this decision tree, with any data qualifier flags listed in Table 3.

- If the sample result was less than five times (5X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 5X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.

- If the sample result was greater than 5X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Common laboratory contaminants were evaluated in accordance with the following decision tree, with any data qualifier flags listed in Table3.

- If the sample result was less than ten times (10X) the blank concentration and less than the reporting limit, then the sample result has been raised to the reporting limit.
- If the sample result was less than 10X the blank concentration and greater than the reporting limit, then the reporting limit of the sample has been raised to the observed value.
- If the sample result was greater than 10X the blank concentration or the compounds were not detected, then no data qualifier flag is recommended.

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-07-0405	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSB33-07-0405	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLSB33-07-0405	m,p-Xylene	Trip blank	TB=0.060	TB=ND	10.0	U
HGLSB33-07-0405	n-Butylbenzene	Method blank	MB=1.81	MB=ND	10.0	U
HGLSB33-07-0405	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB33-08-1012	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSB33-08-1012	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLSB33-08-1012	n-Butylbenzene	Method blank	MB=1.81	MB=ND	10.0	U
HGLSB33-08-1012	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB33-11-0607	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSB33-11-0607	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLSBDup-04	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSBDup-04	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLRB06-051806-AL	Chloroform	Trip blank	TB=0.050	TB=ND	1.00	U

Table 3. VOC Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB06-051806-AL	Toluene	Method blank Trip Blank	MB=0.300 TB=0.150	MB=ND TB=ND	1.00	U
HGLRB06-051806-AL	m,p-Xylene	Method blank Trip Blank	MB=0.100 TB=0.060	MB=ND TB=ND	1.00	U
HGLSB27-05-0708	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB27-05-0708	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
HGLSB3301-0809	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB3301-0809	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
HGLSB33-02-0809	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB33-02-0809	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
HGLSB33-03-0809	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB33-03-0809	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value.

Table 4. VOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
TB-051706	Methylene chloride	Value < RL	Value=1.24	RL=5.00	1.24	J
TB-051706	Chloroform	Value < RL	Value=0.050	RL=1.00	0.050	J
TB-051706	Toluene	Value < RL	Value=0.150	RL=1.00	0.150	J
TB-051706	Tetrachloroethene	Value < RL	Value=0.070	RL=1.00	0.070	J
TB-051706	m,p-Xylene	Value < RL	Value=0.060	RL=1.00	0.060	J
TB-051706	1,2,4-Trimethylbenzene	Value < RL	Value=0.060	RL=1.00	0.060	J
TB-051706	n-Butylbenzene	Value < RL	Value=0.050	RL=1.00	0.050	J
HGLSB33-07-0405	Ethylbenzene	Value < RL	Value=0.900	RL=10.0	0.900	J
HGLSB33-07-0405	n-Propylbenzene	Value < RL	Value=1.01	RL=10.0	1.01	J
HGLSB33-07-0405	p-Isopropylbenzene	Value < RL	Value=1.14	RL=10.0	1.14	J
HGLSB33-08-1012	p-Isopropylbenzene	Value < RL	Value=1.12	RL=10.0	1.12	J
HGLRB06-051806-AL	Benzene	Value < RL	Value=0.80	RL=1.00	0.080	J
HGLRB06-051806-AL	Ethylbenzene	Value < RL	Value=0.070	RL=1.00	0.070	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012, and Sample HGLSBDup-05 is a duplicate of Sample HGLSB33-10-0405. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 5, were reported as not detected.

Table 5. VOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-08-1012	HGLSBDup-04	
p-Isopropyltoluene	1.12	ND	NC

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

F. Review of Semivolatile Organic Analyses by GC/MS

EPA Method 8270C

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All RF, SPCC, and CCC criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: The surrogate percent recoveries for terphenyl-d_{14} were out of the acceptance criteria at 244 percent, and 300 and 286 percent in the method blank and LCS/LCSD pair in QC Batch No. 27154, and at 140 and 123 percent in the MS/MSD pair in QC Batch No. 27215. No data qualifier flags are recommended because the surrogates were evaluated separately in the samples.

A single surrogate, terphenyl-d_{14}, was out of the criteria of 10 to 116 percent in the base/neutral fraction of Samples HGLSB33-07-0405, HGLHA3901R-0204, HGLHA3901R-0708, HGLHA3902R-0204, HGLHA3902R-0809, HGLSB3902R-0204, HGLSB3902R-0910, HGLSB3901R-0204, HGLSB3901R-0810, HGLSB39-17-0204, HGLSB39-17-0910, and HGLSB33-02-0809. *Functional Guidelines* states that "data are not qualified . . . unless two or more semivolatile surrogates, within the same fraction . . . are out of specification". No data qualifier flags are recommended because the other surrogates were in criteria.

A single surrogate in each of the acid and the base/neutral fractions, terphenyl-d_{14} and 2,4,6-tribromophenol, were out of the criteria of 10 to 116 and 10 to 117 percent at 250 and 128 percent, respectively, in Sample HGLSB33-08-1012. *Functional Guidelines* states that "data are not qualified . . . unless two or more semivolatile surrogates, within the same fraction . . . are out of specification". No data qualifier flags are recommended because the other surrogates were in criteria.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: The percent recoveries in a single LCS for n-nitroso-di-n-propylamine and 1,2,4-Trichlorobnezene were out of the criteria of 10 to 121 percent and 10 to 126 percent, respectively, at 127 percent each. Another percent recovery in a single LCS for acenaphthene was out of the criteria of 19 to 134 percent at 135 percent. Since all other accuracy measurements (e.g., the other LCS, the MS/MSD pair, and the calibration verifications) were acceptable, no data qualifier flags are recommended.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Two samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value.

Table 6. SVOC Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB27-05-0708	Fluoranthene	Value < RL	Value=0.0853	RL=0.250	0.0853	J
HGLSB3301-0809	Fluoranthene	Value < RL	Value=0.0853	RL=0.250	0.0853	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012, Sample HGLSBDup-05 is a duplicate of Sample HGLSB33-10-0405, and Sample HGLSBDup06 is a duplicate of HGLSB3902R-0910. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 7, were reported as not detected.

Table 7. SVOC Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-08-1012	HGLSBDup-04	
bis(2-Ethylhexyl)phthalate	0.971	ND	NC

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

G. Review of Chlorinated Pesticide Analyses by GC

EPA Methods 8081A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: The recoveries for seven analytes were low and out of criteria in the water MS/MSD pair associated with QC Batch No. 27045. The recoveries for two analytes were low and out of criteria in the soil MS/MSD pair associated with QC Batch No. 27113. Since the LCS/LCSD pair were acceptable, only the positive results for these analytes in the water sample spiked, HGLRB06-051806-AL, and the soil sample spiked, HGLSB3301-0809, have been flagged "J" to indicate an estimated value, and the not detected result has been flagged "UJ" to indicate an estimated reporting limit, as listed in Table 8.

Table 8. Chlorinated Pesticide Data Qualifiers Due to MS/MSD Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB06-051806-AL	Heptachlor epoxide	MS/MSD	%R=24	%R=45.3-148	0.0005	UJ
HGLRB06-051806-AL	Endosulfan I	MS/MSD	%R=30, 0	%R=43.7-148	0.0005	UJ
HGLRB06-051806-AL	Dieldrin	MS/MSD	%R=40, 5.0	%R=43.9-146	0.0005	UJ
HGLRB06-051806-AL	Endrin	MS/MSD	%R=26, 0	%R=55.2-152	0.0005	UJ
HGLRB06-051806-AL	Endosulfan II	MS/MSD	%R=0, 0	%R=46.7-148	0.0005	UJ
HGLRB06-051806-AL	4,4'-DDT	MS/MSD	%R=7.4, 4.2	%R=45.3-146	0.0005	UJ
HGLRB06-051806-AL	Endrin ketone	MS/MSD	%R=10, 0	%R=16-287	0.0005	UJ
HGLSB3301-0809	Endosulfan II	MS/MSD	%R=3.8, 4.3	%R=10-88.7	0.0008	UJ
HGLSB3301-0809	Endosulfan sulfate	MS/MSD	%R=2.9, 3.3	%R=10-132	0.0008	UJ

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012, and Sample HGLSBDup-05 is a duplicate of Sample HGLSB33-10-0405. All analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

H. Review of Polychlorinated Biphenyl Analyses by GC

EPA Methods 8082

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: The surrogate percent recovery for decachlorobiphenyl was out of the criteria of 50.4 to 129 percent in Samples HGLSB33-07-0405, HGLSB33-08-1012, HGLSB33-11-0607, HGLSB3301-0809, and HGLSB33-02-0809. Since the recovery indicated a low bias, the associated results that were not detected have been flagged "UJ" in Table 9 to indicate an estimated reporting limit, and the positive hits have been flagged "J" to indicate an estimated value.

Table 9. PCB Data Qualifiers Due to Surrogate Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-07-0405	Total PCB	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1016	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1221	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1232	Surrogate	%R=38	%R=50.4-129	0.0016	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-07-0405	Aroclor 1242	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1248	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1254	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1260	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Total PCB	Surrogate	%R=44	%R=50.4-129	0.0065	J
HGLSB33-08-1012	Aroclor 1016	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1221	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1232	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1242	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1248	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1254	Surrogate	%R=44	%R=50.4-129	0.0065	J
HGLSB33-08-1012	Aroclor 1260	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Total PCB	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1016	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1221	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1232	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1242	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1248	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1254	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1260	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Total PCB	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1016	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1221	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1232	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1242	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1248	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1254	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1260	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Total PCB	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1016	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1221	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1232	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1242	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1248	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1254	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1260	Surrogate	%R=48	%R=50.4-129	0.0016	UJ

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012, and Sample HGLSBDup-05 is a duplicate of Sample HGLSB33-10-0405. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 10, were reported as not detected.

Table 10. PCB Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-08-1012	HGLSBDup-04	
Total PCBs	0.00650	0.00360	57.4
Aroclor 1254	0.00650	0.00360	57.4

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

I. Review of TPH-DRO Analyses by GC

EPA Method 8015B Modified

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Diesel Range Organics were detected in the water method blank associated with Sample HGLRB06-051806-AL. As listed in Table 11, since the sample result was less than five times (5X) the blank concentration and less than the reporting limit, the sample result has been raised to the reporting limit.

Table 11. TPH DRO Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB06-051806-AL	TPH-DRO	Method blank	MB=0.510	MB=ND	5.0	U

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: The recovery for DRO was out of the criteria of 77.8 to 112 percent at 114 and 122 percent in the MS/MSD pair associated with Sample HGLRB06-051806-AL. Since the recovery indicated a high bias and the sample result was revised to not detected because of blank contamination, no additional data qualifier flags are recommended.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: One sample contained target analytes that were reported at a level less than the reporting limit but greater than the MDL. This result have been flagged "J" to indicate an estimated value in Table 12.

Table 12. TPH-DRO Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-08-1012	TPH-DRO	Value < RL	Value=43.0	RL=50.0	43.0	J

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 13 were reported as not detected.

Table 13. TPH-DRO Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-08-1012	HGLSBDup-04	
Diesel Range Organics	43.0	ND	NC

Key: ND = Not detected
NC = Not calculable

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

J. Review of TPH-GRO Analyses by GC

EPA Method 8015B Modified

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable, except as noted below.

Discussion: Although the chain-of-custody forms requested that the Trip Blanks be analyzed for Gasoline Range Organics, the test was not reported in the data package. Only two 40-ml vials were provided to the laboratory, but the data package did not include any documentation to indicate that there was insufficient sample.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Gasoline range organics were detected in three of the method blanks at levels of 0.171 in QC Batch No. 26781, 2.50 in QC Batch No. 26822, and 2.48 in QC Batch No. 26855. Since the associated sample results were all reported as not detected, no data qualifier flags are recommended.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were

analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: A MS/MSD pair was not analyzed for water with the soil analyses in QC Batch No. 26781. Instead, the laboratory analyzed a single MS and a BS/BSD pair to measure precision and accuracy. All percent recoveries and RPDs were within laboratory, method, or QAPP criteria.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012. All analytes were reported as not detected.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

K. Review of Metals Analyses by ICP and CVAA

EPA Methods 6010B/7470/7471

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that the proper number of standards were used and the correlation coefficient criteria was met All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit, except as noted below.

Discussion: Sodium and potassium were detected in the water method blank associated with Sample HGLRB06-051806-AL. Since the sample result was less than five times (5X) the blank concentration and greater than the reporting limit, the reporting limit of the sample has been raised to the observed value, as listed in Table 14.

Calcium, sodium, and potassium were detected in the soil method blank associated with QC Batch No. 26894. Since all of the sample results were greater than 5X the blank concentration, no data qualifier flags are recommended.

Table 14. Metals Data Qualifiers Due to Blank Contamination

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB06-051806-AL	Potassium	Method blank	MB=0.813	MB=ND	0.789	U
HGLRB06-051806-AL	Sodium	Method blank	MB=0.497	MB=ND	0.751	U

4. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable, except as noted below.

Discussion: The percent recoveries for several analytes were out of criteria in three MS/MSD pairs due to high concentrations of analytes in the original sample that were greater than five times the amount spiked. Since all other QC checks were in criteria, no data qualifier flags are recommended for these exceedences:

- Iron in the soil MS/MSD in QC Batch No. 26829.
- Chromium and lead in the soil MS/MSD in QC Batch No. 27030.
- Calcium, magnesium, potassium, and sodium in the water MS/MSD in QC Batch No. 26894.

The recoveries for antimony and zinc were out of the method criteria of 75 to 125 percent at 60 and 62.8 percent for antimony and 54.8 and 51.2 percent for zinc in the soil MS/MSD pair associated with QC Batch No. 26829. As listed in Table 15, since the LCS/LCSD pair were acceptable, only the positive results for these analytes in the sample spiked, HGLSB33-08-1012, have been flagged "J" to indicate an estimated value, and the not detected result has been flagged "UJ" to indicate an estimated reporting limit.

The recoveries for iron were out of the method criteria of 75 to 125 percent at 142 and 239 percent water MS/MSD pair associated with QC Batch No. 26872. As listed in Table 15, since the LCS/LCSD pair were acceptable, only the positive result for this analyte in the sample spiked, HGLRB06-051806-AL, has been flagged "J" to indicate an estimated value.

The laboratory flagged the percent recoveries for zinc as being out of the laboratory's in-house criteria of 85 to 100 percent at 86 and 86 percent in the MS/MSD. Since these results are acceptable under both the laboratory's criteria and the method criteria, no data qualifier flags are recommended.

Table 15. Metals Data Qualifiers Due to MS/MSD Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-08-1012	Antimony	MS/MSD	%R=60, 62.8	%R=75-125	0.992	UJ
HGLSB33-08-1012	Zinc	MS/MSD	%R=54.8, 51.2	%R=75-125	49.3	J
HGLRB06-051806-AL	Iron	MS/MSD	%R=142, 239	%R=75-125	0.022	J

5. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

6. Sample Duplicates

Sample duplicates were analyzed as required by the referenced method and all RPDs were within acceptable criteria.

7. Cold Vapor Atomic Absorption Special Requirements

All special criteria for CVAA analysis were performed at a frequency required by the referenced method and were within acceptable criteria.

8. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and digestion procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. These results have been flagged "J" to indicate an estimated value in Table 16.

Table 16. Metals Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-07-0405	Beryllium	Value < RL	Value=0.492	RL=5.00	0.492	J
HGLSB33-07-0405	Nickel	Value < RL	Value=7.54	RL=10.0	7.54	J
HGLSB33-08-0405	TCLP Cadmium	Value < RL	Value=0.0070	RL=0.050	0.0070	J
HGLSB33-08-1012	Beryllium	Value < RL	Value=0.180	RL=5.00	0.180	J
HGLSB33-08-1012	Nickel	Value < RL	Value=4.98	RL=10.0	4.98	J
HGLSB33-11-0607	Beryllium	Value < RL	Value=0.188	RL=5.00	0.188	J
HGLSB33-11-0607	Cadmium	Value < RL	Value=0.216	RL=0.500	0.216	J
HGLSB33-11-0607	Nickel	Value < RL	Value=3.07	RL=10.0	3.07	J
HGLSBDup-04	Beryllium	Value < RL	Value=0.198	RL=5.00	0.198	J
HGLSBDup-04	Cadmium	Value < RL	Value=0.272	RL=0.500	0.272	J
HGLSBDup-04	Nickel	Value < RL	Value=3.68	RL=10.0	3.68	J

Table 16. Metals Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLRB06-051806-AL	Aluminum	Value < RL	Value=0.0190	RL=0.030	0.0190	J
HGLHA3901R-0204	Mercury	Value < RL	Value=0.00954	RL=0.040	0.00954	J
HGLHA3902R-0204	Mercury	Value < RL	Value=0.00949	RL=0.040	0.00949	J
HGLSB39-17-0204	Chromium	Value < RL	Value=0.528	RL=1.00	0.528	J
HGLSB39-17-0910	Chromium	Value < RL	Value=0.615	RL=1.00	0.615	J
HGLSB27-05-0708	Chromium	Value < RL	Value=0.456	RL=1.00	0.456	J
HGLSB3301-0809	Beryllium	Value < RL	Value=0.109	RL=5.00	0.109	J
HGLSB3301-0809	Nickel	Value < RL	Value=2.43	RL=10.0	2.43	J
HGLSB3301-0809	Vanadium	Value < RL	Value=6.26	RL=10.0	6.26	J
HGLSB33-02-0809	Beryllium	Value < RL	Value=0.188	RL=5.00	0.188	J
HGLSB33-02-0809	Cadmium	Value < RL	Value=0.224	RL=0.500	0.224	J
HGLSB33-02-0809	Nickel	Value < RL	Value=3.40	RL=10.0	3.40	J
HGLSB33-03-0809	Beryllium	Value < RL	Value=0.150	RL=5.00	0.150	J
HGLSB33-03-0809	Cadmium	Value < RL	Value=0.136	RL=0.500	0.136	J
HGLSB33-03-0809	Lead	Value < RL	Value=0.684	RL=1.00	0.684	J
HGLSB33-03-0809	Nickel	Value < RL	Value=2.73	RL=10.0	2.73	J

9. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-04 is a duplicate of Sample HGLSB33-08-1012, Sample HGLSBDup-05 is a duplicate of Sample HGLSB33-10-0405, and Sample HGLSBDup06 is a duplicate of HGLSB3902R-0910. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 17, were reported as not detected.

Table 17. Metals Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-08-1012	HGLSBDup-04	
Silver	1.39	1.23	12.2
Aluminum	4530	5170	13.2
Barium	50.1	44.6	11.6
Beryllium	0.180	0.198	9.5
Calcium	118000	129000	8.9
Cadmium	0.724	0.272	90.8
Cobalt	2.37	2.21	7.0

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-08-1012	HGLSBDup-04	
Chromium	6.62	5.35	21.2
Copper	19.2	4.37	126
Iron	4870	4280	12.9
Mercury	0.143	ND	NC
Potassium	1540	1420	8.1
Magnesium	5120	6640	25.9
Manganese	73.1	76.5	4.5
Sodium	1140	1090	4.5
Nickel	4.98	3.68	30.0
Lead	11.6	1.87	145
Vanadium	10.4	12.6	19.1
Zinc	49.3	19.9	85.0

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-10-0405	HGLSBDup-05	
TCLP Barium	1.24	0.783	45.2

Compound	Sample Result	Duplicate Result	RPD
	HGLSB3902R-0910	HGLSBDup06	
Barium	70.7	78.8	10.8
Cadmium	23.4	50.7	73.7
Chromium	287	290	1.0
Mercury	0.0802	0.0625	24.8
Lead	177	612	110

Key: ND = Not detected
NC = Not calculable

10. Laboratory Contact

There was no verbal or written communication with the laboratory.

11. Other Comments

None.

12. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

L. Review of Hazardous Waste Characteristics

Reactivity, Reactive Sulfide, Reactive Cyanide, Corrosivity, pH, & Ignitability
by SW-846, Chapter 7.1

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that the proper number of standards were used and the correlation coefficient criteria were met. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Precision and Accuracy

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs, BS/BSDs and/or LCS/LCSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

5. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

6. Sample Duplicates

Sample duplicates were analyzed as required by the referenced method and all RPDs were within laboratory or method criteria.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and preparation procedures, it appears as if no quantitation exceeded the typical highest calibration standard for

the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable, except as noted below.

Discussion: Because the extraction and distillation is defined as a semi-quantitative method, the laboratory flagged the results, which were not detected, for reactive sulfide and reactive cyanide with "UJ" to indicate an estimated reporting limit. QBD concurs with this evaluation of the method.

Several samples contained target analytes that were reported at levels less than the reporting limit but greater than the MDL. In Table 18, these results have been flagged "J" to indicate an estimated value.

Table 18. Waste Characteristics Data Qualifiers Due to Quantitation Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-07-0203	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSB33-07-0203	Reactive cyanide	Screening method	NA	NA	2.50	UJ
HGLSB33-07-0405	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSB33-07-0405	Reactive cyanide	Screening method	NA	NA	2.50	UJ
HGLSB33-10-0405	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSB33-10-0405	Reactive cyanide	Screening method	NA	NA	2.50	UJ
HGLSBDup-05	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSBDup-05	Reactive cyanide	Screening method	NA	NA	2.50	UJ

8. Field Duplicates

Field duplicates were collected and analyzed. Sample HGLSBDup-05 is a duplicate of Sample HGLSB33-10-0405. Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in Table 19, were reported as not detected.

Table 19. Waste Characteristics Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	HGLSB33-10-0405	HGLSBDup-05	
pH	7.07	7.62	7.5

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Inorganics

U = The analyte was analyzed for but not detected above the numerical quantitation limit. The numerical value may be either a detection limit or a quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils and Waters
Dates of Sampling: May 18-19, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
VOC Data Qualifiers						
TB-051706	1,2,4-Trimethylbenzene	Value < RL	Value=0.060	RL=1.00	0.060	J
TB-051706	Chloroform	Value < RL	Value=0.050	RL=1.00	0.050	J
TB-051706	m,p-Xylene	Value < RL	Value=0.060	RL=1.00	0.060	J
TB-051706	Methylene chloride	Value < RL	Value=1.24	RL=5.00	1.24	J
TB-051706	n-Butylbenzene	Value < RL	Value=0.050	RL=1.00	0.050	J
TB-051706	Tetrachloroethene	Value < RL	Value=0.070	RL=1.00	0.070	J
TB-051706	Toluene	Value < RL	Value=0.150	RL=1.00	0.150	J
HGLSB33-07-0405	Ethylbenzene	Value < RL	Value=0.900	RL=10.0	0.900	J
HGLSB33-07-0405	m,p-Xylene	Trip blank	TB=0.060	TB=ND	10.0	U
HGLSB33-07-0405	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSB33-07-0405	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB33-07-0405	n-Butylbenzene	Method blank	MB=1.81	MB=ND	10.0	U
HGLSB33-07-0405	n-Propylbenzene	Value < RL	Value=1.01	RL=10.0	1.01	J
HGLSB33-07-0405	p-Isopropylbenzene	Value < RL	Value=1.14	RL=10.0	1.14	J
HGLSB33-07-0405	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLSB33-08-1012	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSB33-08-1012	Naphthalene	Method blank	MB=7.58	MB=ND	50.0	U
HGLSB33-08-1012	n-Butylbenzene	Method blank	MB=1.81	MB=ND	10.0	U
HGLSB33-08-1012	p-Isopropylbenzene	Value < RL	Value=1.12	RL=10.0	1.12	J
HGLSB33-08-1012	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLSB33-11-0607	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSB33-11-0607	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSBDup-04	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=0.740	MB=ND TB=ND	50.0	U
HGLSBDup-04	Toluene	Method blank Trip Blank	MB=3.11 TB=0.450	MB=ND TB=ND	10.0	U
HGLRB06-051806-AL	Benzene	Value < RL	Value=0.80	RL=1.00	0.080	J
HGLRB06-051806-AL	Chloroform	Trip blank	TB=0.050	TB=ND	1.00	U
HGLRB06-051806-AL	Ethylbenzene	Value < RL	Value=0.070	RL=1.00	0.070	J
HGLRB06-051806-AL	m,p-Xylene	Method blank Trip Blank	MB=0.100 TB=0.060	MB=ND TB=ND	1.00	U
HGLRB06-051806-AL	Toluene	Method blank Trip Blank	MB=0.300 TB=0.150	MB=ND TB=ND	1.00	U
HGLSB27-05-0708	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB27-05-0708	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
HGLSB3301-0809	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB3301-0809	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
HGLSB33-02-0809	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB33-02-0809	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
HGLSB33-03-0809	Methylene chloride	Method blank Trip Blank	MB=7.48 TB=1.24	MB=ND TB=ND	50.0	U
HGLSB33-03-0809	Toluene	Method blank Trip Blank	MB=3.11 TB=0.150	MB=ND TB=ND	10.0	U
SVOC Data Qualifiers						
HGLSB27-05-0708	Fluoranthene	Value < RL	Value=0.0853	RL=0.250	0.0853	J
HGLSB3301-0809	Fluoranthene	Value < RL	Value=0.0853	RL=0.250	0.0853	J
Chlorinated Pesticide Data Qualifiers						
HGLRB06-051806-AL	Heptachlor epoxide	MS/MSD	%R=24	%R=45.3-148	0.0005	UJ
HGLRB06-051806-AL	Endosulfan I	MS/MSD	%R=30, 0	%R=43.7-148	0.0005	UJ
HGLRB06-051806-AL	Dieldrin	MS/MSD	%R=40, 5.0	%R=43.9-146	0.0005	UJ
HGLRB06-051806-AL	Endrin	MS/MSD	%R=26, 0	%R=55.2-152	0.0005	UJ
HGLRB06-051806-AL	Endosulfan II	MS/MSD	%R=0, 0	%R=46.7-148	0.0005	UJ
HGLRB06-051806-AL	4,4'-DDT	MS/MSD	%R=7.4, 4.2	%R=45.3-146	0.0005	UJ
HGLRB06-051806-AL	Endrin ketone	MS/MSD	%R=10, 0	%R=16-287	0.0005	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB3301-0809	Endosulfan II	MS/MSD	%R=3.8, 4.3	%R=10-88.7	0.0008	UJ
HGLSB3301-0809	Endosulfan sulfate	MS/MSD	%R=2.9, 3.3	%R=10-132	0.0008	UJ
PCB Data Qualifiers						
HGLSB33-07-0405	Total PCB	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1016	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1221	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1232	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1242	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1248	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1254	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-07-0405	Aroclor 1260	Surrogate	%R=38	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Total PCB	Surrogate	%R=44	%R=50.4-129	0.0065	J
HGLSB33-08-1012	Aroclor 1016	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1221	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1232	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1242	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1248	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-08-1012	Aroclor 1254	Surrogate	%R=44	%R=50.4-129	0.0065	J
HGLSB33-08-1012	Aroclor 1260	Surrogate	%R=44	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Total PCB	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1016	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1221	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1232	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1242	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1248	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1254	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-11-0607	Aroclor 1260	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Total PCB	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1016	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1221	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1232	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1242	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1248	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1254	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB3301-0809	Aroclor 1260	Surrogate	%R=46	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Total PCB	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1016	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1221	Surrogate	%R=48	%R=50.4-129	0.0016	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-02-0809	Aroclor 1232	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1242	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1248	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1254	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
HGLSB33-02-0809	Aroclor 1260	Surrogate	%R=48	%R=50.4-129	0.0016	UJ
TPH-DRO Data Qualifiers						
HGLSB33-08-1012	TPH-DRO	Value < RL	Value=43.0	RL=50.0	43.0	J
HGLRB06-051806-AL	TPH-DRO	Method blank	MB=0.510	MB=ND	5.0	U
TPH-GRO Data Qualifiers						
	None					
Metals Data Qualifiers						
HGLSB33-07-0405	Beryllium	Value < RL	Value=0.492	RL=5.00	0.492	J
HGLSB33-07-0405	Nickel	Value < RL	Value=7.54	RL=10.0	7.54	J
HGLSB33-08-0405	TCLP Cadmium	Value < RL	Value=0.0070	RL=0.050	0.0070	J
HGLSB33-08-1012	Antimony	MS/MSD	%R=60, 62.8	%R=75-125	0.992	UJ
HGLSB33-08-1012	Beryllium	Value < RL	Value=0.180	RL=5.00	0.180	J
HGLSB33-08-1012	Nickel	Value < RL	Value=4.98	RL=10.0	4.98	J
HGLSB33-08-1012	Zinc	MS/MSD	%R=54.8, 51.2	%R=75-125	49.3	J
HGLSB33-11-0607	Beryllium	Value < RL	Value=0.188	RL=5.00	0.188	J
HGLSB33-11-0607	Cadmium	Value < RL	Value=0.216	RL=0.500	0.216	J
HGLSB33-11-0607	Nickel	Value < RL	Value=3.07	RL=10.0	3.07	J
HGLSBDup-04	Beryllium	Value < RL	Value=0.198	RL=5.00	0.198	J
HGLSBDup-04	Cadmium	Value < RL	Value=0.272	RL=0.500	0.272	J
HGLSBDup-04	Nickel	Value < RL	Value=3.68	RL=10.0	3.68	J
HGLRB06-051806-AL	Aluminum	Value < RL	Value=0.0190	RL=0.030	0.0190	J
HGLRB06-051806-AL	Iron	MS/MSD	%R=142, 239	%R=75-125	0.022	J
HGLRB06-051806-AL	Potassium	Method blank	MB=0.813	MB=ND	0.789	U
HGLRB06-051806-AL	Sodium	Method blank	MB=0.497	MB=ND	0.751	U
HGLHA3901R-0204	Mercury	Value < RL	Value=0.00954	RL=0.040	0.00954	J
HGLHA3902R-0204	Mercury	Value < RL	Value=0.00949	RL=0.040	0.00949	J
HGLSB39-17-0204	Chromium	Value < RL	Value=0.528	RL=1.00	0.528	J
HGLSB39-17-0910	Chromium	Value < RL	Value=0.615	RL=1.00	0.615	J
HGLSB27-05-0708	Chromium	Value < RL	Value=0.456	RL=1.00	0.456	J
HGLSB3301-0809	Beryllium	Value < RL	Value=0.109	RL=5.00	0.109	J
HGLSB3301-0809	Nickel	Value < RL	Value=2.43	RL=10.0	2.43	J
HGLSB3301-0809	Vanadium	Value < RL	Value=6.26	RL=10.0	6.26	J
HGLSB33-02-0809	Beryllium	Value < RL	Value=0.188	RL=5.00	0.188	J
HGLSB33-02-0809	Cadmium	Value < RL	Value=0.224	RL=0.500	0.224	J

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
HGLSB33-02-0809	Nickel	Value < RL	Value=3.40	RL=10.0	3.40	J
HGLSB33-03-0809	Beryllium	Value < RL	Value=0.150	RL=5.00	0.150	J
HGLSB33-03-0809	Cadmium	Value < RL	Value=0.136	RL=0.500	0.136	J
HGLSB33-03-0809	Lead	Value < RL	Value=0.684	RL=1.00	0.684	J
HGLSB33-03-0809	Nickel	Value < RL	Value=2.73	RL=10.0	2.73	J
Waste Characteristics Data Qualifiers						
HGLSB33-07-0203	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSB33-07-0203	Reactive cyanide	Screening method	NA	NA	2.50	UJ
HGLSB33-07-0405	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSB33-07-0405	Reactive cyanide	Screening method	NA	NA	2.50	UJ
HGLSB33-10-0405	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSB33-10-0405	Reactive cyanide	Screening method	NA	NA	2.50	UJ
HGLSBDup-05	Reactive sulfide	Screening method	NA	NA	10.0	UJ
HGLSBDup-05	Reactive cyanide	Screening method	NA	NA	2.50	UJ

Attachment 3 Reviewed/Revised Laboratory Forms

Analytical Report

Sample: 90999 - TB-051706

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26849	Date Analyzed:	2006-05-24	Analyzed By:	JG
Prep Batch:	23577	Sample Preparation:	2006-05-24	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699	
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298	
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902	
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402	
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952	
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16	
Acetone	U	<0.854	<10.0	<0.854	µg/L	1	0.854	10	0.8536	
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119	
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764	
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837	
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941	
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484	
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975	
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207	
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736	
Methylene chloride	J	**1.24**	<5.00	<0.689	µg/L	1	0.689	5	0.6888	J
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598	
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299	
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006	
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	J	**0.0500**	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	J
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	**0.150**	<1.00	0.300	µg/L	1	0.0736	1	0.0736	
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	J	**0.0700**	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	J
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	U	<0.0566	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	
m,p-Xylene	JB	**0.0600**	<1.00	0.100	µg/L	1	0.0363	1	0.0363	J

continued ...

Validated EPA Level 3 (Verification), Quality by Design, February 21, 2007

sample 90999 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
2-Chlorotoluene	U	<0.0283	<1.00	0.0600	µg/L	1	0.0283	1	0.0283
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679
Isopropylbenzene	U	<0.0406	<1.00	0.0500	µg/L	1	0.0406	1	0.0406
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033
n-Propylbenzene	U	<0.0423	<1.00	0.0900	µg/L	1	0.0423	1	0.0423
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.0700	µg/L	1	0.0557	1	0.0557
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077
1,2,4-Trimethylbenzene	JB	**0.0600**	<1.00	0.110	µg/L	1	0.0336	1	0.0336
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
sec-Butylbenzene	U	<0.0439	<1.00	0.140	µg/L	1	0.0439	1	0.0439
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672
p-Isopropyltoluene	U	<0.0513	<1.00	<0.0513	µg/L	1	0.0513	1	0.0513
4-Chlorotoluene	U	<0.0460	<1.00	0.0600	µg/L	1	0.0460	1	0.046
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629
n-Butylbenzene	J	**0.0500**	<1.00	<0.0400	µg/L	1	0.0400	1	0.04
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663
Naphthalene	U	<0.417	<5.00	0.750	µg/L	1	0.417	5	0.4166
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.4	µg/L	1	50.0	101	70 - 130
Toluene-d8		51.0	µg/L	1	50.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)		47.7	µg/L	1	50.0	95	70 - 130

Sample: 91000 - HGLSB33-07-0203

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26834	Date Analyzed:	2006-05-25	Analyzed By:	SM
Prep Batch:	23560	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		6.34	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91000 - HGLSB33-07-0203

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Analysis: TCLP Pesticides | Analytical Method: S 8081A | Prep Method: TCLP 1311
QC Batch: 27045 | Date Analyzed: 2006-05-30 | Analyzed By: AG
Prep Batch: 23720 | Sample Preparation: 2006-05-29 | Prepared By: AG
TCLP Extraction: 2006-05-26 | Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00370	mg/L	0.025	0.200	74	16.8 - 143
Deca chlorobiphenyl		0.00470	mg/L	0.025	0.200	94	35.8 - 155

Sample: 91000 - HGLSB33-07-0203

Analysis: TCLP Semivolatiles | Analytical Method: S 8270C | Prep Method: TCLP 1311
QC Batch: 27149 | Date Analyzed: 2006-05-29 | Analyzed By: AG
Prep Batch: 23542 | Sample Preparation: 2006-05-24 | Prepared By: AG
TCLP Extraction: 2006-05-23 | Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466

continued . . .

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sample 91000 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0557	mg/L	1	0.400	14	10 - 110.33
Phenol-d5		0.0403	mg/L	1	0.400	10	10 - 82.08
Nitrobenzene-d5		0.136	mg/L	1	0.400	34	26.72 - 155
2-Fluorobiphenyl		0.156	mg/L	1	0.400	39	35.89 - 150.5
2,4,6-Tribromophenol		0.238	mg/L	1	0.400	60	10 - 204.91
Terphenyl-d14		0.246	mg/L	1	0.400	62	33.98 - 168.85

Sample: 91000 - HGLSB33-07-0203

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**0.984**	**0.984**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91000 - HGLSB33-07-0203

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27055	Date Analyzed:	2006-06-02	Analyzed By:	JG
Prep Batch:	23752	Sample Preparation:	2006-05-29	Prepared By:	JG
		TCLP Extraction:	2006-05-30	Prepared By:	JG

continued ...

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sample 91000 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.7	mg/L	1	50.0	95	70 - 130
Toluene-d8		48.9	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		46.7	mg/L	1	50.0	93	70 - 130

Sample: 91001 - HGLSB33-07-0405

Analysis:	Ag, Total	Analytical Method:	S 6010B
QC Batch:	26829	Date Analyzed:	2006-05-25
Prep Batch:	23546	Sample Preparation:	2006-05-24
		Prep Method:	S 3050B
		Analyzed By:	RR
		Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.971**	**0.971**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91001 - HGLSB33-07-0405

Analysis:	Al, Total	Analytical Method:	S 6010B
QC Batch:	26829	Date Analyzed:	2006-05-25
Prep Batch:	23546	Sample Preparation:	2006-05-24
		Prep Method:	S 3050B
		Analyzed By:	RR
		Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**11600**	**11600**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91001 - HGLSB33-07-0405

Analysis:	As, Total	Analytical Method:	S 6010B
QC Batch:	26829	Date Analyzed:	2006-05-25
		Prep Method:	S 3050B
		Analyzed By:	RR

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91001 - HGLSB33-07-0405

Analysis: K, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**2950**	**2950**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91001 - HGLSB33-07-0405

Analysis: Mg, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**10500**	**10500**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91001 - HGLSB33-07-0405

Analysis: Mn, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**101**	**101**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91001 - HGLSB33-07-0405

Analysis: Na, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1010**	**1010**	<0.820	mg/Kg	10	0.0820	50	0.082

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Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91001 - HGLSB33-07-0405

Analysis: Ba, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26829 Date Analyzed: 2006-05-25 Analyzed By: RR
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**38.9**	**38.9**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91001 - HGLSB33-07-0405

Analysis: Be, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26829 Date Analyzed: 2006-05-25 Analyzed By: RR
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.492**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91001 - HGLSB33-07-0405

Analysis: Ca, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26894 Date Analyzed: 2006-05-26 Analyzed By: TP
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**124000**	**124000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91001 - HGLSB33-07-0405

Analysis: Cd, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26829 Date Analyzed: 2006-05-25 Analyzed By: RR
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium		**0.702**	**0.702**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

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Sample: 91001 - HGLSB33-07-0405

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**2.98**	**2.98**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91001 - HGLSB33-07-0405

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**10.5**	**10.5**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91001 - HGLSB33-07-0405

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**4.92**	**4.92**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91001 - HGLSB33-07-0405

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**9130**	**9130**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91001 - HGLSB33-07-0405

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

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Sample: 91001 - HGLSB33-07-0405

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**7.54**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91001 - HGLSB33-07-0405

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**7.14**	**7.14**	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91001 - HGLSB33-07-0405

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[1]	0.00610	mg/Kg	0.16	0.100	38	50.4 - 128.7

Sample: 91001 - HGLSB33-07-0405

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

[1] Surrogate out due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00590	mg/Kg	0.16	0.100	37	10 - 171
Deca chlorobiphenyl		0.00830	mg/Kg	0.16	0.100	52	10 - 179

Sample: 91001 - HGLSB33-07-0405

Analysis: Sb, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91001 - HGLSB33-07-0405

Analysis: Se, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

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Sample: 91001 - HGLSB33-07-0405

Analysis: Semivolatiles
QC Batch: 27154
Prep Batch: 23540

Analytical Method: S 8270C
Date Analyzed: 2006-05-31
Sample Preparation: 2006-05-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

continued ...

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sample 91001 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.63	mg/Kg	1	2.67	61	10 - 98.8
Phenol-d5		1.80	mg/Kg	1	2.67	67	10 - 105

continued . . .

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		1.79	mg/Kg	1	2.67	67	10 - 114
2-Fluorobiphenyl		1.82	mg/Kg	1	2.67	68	10 - 122
2,4,6-Tribromophenol		2.41	mg/Kg	1	2.67	90	10 - 117
Terphenyl-d14	[2]	8.68	mg/Kg	1	2.67	325	10 - 116

Sample: 91001 - HGLSB33-07-0405

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91001 - HGLSB33-07-0405

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26755	Date Analyzed:	2006-05-22	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		112	mg/Kg	1	150	75	62.8 - 115

Sample: 91001 - HGLSB33-07-0405

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.743	mg/Kg	10	0.100	74	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.867	mg/Kg	10	0.100	87	71.9 - 123.7

[2]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

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Sample: 91001 - HGLSB33-07-0405

Analysis: V, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**21.1**	**21.1**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91001 - HGLSB33-07-0405

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	**7.51**	<50.0	7.48	µg/Kg	10	0.119	5	0.119
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561

50 U

continued . . .

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sample 91001 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Toluene	JB	~~3.04~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	J	**0.900**	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	J
m,p-Xylene	J	~~1.77~~	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	10.0 U
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048	
n-Propylbenzene	J	**1.01**	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421	J
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21	
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041	
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535	
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387	
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632	
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534	
p-Isopropyltoluene	J	**1.14**	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	J
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675	
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475	
n-Butylbenzene	JB	~~1.81~~	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979	10.0 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915	
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364	
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228	
Naphthalene	JB	~~4.54~~	<50.0	7.58	µg/Kg	10	0.441	5	0.441	50.0 U
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		458	µg/Kg	10	50.0	92	42 - 129
Toluene-d8		504	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		503	µg/Kg	10	50.0	101	78 - 120

Sample: 91001 - HGLSB33-07-0405

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**31.6**	**31.6**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91002 - HGLSB33-08-0405

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26834	Date Analyzed:	2006-05-25	Analyzed By:	SM
Prep Batch:	23560	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		6.88	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91002 - HGLSB33-08-0405

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG
		TCLP Extraction:	2006-05-26	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09

continued . . .

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sample 91002 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00400	mg/L	0.025	0.200	80	16.8 - 143
Deca chlorobiphenyl		0.00470	mg/L	0.025	0.200	94	35.8 - 155

Sample: 91002 - HGLSB33-08-0405

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	27149	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23542	Sample Preparation:	2006-05-24	Prepared By:	AG
		TCLP Extraction:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.103	mg/L	1	0.400	26	10 - 110.33
Phenol-d5		0.0692	mg/L	1	0.400	17	10 - 82.08
Nitrobenzene-d5		0.279	mg/L	1	0.400	70	26.72 - 155
2-Fluorobiphenyl		0.297	mg/L	1	0.400	74	35.89 - 150.5
2,4,6-Tribromophenol		0.221	mg/L	1	0.400	55	10 - 204.91
Terphenyl-d14		0.329	mg/L	1	0.400	82	33.98 - 168.85

Sample: 91002 - HGLSB33-08-0405

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	26931	Date Analyzed:	2006-05-30	Analyzed By:	RR
Prep Batch:	23605	Sample Preparation:	2006-05-26	Prepared By:	DS
		TCLP Extraction:	2006-05-26	Prepared By:	DS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP

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Prep Batch: 23797

Sample Preparation: 2006-06-06
TCLP Extraction:

Prepared By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**1.28**	**1.28**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	J	**0.00700**	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91002 - HGLSB33-08-0405

Analysis: TCLP Volatiles
QC Batch: 27055
Prep Batch: 23752

Analytical Method: S 8260B
Date Analyzed: 2006-06-02
Sample Preparation: 2006-05-29
TCLP Extraction: 2006-05-30

Prep Method: TCLP 1311
Analyzed By: JG
Prepared By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.0	mg/L	1	50.0	96	70 - 130
Toluene-d8		48.9	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		46.7	mg/L	1	50.0	93	70 - 130

Sample: 91003 - HGLSB33-08-1012

Analysis: Ag, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.39**	**1.39**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

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Sample: 91003 - HGLSB33-08-1012

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**4530**	**4530**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91003 - HGLSB33-08-1012

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91003 - HGLSB33-08-1012

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**50.1**	**50.1**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91003 - HGLSB33-08-1012

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.180**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91003 - HGLSB33-08-1012

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**118000**	**118000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91003 - HGLSB33-08-1012

Analysis: Cd, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium		**0.724**	**0.724**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91003 - HGLSB33-08-1012

Analysis: Co, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**2.37**	**2.37**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91003 - HGLSB33-08-1012

Analysis: Cr, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**6.62**	**6.62**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91003 - HGLSB33-08-1012

Analysis: Cu, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**19.2**	**19.2**	<0.268	mg/Kg	1	0.268	0.5	0.26781

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Sample: 91003 - HGLSB33-08-1012

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**4870**	**4870**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91003 - HGLSB33-08-1012

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury		**0.143**	**0.143**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91003 - HGLSB33-08-1012

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1540**	**1540**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91003 - HGLSB33-08-1012

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**5120**	**5120**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91003 - HGLSB33-08-1012

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**73.1**	**73.1**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91003 - HGLSB33-08-1012

Analysis:	Na, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1140**	**1140**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91003 - HGLSB33-08-1012

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**4.98**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91003 - HGLSB33-08-1012

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**11.6**	**11.6**	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91003 - HGLSB33-08-1012

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB		**0.00650**	**0.00650**	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046

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sample 91003 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)		**0.00650**	**0.00650**	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[3]	0.00700	mg/Kg	0.16	0.100	44	50.4 - 128.7

Sample: 91003 - HGLSB33-08-1012

Analysis: Pesticides
QC Batch: 27113
Prep Batch: 23778

Analytical Method: S 8081A
Date Analyzed: 2006-06-05
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00580	mg/Kg	0.16	0.100	36	10 - 171
Deca chlorobiphenyl		0.00930	mg/Kg	0.16	0.100	58	10 - 179

[3]Surrogate out due to peak interference.

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Sample: 91003 - HGLSB33-08-1012

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91003 - HGLSB33-08-1012

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91003 - HGLSB33-08-1012

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27154	Date Analyzed:	2006-05-31	Analyzed By:	AG
Prep Batch:	23540	Sample Preparation:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252

continued . . .

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sample 91003 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475

continued . . .

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sample 91003 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate		**0.971**	**0.971**	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.91	mg/Kg	1	2.67	72	10 - 98.8
Phenol-d5		2.10	mg/Kg	1	2.67	79	10 - 105
Nitrobenzene-d5		2.29	mg/Kg	1	2.67	86	10 - 114
2-Fluorobiphenyl		2.26	mg/Kg	1	2.67	85	10 - 122
2,4,6-Tribromophenol	[4]	3.42	mg/Kg	1	2.67	128	10 - 117
Terphenyl-d14	[5]	6.68	mg/Kg	1	2.67	250	10 - 116

Sample: 91003 - HGLSB33-08-1012

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91003 - HGLSB33-08-1012

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26756	Date Analyzed:	2006-05-23	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

[4]8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.
[5]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	**43.0**	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		102	mg/Kg	1	150	68	62.8 - 115

Sample: 91003 - HGLSB33-08-1012

Analysis: TPH GRO
QC Batch: 26822
Prep Batch: 23551

Analytical Method: S 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.732	mg/Kg	10	0.100	73	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.909	mg/Kg	10	0.100	91	71.9 - 123.7

Sample: 91003 - HGLSB33-08-1012

Analysis: V, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**10.4**	**10.4**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91003 - HGLSB33-08-1012

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306

continued ...

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sample 91003 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	**7.35**	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	**3.22**	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387

continued . . .

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sample 91003 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	J	**1.12**	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679 J
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	JB	**1.72**	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979 10.0 U
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	JB	**4.96**	<50.0	7.58	µg/Kg	10	0.441	5	0.441 50.0 U
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		452	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		505	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		503	µg/Kg	10	50.0	101	78 - 120

Sample: 91003 - HGLSB33-08-1012

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**49.3**	**49.3**	<0.124	mg/Kg	1	0.124	1	0.124 J

Sample: 91004 - HGLSB33-10-0405

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26834	Date Analyzed:	2006-05-25	Analyzed By:	SM
Prep Batch:	23560	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10 J
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5 J
Corrosivity		non-corrosive	mm/yr	1	
pH		7.07	s.u.	1	
Ignitability		non-ignitable		1	

Sample: 91004 - HGLSB33-10-0405

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Analysis: TCLP Pesticides
QC Batch: 27045
Prep Batch: 23720

Analytical Method: S 8081A
Date Analyzed: 2006-05-30
Sample Preparation: 2006-05-29
TCLP Extraction: 2006-05-26

Prep Method: TCLP 1311
Analyzed By: AG
Prepared By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00430	mg/L	0.025	0.200	86	16.8 - 143
Deca chlorobiphenyl		0.00480	mg/L	0.025	0.200	96	35.8 - 155

Sample: 91004 - HGLSB33-10-0405

Analysis: TCLP Semivolatiles
QC Batch: 27149
Prep Batch: 23542

Analytical Method: S 8270C
Date Analyzed: 2006-05-29
Sample Preparation: 2006-05-24
TCLP Extraction: 2006-05-23

Prep Method: TCLP 1311
Analyzed By: AG
Prepared By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466

continued . . .

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sample 91004 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0702	mg/L	1	0.400	18	10 - 110.33
Phenol-d5		0.0506	mg/L	1	0.400	13	10 - 82.08
Nitrobenzene-d5		0.206	mg/L	1	0.400	52	26.72 - 155
2-Fluorobiphenyl		0.218	mg/L	1	0.400	54	35.89 - 150.5
2,4,6-Tribromophenol		0.247	mg/L	1	0.400	62	10 - 204.91
Terphenyl-d14		0.313	mg/L	1	0.400	78	33.98 - 168.85

Sample: 91004 - HGLSB33-10-0405

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**1.24**	**1.24**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91004 - HGLSB33-10-0405

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27055	Date Analyzed:	2006-06-02	Analyzed By:	JG
Prep Batch:	23752	Sample Preparation:	2006-05-29	Prepared By:	JG
		TCLP Extraction:	2006-05-30	Prepared By:	JG

continued . . .

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sample 91004 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.5	mg/L	1	50.0	97	70 - 130
Toluene-d8		49.2	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		47.2	mg/L	1	50.0	94	70 - 130

Sample: 91005 - HGLSB33-11-0607

Analysis: Ag, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.12**	**1.12**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91005 - HGLSB33-11-0607

Analysis: Al, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**4660**	**4660**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91005 - HGLSB33-11-0607

Analysis: As, Total
QC Batch: 26829

Analytical Method: S 6010B
Date Analyzed: 2006-05-25

Prep Method: S 3050B
Analyzed By: RR

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Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91005 - HGLSB33-11-0607

Analysis: Ba, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26829 Date Analyzed: 2006-05-25 Analyzed By: RR
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**33.3**	**33.3**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91005 - HGLSB33-11-0607

Analysis: Be, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26829 Date Analyzed: 2006-05-25 Analyzed By: RR
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.188**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91005 - HGLSB33-11-0607

Analysis: Ca, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26894 Date Analyzed: 2006-05-26 Analyzed By: TP
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**139000**	**139000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91005 - HGLSB33-11-0607

Analysis: Cd, Total Analytical Method: S 6010B Prep Method: S 3050B
QC Batch: 26829 Date Analyzed: 2006-05-25 Analyzed By: RR
Prep Batch: 23546 Sample Preparation: 2006-05-24 Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.216**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

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Sample: 91005 - HGLSB33-11-0607

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.51**	**1.51**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91005 - HGLSB33-11-0607

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**4.51**	**4.51**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91005 - HGLSB33-11-0607

Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**3.75**	**3.75**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91005 - HGLSB33-11-0607

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**4470**	**4470**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91005 - HGLSB33-11-0607

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91005 - HGLSB33-11-0607

Analysis: K, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1520**	**1520**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91005 - HGLSB33-11-0607

Analysis: Mg, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**5910**	**5910**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91005 - HGLSB33-11-0607

Analysis: Mn, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**46.9**	**46.9**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91005 - HGLSB33-11-0607

Analysis: Na, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**822**	**822**	<0.820	mg/Kg	10	0.0820	50	0.082

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Sample: 91005 - HGLSB33-11-0607

Analysis:	Ni, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**3.07**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91005 - HGLSB33-11-0607

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**2.31**	**2.31**	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91005 - HGLSB33-11-0607

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	6	0.00760	mg/Kg	0.16	0.100	48	50.4 - 128.7

Sample: 91005 - HGLSB33-11-0607

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

[6]Surrogate out due to peak interference.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00580	mg/Kg	0.16	0.100	36	10 - 171
Deca chlorobiphenyl		0.00890	mg/Kg	0.16	0.100	56	10 - 179

Sample: 91005 - HGLSB33-11-0607

Analysis: Sb, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91005 - HGLSB33-11-0607

Analysis: Se, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

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Sample: 91005 - HGLSB33-11-0607

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27154	Date Analyzed:	2006-05-31	Analyzed By:	AG
Prep Batch:	23540	Sample Preparation:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

continued . . .

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sample 91005 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.92	mg/Kg	1	2.67	72	10 - 98.8
Phenol-d5		2.17	mg/Kg	1	2.67	81	10 - 105

continued . . .

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sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		2.16	mg/Kg	1	2.67	81	10 - 114
2-Fluorobiphenyl		2.18	mg/Kg	1	2.67	82	10 - 122
2,4,6-Tribromophenol		2.70	mg/Kg	1	2.67	101	10 - 117
Terphenyl-d14		2.94	mg/Kg	1	2.67	110	10 - 116

Sample: 91005 - HGLSB33-11-0607

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91005 - HGLSB33-11-0607

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26756	Date Analyzed:	2006-05-23	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		107	mg/Kg	1	150	71	62.8 - 115

Sample: 91005 - HGLSB33-11-0607

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.685	mg/Kg	10	0.100	68	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.903	mg/Kg	10	0.100	90	71.9 - 123.7

Sample: 91005 - HGLSB33-11-0607

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Analysis: V, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**11.0**	**11.0**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91005 - HGLSB33-11-0607

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~7.47~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~3.02~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	

continued . . .

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sample 91005 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		454	µg/Kg	10	50.0	91	42 - 129
Toluene-d8		499	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorobenzene (4-BFB)		495	µg/Kg	10	50.0	99	78 - 120

Sample: 91005 - HGLSB33-11-0607

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**18.4**	**18.4**	<0.124	mg/Kg	1	0.124	1	0.124

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Sample: 91006 - HGLSBDUP-04

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.23**	**1.23**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

Sample: 91006 - HGLSBDUP-04

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**5170**	**5170**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91006 - HGLSBDUP-04

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91006 - HGLSBDUP-04

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**44.6**	**44.6**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91006 - HGLSBDUP-04

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.198**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91006 - HGLSBDUP-04

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**129000**	**129000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91006 - HGLSBDUP-04

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	J	**0.272**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91006 - HGLSBDUP-04

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**2.21**	**2.21**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91006 - HGLSBDUP-04

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**5.35**	**5.35**	<0.125	mg/Kg	1	0.125	1	0.125172

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Sample: 91006 - HGLSBDUP-04

Analysis: Cu, Total
QC Batch: 26829
Prep Batch: 23546
Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24
Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**4.37**	**4.37**	<0.268	mg/Kg	1	0.268	0.5	0.26781

Sample: 91006 - HGLSBDUP-04

Analysis: Fe, Total
QC Batch: 26829
Prep Batch: 23546
Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24
Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**4280**	**4280**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91006 - HGLSBDUP-04

Analysis: Hg, Total
QC Batch: 27203
Prep Batch: 23857
Analytical Method: S 7471A
Date Analyzed: 2006-06-09
Sample Preparation: 2006-06-08
Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91006 - HGLSBDUP-04

Analysis: K, Total
QC Batch: 26894
Prep Batch: 23546
Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24
Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1420**	**1420**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91006 - HGLSBDUP-04

Analysis: Mg, Total
QC Batch: 26894
Prep Batch: 23546
Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24
Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**6640**	**6640**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91006 - HGLSBDUP-04

Analysis: Mn, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**76.5**	**76.5**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91006 - HGLSBDUP-04

Analysis: Na, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**1090**	**1090**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91006 - HGLSBDUP-04

Analysis: Ni, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**3.68**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91006 - HGLSBDUP-04

Analysis: Pb, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead		**1.87**	**1.87**	<0.650	mg/Kg	1	0.650	1	0.650424

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Sample: 91006 - HGLSBDUP-04

Analysis: PCB
QC Batch: 27095
Prep Batch: 23778

Analytical Method: S 8082
Date Analyzed: 2006-06-05
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)		**0.00360**	**0.00360**	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.00850	mg/Kg	0.16	0.100	53	50.4 - 128.7

Sample: 91006 - HGLSBDUP-04

Analysis: Pesticides
QC Batch: 27113
Prep Batch: 23778

Analytical Method: S 8081A
Date Analyzed: 2006-06-05
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00780	mg/Kg	0.16	0.100	49	10 - 171
Deca chlorobiphenyl		0.0118	mg/Kg	0.16	0.100	74	10 - 179

Sample: 91006 - HGLSBDUP-04

Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91006 - HGLSBDUP-04

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91006 - HGLSBDUP-04

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27154	Date Analyzed:	2006-05-31	Analyzed By:	AG
Prep Batch:	23540	Sample Preparation:	2006-05-23	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392

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sample 91006 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584

continued . . .

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sample 91006 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.69	mg/Kg	1	2.67	63	10 - 98.8
Phenol-d5		1.84	mg/Kg	1	2.67	69	10 - 105
Nitrobenzene-d5		1.85	mg/Kg	1	2.67	69	10 - 114
2-Fluorobiphenyl		1.93	mg/Kg	1	2.67	72	10 - 122
2,4,6-Tribromophenol		2.58	mg/Kg	1	2.67	97	10 - 117
Terphenyl-d14		2.70	mg/Kg	1	2.67	101	10 - 116

Sample: 91006 - HGLSBDUP-04

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91006 - HGLSBDUP-04

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Analysis: TPH DRO
QC Batch: 26756
Prep Batch: 23478

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-23
Sample Preparation: 2006-05-22

Prep Method: N/A
Analyzed By: DS
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		108	mg/Kg	1	150	72	62.8 - 115

Sample: 91006 - HGLSBDUP-04

Analysis: TPH GRO
QC Batch: 26822
Prep Batch: 23551

Analytical Method: S 8015B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.685	mg/Kg	10	0.100	68	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.930	mg/Kg	10	0.100	93	71.9 - 123.7

Sample: 91006 - HGLSBDUP-04

Analysis: V, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**12.6**	**12.6**	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91006 - HGLSBDUP-04

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929

continued ...

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sample 91006 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.30~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~2.99~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421

continued . . .

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sample 91006 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		448	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		503	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		502	µg/Kg	10	50.0	100	78 - 120

Sample: 91006 - HGLSBDUP-04

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**19.9**	**19.9**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91007 - HGLSBDUP-05

Analysis:	RCI	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	26834	Date Analyzed:	2006-05-25	Analyzed By:	SM
Prep Batch:	23560	Sample Preparation:	2006-05-25	Prepared By:	SM
Analysis:	RCI	Analytical Method:	SW-846 Ch. 7.1	Prep Method:	N/A
Analysis:	RCI	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0
Hydrogen Sulfide	J	<10.0	mg/Kg	1	10
Hydrogen Cyanide	J	<2.50	mg/Kg	1	2.5
Corrosivity		non-corrosive	mm/yr	1	
pH		7.62	s.u.	1	

continued . . .

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sample 91007 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ignitability		non-ignitable		1	

Sample: 91007 - HGLSBDUP-05

Analysis:	TCLP Pesticides	Analytical Method:	S 8081A	Prep Method:	TCLP 1311
QC Batch:	27045	Date Analyzed:	2006-05-30	Analyzed By:	AG
Prep Batch:	23720	Sample Preparation:	2006-05-29	Prepared By:	AG
		TCLP Extraction:	2006-05-26	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.0000500	<0.00250	<0.0000500	mg/L	0.025	0.00200	0.1	0.002
gamma-BHC (Lindane)	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001856
beta-BHC	U	<0.0000465	<0.00250	<0.0000465	mg/L	0.025	0.00186	0.1	0.001862
Heptachlor	U	<0.0000552	<0.00250	<0.0000552	mg/L	0.025	0.00221	0.1	0.002212
delta-BHC	U	<0.0000372	<0.00250	<0.0000372	mg/L	0.025	0.00149	0.1	0.001487
Aldrin	U	<0.0000735	<0.00250	<0.0000735	mg/L	0.025	0.00294	0.1	0.002937
Heptachlor Epoxide	U	<0.000109	<0.00250	<0.000109	mg/L	0.025	0.00436	0.1	0.004356
gamma-Chlordane	U	<0.0000468	<0.00250	<0.0000468	mg/L	0.025	0.00187	0.1	0.001868
alpha-Chlordane	U	<0.0000845	<0.00250	<0.0000845	mg/L	0.025	0.00338	0.1	0.003375
Endosulfan I	U	<0.0000982	<0.00250	<0.0000982	mg/L	0.025	0.00393	0.1	0.003931
p,p-DDE	U	<0.000123	<0.00250	<0.000123	mg/L	0.025	0.00492	0.1	0.004925
Dieldrin	U	<0.0000548	<0.00250	<0.0000548	mg/L	0.025	0.00219	0.1	0.002187
Endrin	U	<0.0000348	<0.00250	<0.0000348	mg/L	0.025	0.00139	0.1	0.001387
p,p-DDD	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Endosulfan II	U	<0.0000525	<0.00250	<0.0000525	mg/L	0.025	0.00210	0.1	0.0021
p,p-DDT	U	<0.0000678	<0.00250	<0.0000678	mg/L	0.025	0.00271	0.1	0.002712
Endrin aldehyde	U	<0.0000330	<0.00250	<0.0000330	mg/L	0.025	0.00132	0.1	0.001325
Endosulfan sulfate	U	<0.0000952	<0.00250	<0.0000952	mg/L	0.025	0.00381	0.1	0.003812
Methoxychlor	U	<0.0000335	<0.00250	<0.0000335	mg/L	0.025	0.00134	0.1	0.001343
Endrin Ketone	U	<0.0000555	<0.00250	<0.0000555	mg/L	0.025	0.00222	0.1	0.002225
Toxaphene	U	<0.00225	<0.00250	<0.00225	mg/L	0.025	0.0900	0.1	0.09
Technical Chlordane	U	<0.00106	<0.00250	<0.00106	mg/L	0.025	0.0425	0.1	0.0425

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00440	mg/L	0.025	0.200	88	16.8 - 143
Deca chlorobiphenyl		0.00500	mg/L	0.025	0.200	100	35.8 - 155

Sample: 91007 - HGLSBDUP-05

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	27149	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23542	Sample Preparation:	2006-05-24	Prepared By:	AG
		TCLP Extraction:	2006-05-23	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0148	<0.0500	<0.0148	mg/L	1	0.0148	0.05	0.0148
1,4-Dichlorobenzene (para)	U	<0.00719	<0.0500	<0.00719	mg/L	1	0.00719	0.05	0.00719
o-Cresol	U	<0.00586	<0.0500	<0.00586	mg/L	1	0.00586	0.05	0.00586
m,p-Cresol	U	<0.0101	<0.0500	<0.0101	mg/L	1	0.0101	0.05	0.0101
Hexachloroethane	U	<0.00654	<0.0500	<0.00654	mg/L	1	0.00654	0.05	0.00654
Nitrobenzene	U	<0.00746	<0.0500	<0.00746	mg/L	1	0.00746	0.05	0.00746
Hexachlorobutadiene	U	<0.00663	<0.0500	<0.00663	mg/L	1	0.00663	0.05	0.00663
2,4,6-Trichlorophenol	U	<0.00546	<0.0500	<0.00546	mg/L	1	0.00546	0.05	0.00546
2,4,5-Trichlorophenol	U	<0.00466	<0.0500	<0.00466	mg/L	1	0.00466	0.05	0.00466
2,4-Dinitrotoluene	U	<0.00544	<0.0500	<0.00544	mg/L	1	0.00544	0.05	0.00544
2,4-Dichlorophenoxyacetic acid	U	<0.00916	<0.0500	<0.00916	mg/L	1	0.00916	0.05	0.00916
Hexachlorobenzene	U	<0.00596	<0.0500	<0.00596	mg/L	1	0.00596	0.05	0.00596
2,4,5-Trichlorophenoxyproprionic acid	U	<0.00895	<0.0500	<0.00895	mg/L	1	0.00895	0.05	0.00895
Pentachlorophenol	U	<0.00525	<0.0500	<0.00525	mg/L	1	0.00525	0.05	0.00525

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0565	mg/L	1	0.400	14	10 - 110.33
Phenol-d5		0.0430	mg/L	1	0.400	11	10 - 82.08
Nitrobenzene-d5		0.172	mg/L	1	0.400	43	26.72 - 155
2-Fluorobiphenyl		0.188	mg/L	1	0.400	47	35.89 - 150.5
2,4,6-Tribromophenol		0.234	mg/L	1	0.400	58	10 - 204.91
Terphenyl-d14		0.324	mg/L	1	0.400	81	33.98 - 168.85

Sample: 91007 - HGLSBDUP-05

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	27101	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23700	Sample Preparation:	2006-06-01	Prepared By:	TS
		TCLP Extraction:	2006-06-01	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	27132	Date Analyzed:	2006-06-07	Analyzed By:	TP
Prep Batch:	23797	Sample Preparation:	2006-06-06	Prepared By:	TP
		TCLP Extraction:		Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
TCLP Silver	U	<0.00780	<0.125	<0.00780	mg/L	1	0.00780	0.125	0.0078
TCLP Arsenic	U	<0.0590	<0.100	<0.0590	mg/L	1	0.0590	0.1	0.059
TCLP Barium		**0.783**	**0.783**	<0.00340	mg/L	1	0.00340	0.1	0.0034
TCLP Cadmium	U	<0.00270	<0.0500	<0.00270	mg/L	1	0.00270	0.05	0.0027
TCLP Chromium	U	<0.00660	<0.100	<0.00660	mg/L	1	0.00660	0.1	0.0066
TCLP Mercury	U	<0.000102	**0.00**	<0.000102	mg/L	1	0.000102	0	0.000102
TCLP Lead	U	<0.0370	<0.100	<0.0370	mg/L	1	0.0370	0.1	0.037
TCLP Selenium	U	<0.100	<0.500	<0.100	mg/L	1	0.100	0.5	0.1

Sample: 91007 - HGLSBDUP-05

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	27056	Date Analyzed:	2006-06-02	Analyzed By:	JG

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Prep Batch: 23753

Sample Preparation: 2006-05-31
TCLP Extraction: 2006-06-01

Prepared By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.00895	<0.0500	<0.00895	mg/L	50	0.000179	0.001	0.000179
1,1-Dichloroethene	U	<0.0122	<0.0500	<0.0122	mg/L	50	0.000244	0.001	0.000244
2-Butanone (MEK)	U	<0.0492	<0.500	<0.0492	mg/L	50	0.000985	0.01	0.000985
Chloroform	U	<0.00845	<0.0500	<0.00845	mg/L	50	0.000169	0.001	0.000169
1,2-Dichloroethane (EDC)	U	<0.00785	<0.0500	<0.00785	mg/L	50	0.000157	0.001	0.000157
Benzene	U	<0.00920	<0.0500	<0.00920	mg/L	50	0.000184	0.001	0.000184
Carbon Tetrachloride	U	<0.00805	<0.0500	<0.00805	mg/L	50	0.000161	0.001	0.000161
Trichloroethene (TCE)	U	<0.0354	<0.0500	<0.0354	mg/L	50	0.000708	0.001	0.000708
Tetrachloroethene (PCE)	U	<0.00615	<0.0500	<0.00615	mg/L	50	0.000123	0.001	0.000123
Chlorobenzene	U	<0.00725	<0.0500	<0.00725	mg/L	50	0.000145	0.001	0.000145
1,4-Dichlorobenzene (para)	U	<0.00905	<0.0500	<0.00905	mg/L	50	0.000181	0.001	0.000181

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.6	mg/L	1	50.0	97	70 - 130
Toluene-d8		49.0	mg/L	1	50.0	98	70 - 130
4-Bromofluorobenzene (4-BFB)		47.0	mg/L	1	50.0	94	70 - 130

Sample: 91008 - TB-051806

Analysis: Volatiles
QC Batch: 26849
Prep Batch: 23577

Analytical Method: S 8260B
Date Analyzed: 2006-05-24
Sample Preparation: 2006-05-24

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	<0.854	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	J	**0.740**	<5.00	<0.689	µg/L	1	0.689	5	0.6888
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665

continued . . .

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sample 91008 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557	
Chloroform	U	<0.0475	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	**0.450**	<1.00	0.300	µg/L	1	0.0736	1	0.0736	J
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	U	<0.0566	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	
m,p-Xylene	JB	**0.0600**	<1.00	0.100	µg/L	1	0.0363	1	0.0363	J
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	0.0600	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	0.0500	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	U	<0.0423	<1.00	0.0900	µg/L	1	0.0423	1	0.0423	
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.0700	µg/L	1	0.0557	1	0.0557	
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	JB	**0.0400**	<1.00	0.110	µg/L	1	0.0336	1	0.0336	J
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	U	<0.0439	<1.00	0.140	µg/L	1	0.0439	1	0.0439	
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	U	<0.0513	<1.00	<0.0513	µg/L	1	0.0513	1	0.0513	
4-Chlorotoluene	U	<0.0460	<1.00	0.0600	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	U	<0.0400	<1.00	<0.0400	µg/L	1	0.0400	1	0.04	
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.750	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	µg/L	1	50.0	102	70 - 130

continued . . .

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		50.9	µg/L	1	50.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)		47.1	µg/L	1	50.0	94	70 - 130

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum	J	**0.0190**	<0.0300	<0.00840	mg/L	1	0.00840	0.03	0.0084

Sample: 91009 - HGLRB06-051806-AL

Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjustcd)
Total Barium	U	<0.00200	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002

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Sample: 91009 - HGLRB06-051806-AL

Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	U	<0.000300	<0.00250	<0.000300	mg/L	1	0.000300	0.0025	0.0003

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Ca, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26893	Date Analyzed:	2006-05-27	Analyzed By:	TP
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium	U	<0.108	**0.00**	<0.108	mg/L	1	0.108	0	0.108

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt	U	<0.000600	<0.00500	<0.000600	mg/L	1	0.000600	0.005	0.0006

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014

Sample: 91009 - HGLRB06-051806-AL

Analysis: Cu, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper	U	<0.00380	<0.00500	<0.00380	mg/L	1	0.00380	0.005	0.0038

Sample: 91009 - HGLRB06-051806-AL

Analysis: Fe, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**0.0220**	**0.0220**	<0.0103	mg/L	1	0.0103	0.01	0.0103

Sample: 91009 - HGLRB06-051806-AL

Analysis: Hg, Total
QC Batch: 27001
Prep Batch: 23694

Analytical Method: S 7470A
Date Analyzed: 2006-06-01
Sample Preparation: 2006-05-31

Prep Method: N/A
Analyzed By: TP
Prepared By: TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05

Sample: 91009 - HGLRB06-051806-AL

Analysis: K, Total
QC Batch: 26893
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-27
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		~~0.789~~	~~0.789~~	<0.331	mg/L	1	0.331	0	0.331

0.789

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Sample: 91009 - HGLRB06-051806-AL

Analysis: Mg, Total
QC Batch: 26893
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-27
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium	U	<0.248	<0.500	<0.248	mg/L	1	0.248	0.5	0.248

Sample: 91009 - HGLRB06-051806-AL

Analysis: Mn, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327

Sample: 91009 - HGLRB06-051806-AL

Analysis: Na, Total
QC Batch: 26893
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-27
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		~~0.751~~	~~0.751~~	<0.0640	mg/L	1	0.0640	0	0.064

0.751 U

Sample: 91009 - HGLRB06-051806-AL

Analysis: Ni, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	U	<0.000598	<0.0100	<0.000598	mg/L	1	0.000598	0.01	0.000598

Sample: 91009 - HGLRB06-051806-AL

Analysis: Pb, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671

Sample: 91009 - HGLRB06-051806-AL

Analysis: Pesticides
QC Batch: 26852
Prep Batch: 23572

Analytical Method: S 8081A
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 3510C
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
alpha-BHC	U	<0.00000566	<0.000500	<0.00000566	mg/L	1	0.00000566	0.0005	5.66e-06	
gamma-BHC (Lindane)	U	<0.00000713	<0.000500	<0.00000713	mg/L	1	0.00000713	0.0005	7.13e-06	
beta-BHC	U	<0.00000758	<0.000500	<0.00000758	mg/L	1	0.00000758	0.0005	7.58e-06	
Heptachlor	U	<0.00000513	<0.000500	<0.00000513	mg/L	1	0.00000513	0.0005	5.13e-06	
delta-BHC	U	<0.00000665	<0.000500	<0.00000665	mg/L	1	0.00000665	0.0005	6.65e-06	
Aldrin	U	<0.00000640	<0.000500	<0.00000640	mg/L	1	0.00000640	0.0005	6.4e-06-	
Heptachlor Epoxide	U	<0.00000745	<0.000500	<0.00000745	mg/L	1	0.00000745	0.0005	7.45e-06	J
gamma-Chlordane	U	<0.00000758	<0.000500	<0.00000758	mg/L	1	0.00000758	0.0005	7.58e-06	
alpha-Chlordane	U	<0.00000758	<0.000500	<0.00000758	mg/L	1	0.00000758	0.0005	7.58e-06	
Endosulfan I	U	<0.00000925	<0.000500	<0.00000925	mg/L	1	0.00000925	0.0005	9.25e-06	J
p,p-DDE	U	<0.00000654	<0.000500	<0.00000654	mg/L	1	0.00000654	0.0005	6.54e-06	
Dieldrin	U	<0.00000745	<0.000500	<0.00000745	mg/L	1	0.00000745	0.0005	7.45e-06	J
Endrin	U	<0.00000742	<0.000500	<0.00000742	mg/L	1	0.00000742	0.0005	7.42e-06	J
p,p-DDD	U	<0.00000594	<0.000500	<0.00000594	mg/L	1	0.00000594	0.0005	5.94e-06	
Endosulfan II	U	<0.00000745	<0.000500	<0.00000745	mg/L	1	0.00000745	0.0005	7.45e-06	J
p,p-DDT	U	<0.00000859	<0.000500	<0.00000859	mg/L	1	0.00000859	0.0005	8.59e-06	J
Endrin aldehyde	U	<0.0000126	<0.000500	<0.0000126	mg/L	1	0.0000126	0.0005	1.26e-05	
Endosulfan sulfate	U	<0.00000494	<0.000500	<0.00000494	mg/L	1	0.00000494	0.0005	4.94e-06	
Methoxychlor	U	<0.0000124	<0.000500	<0.0000124	mg/L	1	0.0000124	0.0005	1.24e-05	
Endrin Ketone	U	<0.00000742	<0.000500	<0.00000742	mg/L	1	0.00000742	0.0005	7.42e-06	J
Toxaphene	U	<0.000400	<0.00500	<0.000400	mg/L	1	0.000400	0.005	0.0004	
Technical Chlordane	U	<0.000200	<0.00500	<0.000200	mg/L	1	0.000200	0.005	0.0002	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.000620	mg/L	1	0.00100	62	0 - 151
Deca chlorobiphenyl		0.00110	mg/L	1	0.00100	110	0 - 166

Sample: 91009 - HGLRB06-051806-AL

Analysis: Sb, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.00266	<0.00500	<0.00266	mg/L	1	0.00266	0.005	0.002664

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Sample: 91009 - HGLRB06-051806-AL

Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	27049	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23541	Sample Preparation:	2006-05-24	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.000890	<0.00500	<0.000890	mg/L	1	0.000890	0.005	0.00089
n-Nitrosodimethylamine	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
2-Picoline	U	<0.00121	<0.00500	<0.00121	mg/L	1	0.00121	0.005	0.00121
Methyl methanesulfonate	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Ethyl methanesulfonate	U	<0.000552	<0.00500	<0.000552	mg/L	1	0.000552	0.005	0.000552
Phenol	U	<0.000495	<0.00500	<0.000495	mg/L	1	0.000495	0.005	0.000495
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287
bis(2-chloroethyl)ether	U	<0.000535	<0.00500	<0.000535	mg/L	1	0.000535	0.005	0.000535
2-Chlorophenol	U	<0.000923	<0.00500	<0.000923	mg/L	1	0.000923	0.005	0.000923
1,3-Dichlorobenzene (meta)	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
1,4-Dichlorobenzene (para)	U	<0.000516	<0.00500	<0.000516	mg/L	1	0.000516	0.005	0.000516
Benzyl alcohol	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
1,2-Dichlorobenzene (ortho)	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
2-Methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
bis(2-chloroisopropyl)ether	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
4-Methylphenol / 3-Methylphenol	U	<0.000488	<0.00500	<0.000488	mg/L	1	0.000488	0.005	0.000488
n-Nitrosodi-n-propylamine	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662
Hexachloroethane	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Acetophenone	U	<0.000684	<0.00500	<0.000684	mg/L	1	0.000684	0.005	0.000684
Nitrobenzene	U	<0.000651	<0.00500	<0.000651	mg/L	1	0.000651	0.005	0.000651
n-Nitrosopiperidine	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Isophorone	U	<0.000743	<0.00500	<0.000743	mg/L	1	0.000743	0.005	0.000743
2-Nitrophenol	U	<0.000833	<0.00500	<0.000833	mg/L	1	0.000833	0.005	0.000833
2,4-Dimethylphenol	U	<0.000945	<0.00500	<0.000945	mg/L	1	0.000945	0.005	0.000945
bis(2-chloroethoxy)methane	U	<0.000580	<0.00500	<0.000580	mg/L	1	0.000580	0.005	0.00058
2,4-Dichlorophenol	U	<0.000902	<0.00500	<0.000902	mg/L	1	0.000902	0.005	0.000902
1,2,4-Trichlorobenzene	U	<0.000484	<0.00500	<0.000484	mg/L	1	0.000484	0.005	0.000484
Benzoic acid	U	<0.000719	<0.00500	<0.000719	mg/L	1	0.000719	0.005	0.000719
Naphthalene	U	<0.000480	<0.00500	<0.000480	mg/L	1	0.000480	0.005	0.00048
a,a-Dimethylphenethylamine	U	<0.00199	<0.00500	<0.00199	mg/L	1	0.00199	0.005	0.00199
4-Chloroaniline	U	<0.000978	<0.00500	<0.000978	mg/L	1	0.000978	0.005	0.000978
2,6-Dichlorophenol	U	<0.00132	<0.0100	<0.00132	mg/L	1	0.00132	0.01	0.00132
Hexachlorobutadiene	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
n-Nitroso-di-n-butylamine	U	<0.000704	<0.00500	<0.000704	mg/L	1	0.000704	0.005	0.000704
4-Chloro-3-methylphenol	U	<0.000662	<0.00500	<0.000662	mg/L	1	0.000662	0.005	0.000662

continued . . .

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sample 91009 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Methylnaphthalene	U	<0.000416	<0.00500	<0.000416	mg/L	1	0.000416	0.005	0.000416
1-Methylnaphthalene	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
1,2,4,5-Tetrachlorobenzene	U	<0.000445	<0.00500	<0.000445	mg/L	1	0.000445	0.005	0.000445
Hexachlorocyclopentadiene	U	<0.000387	<0.00500	<0.000387	mg/L	1	0.000387	0.005	0.000387
2,4,6-Trichlorophenol	U	<0.00143	<0.0100	<0.00143	mg/L	1	0.00143	0.01	0.00143
2,4,5-Trichlorophenol	U	<0.00143	<0.00500	<0.00143	mg/L	1	0.00143	0.005	0.00143
2-Chloronaphthalene	U	<0.000327	<0.00500	<0.000327	mg/L	1	0.000327	0.005	0.000327
1-Chloronaphthalene	U	<0.000450	<0.00500	<0.000450	mg/L	1	0.000450	0.005	0.00045
2-Nitroaniline	U	<0.00102	<0.00500	<0.00102	mg/L	1	0.00102	0.005	0.00102
Dimethylphthalate	U	<0.000752	<0.00500	<0.000752	mg/L	1	0.000752	0.005	0.000752
Acenaphthylene	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
2,6-Dinitrotoluene	U	<0.000738	<0.00500	<0.000738	mg/L	1	0.000738	0.005	0.000738
3-Nitroaniline	U	<0.000694	<0.00500	<0.000694	mg/L	1	0.000694	0.005	0.000694
Acenaphthene	U	<0.000601	<0.00500	<0.000601	mg/L	1	0.000601	0.005	0.000601
2,4-Dinitrophenol	U	<0.000476	<0.00500	<0.000476	mg/L	1	0.000476	0.005	0.000476
Dibenzofuran	U	<0.000556	<0.00500	<0.000556	mg/L	1	0.000556	0.005	0.000556
Pentachlorobenzene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
4-Nitrophenol	U	<0.000924	<0.0250	<0.000924	mg/L	1	0.000924	0.025	0.000924
2,4-Dinitrotoluene	U	<0.000803	<0.00500	<0.000803	mg/L	1	0.000803	0.005	0.000803
1-Naphthylamine	U	<0.00122	<0.00500	<0.00122	mg/L	1	0.00122	0.005	0.00122
2,3,4,6-Tetrachlorophenol	U	<0.00225	<0.0100	<0.00225	mg/L	1	0.00225	0.01	0.00225
2-Naphthylamine	U	<0.00147	<0.00500	<0.00147	mg/L	1	0.00147	0.005	0.00147
Fluorene	U	<0.000675	<0.00500	<0.000675	mg/L	1	0.000675	0.005	0.000675
4-Chlorophenyl-phenylether	U	<0.000679	<0.00500	<0.000679	mg/L	1	0.000679	0.005	0.000679
Diethylphthalate	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843
4-Nitroaniline	U	<0.000740	<0.00500	<0.000740	mg/L	1	0.000740	0.005	0.00074
Diphenylhydrazine	U	<0.000897	<0.00500	<0.000897	mg/L	1	0.000897	0.005	0.000897
4,6-Dinitro-2-methylphenol	U	<0.000630	<0.00500	<0.000630	mg/L	1	0.000630	0.005	0.00063
Diphenylamine	U	<0.000598	<0.00500	<0.000598	mg/L	1	0.000598	0.005	0.000598
4-Bromophenyl-phenylether	U	<0.000741	<0.00500	<0.000741	mg/L	1	0.000741	0.005	0.000741
Phenacetin	U	<0.000494	<0.00500	<0.000494	mg/L	1	0.000494	0.005	0.000494
Hexachlorobenzene	U	<0.000571	<0.00500	<0.000571	mg/L	1	0.000571	0.005	0.000571
4-Aminobiphenyl	U	<0.00157	<0.00500	<0.00157	mg/L	1	0.00157	0.005	0.00157
Pentachlorophenol	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Anthracene	U	<0.000641	<0.00500	<0.000641	mg/L	1	0.000641	0.005	0.000641
Pentachloronitrobenzene	U	<0.000609	<0.00500	<0.000609	mg/L	1	0.000609	0.005	0.000609
Pronamide	U	<0.000441	<0.00500	<0.000441	mg/L	1	0.000441	0.005	0.000441
Phenanthrene	U	<0.000523	<0.00500	<0.000523	mg/L	1	0.000523	0.005	0.000523
Di-n-butylphthalate	U	<0.000564	<0.00500	<0.000564	mg/L	1	0.000564	0.005	0.000564
Fluoranthene	U	<0.000399	<0.00500	<0.000399	mg/L	1	0.000399	0.005	0.000399
Benzidine	U	<0.00133	<0.0250	<0.00133	mg/L	1	0.00133	0.025	0.00133
Pyrene	U	<0.00146	<0.00500	<0.00146	mg/L	1	0.00146	0.005	0.00146
p-Dimethylaminoazobenzene	U	<0.00247	<0.00500	<0.00247	mg/L	1	0.00247	0.005	0.00247
Butylbenzylphthalate	U	<0.000997	<0.00500	<0.000997	mg/L	1	0.000997	0.005	0.000997
Benzo(a)anthracene	U	<0.000734	<0.00500	<0.000734	mg/L	1	0.000734	0.005	0.000734
3,3-Dichlorobenzidine	U	<0.00153	<0.00500	<0.00153	mg/L	1	0.00153	0.005	0.00153
Chrysene	U	<0.000814	<0.00500	<0.000814	mg/L	1	0.000814	0.005	0.000814
bis(2-ethylhexyl)phthalate	U	<0.00209	<0.00500	<0.00209	mg/L	1	0.00209	0.005	0.00209
Di-n-octylphthalate	U	<0.000529	<0.00500	<0.000529	mg/L	1	0.000529	0.005	0.000529
Benzo(b)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501
Benzo(k)fluoranthene	U	<0.000501	<0.00500	<0.000501	mg/L	1	0.000501	0.005	0.000501

continued ...

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sample 91009 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
7,12-Dimethylbenz(a)anthracene	U	<0.000320	<0.00500	<0.000320	mg/L	1	0.000320	0.005	0.00032
Benzo(a)pyrene	U	<0.000515	<0.00500	<0.000515	mg/L	1	0.000515	0.005	0.000515
3-Methylcholanthrene	U	<0.000457	<0.00500	<0.000457	mg/L	1	0.000457	0.005	0.000457
Dibenzo(a,j)acridine	U	<0.000846	<0.00500	<0.000846	mg/L	1	0.000846	0.005	0.000846
Indeno(1,2,3-cd)pyrene	U	<0.000548	<0.00500	<0.000548	mg/L	1	0.000548	0.005	0.000548
Dibenzo(a,h)anthracene	U	<0.000498	<0.00500	<0.000498	mg/L	1	0.000498	0.005	0.000498
Benzo(g,h,i)perylene	U	<0.000462	<0.00500	<0.000462	mg/L	1	0.000462	0.005	0.000462

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0337	mg/L	1	0.0800	42	10 - 84.7
Phenol-d5		0.0236	mg/L	1	0.0800	30	10 - 54.9
Nitrobenzene-d5		0.0847	mg/L	1	0.0800	106	10 - 202
2-Fluorobiphenyl		0.0801	mg/L	1	0.0800	100	10 - 199
2,4,6-Tribromophenol		0.0767	mg/L	1	0.0800	96	10 - 141
Terphenyl-d14		0.0930	mg/L	1	0.0800	116	10 - 160

Sample: 91009 - HGLRB06-051806-AL

Analysis: Tl, Total
QC Batch: 26872
Prep Batch: 23563

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-25

Prep Method: S 3010A
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.00379	<0.0100	<0.00379	mg/L	1	0.00379	0.01	0.00379

Sample: 91009 - HGLRB06-051806-AL

Analysis: TPH DRO
QC Batch: 26754
Prep Batch: 23476

Analytical Method: Mod. 8015B
Date Analyzed: 2006-05-22
Sample Preparation: 2006-05-22

Prep Method: N/A
Analyzed By: DS
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	JB	~~0.490~~	<5.00	0.510	mg/L	0.1	1.19	50	1.19

5.0 U

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.1	mg/L	0.1	150	100	66.6 - 111

Sample: 91009 - HGLRB06-051806-AL

Analysis: TPH GRO
QC Batch: 26781
Prep Batch: 23513

Analytical Method: S 8015B
Date Analyzed: 2006-05-23
Sample Preparation: 2006-05-23

Prep Method: S 5030B
Analyzed By: KB
Prepared By: KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<0.144	<0.500	<0.144	mg/L	5	0.0288	0.1	0.02875

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.445	mg/L	5	0.100	89	88.8 - 95.6
4-Bromofluorobenzene (4-BFB)		0.452	mg/L	5	0.100	90	75.6 - 111.2

Sample: 91009 - HGLRB06-051806-AL

Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	U	<0.000426	<0.00500	<0.000426	mg/L	1	0.000426	0.005	0.000426

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	26849	Date Analyzed:	2006-05-24	Analyzed By:	JG
Prep Batch:	23577	Sample Preparation:	2006-05-24	Prepared By:	JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.0699	<1.00	<0.0699	µg/L	1	0.0699	1	0.0699
Dichlorodifluoromethane	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
Chloromethane (methyl chloride)	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.2298
Vinyl Chloride	U	<0.0902	<1.00	<0.0902	µg/L	1	0.0902	1	0.0902
Bromomethane (methyl bromide)	U	<0.740	<1.00	<0.740	µg/L	1	0.740	1	0.7402
Chloroethane	U	<0.195	<1.00	<0.195	µg/L	1	0.195	1	0.1952
Trichlorofluoromethane	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
Acetone	U	<0.854	<10.0	<0.854	µg/L	1	0.854	10	0.8536
Iodomethane (methyl iodide)	U	<0.112	<5.00	<0.112	µg/L	1	0.112	5	0.1119
Carbon Disulfide	U	<0.0764	<1.00	<0.0764	µg/L	1	0.0764	1	0.0764
Acrylonitrile	U	<0.184	<1.00	<0.184	µg/L	1	0.184	1	0.1837
2-Butanone (MEK)	U	<0.394	<5.00	<0.394	µg/L	1	0.394	5	0.3941
4-Methyl-2-pentanone (MIBK)	U	<0.484	<5.00	<0.484	µg/L	1	0.484	5	0.484
2-Hexanone	U	<0.0975	<1.00	<0.0975	µg/L	1	0.0975	1	0.0975
trans 1,4-Dichloro-2-butene	U	<0.421	<10.0	<0.421	µg/L	1	0.421	10	0.4207
1,1-Dichloroethene	U	<0.0736	<1.00	<0.0736	µg/L	1	0.0736	1	0.0736
Methylene chloride	U	<0.689	<5.00	<0.689	µg/L	1	0.689	5	0.6888
MTBE	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504
trans-1,2-Dichloroethene	U	<0.0598	<1.00	<0.0598	µg/L	1	0.0598	1	0.0598
1,1-Dichloroethane	U	<0.0299	<1.00	<0.0299	µg/L	1	0.0299	1	0.0299
cis-1,2-Dichloroethene	U	<0.101	<1.00	<0.101	µg/L	1	0.101	1	0.1006
2,2-Dichloropropane	U	<0.0665	<1.00	<0.0665	µg/L	1	0.0665	1	0.0665
1,2-Dichloroethane (EDC)	U	<0.0557	<1.00	<0.0557	µg/L	1	0.0557	1	0.0557

continued . . .

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sample 91009 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Chloroform	J	~~0.580~~	<1.00	<0.0475	µg/L	1	0.0475	1	0.0475	1.0 U
1,1,1-Trichloroethane	U	<0.0846	<1.00	<0.0846	µg/L	1	0.0846	1	0.0846	
1,1-Dichloropropene	U	<0.0423	<1.00	<0.0423	µg/L	1	0.0423	1	0.0423	
Benzene	J	**0.0800**	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	J
Carbon Tetrachloride	U	<0.121	<1.00	<0.121	µg/L	1	0.121	1	0.1213	
1,2-Dichloropropane	U	<0.0933	<1.00	<0.0933	µg/L	1	0.0933	1	0.0933	
Trichloroethene (TCE)	U	<0.0495	<1.00	<0.0495	µg/L	1	0.0495	1	0.0495	
Dibromomethane (methylene bromide)	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
Bromodichloromethane	U	<0.0651	<1.00	<0.0651	µg/L	1	0.0651	1	0.0651	
2-Chloroethyl vinyl ether	U	<0.0905	<5.00	<0.0905	µg/L	1	0.0905	5	0.0905	
cis-1,3-Dichloropropene	U	<0.0640	<1.00	<0.0640	µg/L	1	0.0640	1	0.064	
trans-1,3-Dichloropropene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
Toluene	JB	~~0.330~~	<1.00	0.300	µg/L	1	0.0736	1	0.0736	1.0 U
1,1,2-Trichloroethane	U	<0.106	<1.00	<0.106	µg/L	1	0.106	1	0.1056	
1,3-Dichloropropane	U	<0.0625	<1.00	<0.0625	µg/L	1	0.0625	1	0.0625	
Dibromochloromethane	U	<0.0791	<1.00	<0.0791	µg/L	1	0.0791	1	0.0791	
1,2-Dibromoethane (EDB)	U	<0.0460	<1.00	<0.0460	µg/L	1	0.0460	1	0.046	
Tetrachloroethene (PCE)	U	<0.0696	<1.00	<0.0696	µg/L	1	0.0696	1	0.0696	
Chlorobenzene	U	<0.0217	<1.00	0.0400	µg/L	1	0.0217	1	0.0217	
1,1,1,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.1253	
Ethylbenzene	J	**0.0700**	<1.00	<0.0566	µg/L	1	0.0566	1	0.0566	J
m,p-Xylene	JB	~~0.0500~~	<1.00	0.100	µg/L	1	0.0363	1	0.0363	1.0 U
Bromoform	U	<0.0859	<1.00	<0.0859	µg/L	1	0.0859	1	0.0859	
Styrene	U	<0.0394	<1.00	<0.0394	µg/L	1	0.0394	1	0.0394	
o-Xylene	U	<0.0504	<1.00	<0.0504	µg/L	1	0.0504	1	0.0504	
1,1,2,2-Tetrachloroethane	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
2-Chlorotoluene	U	<0.0283	<1.00	0.0600	µg/L	1	0.0283	1	0.0283	
1,2,3-Trichloropropane	U	<0.0679	<1.00	<0.0679	µg/L	1	0.0679	1	0.0679	
Isopropylbenzene	U	<0.0406	<1.00	0.0500	µg/L	1	0.0406	1	0.0406	
Bromobenzene	U	<0.103	<1.00	<0.103	µg/L	1	0.103	1	0.1033	
n-Propylbenzene	U	<0.0423	<1.00	0.0900	µg/L	1	0.0423	1	0.0423	
1,3,5-Trimethylbenzene	U	<0.0557	<1.00	0.0700	µg/L	1	0.0557	1	0.0557	
tert-Butylbenzene	U	<0.0770	<1.00	<0.0770	µg/L	1	0.0770	1	0.077	
1,2,4-Trimethylbenzene	U	<0.0336	<1.00	0.110	µg/L	1	0.0336	1	0.0336	
1,4-Dichlorobenzene (para)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
sec-Butylbenzene	U	<0.0439	<1.00	0.140	µg/L	1	0.0439	1	0.0439	
1,3-Dichlorobenzene (meta)	U	<0.0672	<1.00	<0.0672	µg/L	1	0.0672	1	0.0672	
p-Isopropyltoluene	U	<0.0513	<1.00	<0.0513	µg/L	1	0.0513	1	0.0513	
4-Chlorotoluene	U	<0.0460	<1.00	0.0600	µg/L	1	0.0460	1	0.046	
1,2-Dichlorobenzene (ortho)	U	<0.0629	<1.00	<0.0629	µg/L	1	0.0629	1	0.0629	
n-Butylbenzene	U	<0.0400	<1.00	<0.0400	µg/L	1	0.0400	1	0.04	
1,2-Dibromo-3-chloropropane	U	<0.538	<2.00	<0.538	µg/L	1	0.538	2	0.5379	
1,2,3-Trichlorobenzene	U	<0.504	<5.00	<0.504	µg/L	1	0.504	5	0.5035	
1,2,4-Trichlorobenzene	U	<0.166	<5.00	<0.166	µg/L	1	0.166	5	0.1663	
Naphthalene	U	<0.417	<5.00	0.750	µg/L	1	0.417	5	0.4166	
Hexachlorobutadiene	U	<0.176	<5.00	<0.176	µg/L	1	0.176	5	0.1758	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	µg/L	1	50.0	102	70 - 130
Toluene-d8		50.8	µg/L	1	50.0	102	70 - 130

continued . . .

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		47.3	µg/L	1	50.0	95	70 - 130

Sample: 91009 - HGLRB06-051806-AL

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**0.0460**	**0.0460**	<0.00546	mg/L	1	0.00546	0.005	0.005455

Sample: 91010 - HGLRB06-051806-HA

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	27049	Date Analyzed:	2006-05-29	Analyzed By:	AG
Prep Batch:	23541	Sample Preparation:	2006-05-24	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.00287	<0.00500	<0.00287	mg/L	1	0.00287	0.005	0.00287

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0271	mg/L	1	0.0800	34	10 - 84.7
Phenol-d5		0.0199	mg/L	1	0.0800	25	10 - 54.9
Nitrobenzene-d5		0.0527	mg/L	1	0.0800	66	10 - 202
2-Fluorobiphenyl		0.0503	mg/L	1	0.0800	63	10 - 199
2,4,6-Tribromophenol		0.0512	mg/L	1	0.0800	64	10 - 141
Terphenyl-d14		0.0493	mg/L	1	0.0800	62	10 - 160

Sample: 91010 - HGLRB06-051806-HA

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	26872	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23563	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	27001	Date Analyzed:	2006-06-01	Analyzed By:	TP
Prep Batch:	23694	Sample Preparation:	2006-05-31	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.000200	<0.00200	<0.000200	mg/L	1	0.000200	0.002	0.0002
Total Arsenic	U	<0.00500	<0.00500	<0.00500	mg/L	1	0.00500	0.005	0.005
Total Barium	U	<0.00200	<0.0100	<0.00200	mg/L	1	0.00200	0.01	0.002
Total Cadmium	U	<0.000400	<0.00100	<0.000400	mg/L	1	0.000400	0.001	0.0004

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sample 91010 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium	U	<0.00140	<0.0100	<0.00140	mg/L	1	0.00140	0.01	0.0014
Total Mercury	U	<0.0000407	<0.000200	<0.0000407	mg/L	1	0.0000407	0.0002	4.07e-05
Total Lead	U	<0.00167	<0.00500	<0.00167	mg/L	1	0.00167	0.005	0.001671
Total Selenium	U	<0.00163	<0.0100	<0.00163	mg/L	1	0.00163	0.01	0.001634

Sample: 91011 - HGLHA3901R-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.80	mg/Kg	1	2.67	67	10 - 98.8
Phenol-d5		2.02	mg/Kg	1	2.67	76	10 - 105
Nitrobenzene-d5		2.11	mg/Kg	1	2.67	79	10 - 114
2-Fluorobiphenyl		2.39	mg/Kg	1	2.67	90	10 - 122
2,4,6-Tribromophenol		1.94	mg/Kg	1	2.67	73	10 - 117
Terphenyl-d14	7	3.63	mg/Kg	1	2.67	136	10 - 116

Sample: 91011 - HGLHA3901R-0204

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26874	Date Analyzed:	2006-05-26	Analyzed By:	RR
Prep Batch:	23562	Sample Preparation:	2006-05-25	Prepared By:	DS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.994**	**0.994**	<0.00444	mg/Kg	1	0.00444	0.05	0.00444
Total Arsenic		**8.27**	**8.27**	<0.228	mg/Kg	1	0.228	2	0.228
Total Barium		**36.8**	**36.8**	<0.0601	mg/Kg	1	0.0601	1	0.0601
Total Cadmium		**0.294**	**0.294**	<0.00794	mg/Kg	1	0.00794	0.1	0.00794
Total Chromium		**10.4**	**10.4**	<0.0125	mg/Kg	1	0.0125	0.5	0.0125
Total Mercury	J	**0.00954**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**102**	**102**	<0.367	mg/Kg	1	0.367	1	0.367
Total Selenium	U	<0.0767	<1.00	<0.0767	mg/Kg	1	0.0767	1	0.0767

[7]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91012 - HGLHA3901R-0708

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.78	mg/Kg	1	2.67	67	10 - 98.8
Phenol-d5		2.05	mg/Kg	1	2.67	77	10 - 105
Nitrobenzene-d5		1.98	mg/Kg	1	2.67	74	10 - 114
2-Fluorobiphenyl		2.09	mg/Kg	1	2.67	78	10 - 122
2,4,6-Tribromophenol		2.49	mg/Kg	1	2.67	93	10 - 117
Terphenyl-d14	[8]	3.39	mg/Kg	1	2.67	127	10 - 116

Sample: 91012 - HGLHA3901R-0708

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.09**	**1.09**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**21.6**	**21.6**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**3.82**	**3.82**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**53.0**	**53.0**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91013 - HGLHA3902R-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

[8]High surrogate recovery. Sample non-detect, result bias high.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.92	mg/Kg	1	2.67	72	10 - 98.8
Phenol-d5		2.21	mg/Kg	1	2.67	83	10 - 105
Nitrobenzene-d5		2.06	mg/Kg	1	2.67	77	10 - 114
2-Fluorobiphenyl		2.13	mg/Kg	1	2.67	80	10 - 122
2,4,6-Tribromophenol		2.61	mg/Kg	1	2.67	98	10 - 117
Terphenyl-d14	[9]	3.22	mg/Kg	1	2.67	120	10 - 116

Sample: 91013 - HGLHA3902R-0204

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**64.4**	**64.4**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**6.48**	**6.48**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	J	**0.00949**	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**20.7**	**20.7**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91014 - HGLHA3902R-0809

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.870	mg/Kg	1	2.67	32	10 - 98.8
Phenol-d5		1.03	mg/Kg	1	2.67	38	10 - 105
Nitrobenzene-d5		1.00	mg/Kg	1	2.67	37	10 - 114
2-Fluorobiphenyl		1.05	mg/Kg	1	2.67	39	10 - 122
2,4,6-Tribromophenol		1.94	mg/Kg	1	2.67	73	10 - 117
Terphenyl-d14	[10]	3.59	mg/Kg	1	2.67	134	10 - 116

[9]High surrogate recovery. Sample non-detect, result bias high.
[10]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91014 - HGLHA3902R-0809

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.473**	**0.473**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**33.1**	**33.1**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**4.38**	**4.38**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**5.05**	**5.05**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91015 - HGLSB3902R-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.54	mg/Kg	1	2.67	58	10 - 98.8
Phenol-d5		1.90	mg/Kg	1	2.67	71	10 - 105
Nitrobenzene-d5		1.74	mg/Kg	1	2.67	65	10 - 114
2-Fluorobiphenyl		1.88	mg/Kg	1	2.67	70	10 - 122
2,4,6-Tribromophenol		1.97	mg/Kg	1	2.67	74	10 - 117
Terphenyl-d14	[11]	3.51	mg/Kg	1	2.67	131	10 - 116

Sample: 91015 - HGLSB3902R-0204

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

[11] High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**6.34**	**6.34**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**124**	**124**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**36.3**	**36.3**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**178**	**178**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.435**	**0.435**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**342**	**342**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91016 - HGLSB3902R-0910

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.64	mg/Kg	1	2.67	61	10 - 98.8
Phenol-d5		0.530	mg/Kg	1	2.67	20	10 - 105
Nitrobenzene-d5		1.83	mg/Kg	1	2.67	68	10 - 114
2-Fluorobiphenyl		0.910	mg/Kg	1	2.67	34	10 - 122
2,4,6-Tribromophenol		0.760	mg/Kg	1	2.67	28	10 - 117
Terphenyl-d14	[12]	3.16	mg/Kg	1	2.67	118	10 - 116

Sample: 91016 - HGLSB3902R-0910

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**70.7**	**70.7**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**23.4**	**23.4**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**287**	**287**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0802**	**0.0802**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**177**	**177**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

[12] High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91017 - HGLSBSDUP06

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.23	mg/Kg	1	2.67	46	10 - 98.8
Phenol-d5		0.360	mg/Kg	1	2.67	13	10 - 105
Nitrobenzene-d5		1.78	mg/Kg	1	2.67	67	10 - 114
2-Fluorobiphenyl		1.26	mg/Kg	1	2.67	47	10 - 122
2,4,6-Tribromophenol		1.23	mg/Kg	1	2.67	46	10 - 117
Terphenyl-d14		2.87	mg/Kg	1	2.67	107	10 - 116

Sample: 91017 - HGLSBSDUP06

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27203	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.0444	<0.200	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**78.8**	**78.8**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**50.7**	**50.7**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**290**	**290**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0625**	**0.0625**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**612**	**612**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91018 - HGLSB3901R-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.690	mg/Kg	1	2.67	26	10 - 98.8
Phenol-d5		0.820	mg/Kg	1	2.67	31	10 - 105
Nitrobenzene-d5		0.730	mg/Kg	1	2.67	27	10 - 114
2-Fluorobiphenyl		0.760	mg/Kg	1	2.67	28	10 - 122
2,4,6-Tribromophenol		1.96	mg/Kg	1	2.67	73	10 - 117
Terphenyl-d14	[13]	3.86	mg/Kg	1	2.67	144	10 - 116

Sample: 91018 - HGLSB3901R-0204

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.787**	**0.787**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**25.6**	**25.6**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium		**2.25**	**2.25**	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**16.9**	**16.9**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury		**0.0879**	**0.0879**	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead		**18.8**	**18.8**	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91019 - HGLSB3901R-0810

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.790	mg/Kg	1	2.67	30	10 - 98.8
Phenol-d5		1.01	mg/Kg	1	2.67	38	10 - 105
Nitrobenzene-d5		0.900	mg/Kg	1	2.67	34	10 - 114
2-Fluorobiphenyl		1.08	mg/Kg	1	2.67	40	10 - 122
2,4,6-Tribromophenol		2.10	mg/Kg	1	2.67	79	10 - 117
Terphenyl-d14	[14]	3.66	mg/Kg	1	2.67	137	10 - 116

[13]High surrogate recovery. Sample non-detect, result bias high.
[14]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91019 - HGLSB3901R-0810

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.834**	**0.834**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**19.9**	**19.9**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium		**3.01**	**3.01**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91020 - HGLSB39-17-0204

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.53	mg/Kg	1	2.67	57	10 - 98.8
Phenol-d5		1.79	mg/Kg	1	2.67	67	10 - 105
Nitrobenzene-d5		1.62	mg/Kg	1	2.67	61	10 - 114
2-Fluorobiphenyl		1.75	mg/Kg	1	2.67	66	10 - 122
2,4,6-Tribromophenol		2.81	mg/Kg	1	2.67	105	10 - 117
Terphenyl-d14	[15]	3.58	mg/Kg	1	2.67	134	10 - 116

Sample: 91020 - HGLSB39-17-0204

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27030	Date Analyzed:	2006-06-02	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

[15]High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.991**	**0.991**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**19.6**	**19.6**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium	J	**0.528**	<1.00	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91021 - HGLSB39-17-0910

Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3550
QC Batch:	27215	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23718	Sample Preparation:	2006-05-31	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.60	mg/Kg	1	2.67	60	10 - 98.8
Phenol-d5		1.86	mg/Kg	1	2.67	70	10 - 105
Nitrobenzene-d5		1.78	mg/Kg	1	2.67	67	10 - 114
2-Fluorobiphenyl		1.79	mg/Kg	1	2.67	67	10 - 122
2,4,6-Tribromophenol		3.01	mg/Kg	1	2.67	113	10 - 117
Terphenyl-d14	[16]	4.04	mg/Kg	1	2.67	151	10 - 116

Sample: 91021 - HGLSB39-17-0910

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27098	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.536**	**0.536**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**11.5**	**11.5**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium	J	**0.615**	<1.00	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

[16]High surrogate recovery. Sample non-detect, result bias high.

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Sample: 91022 - HGLSB27-05-0708

Analysis: Semivolatiles
QC Batch: 27154
Prep Batch: 23540

Analytical Method: S 8270C
Date Analyzed: 2006-05-31
Sample Preparation: 2006-05-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454

continued . . .

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sample 91022 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	J	**0.0853**	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.30	mg/Kg	1	2.67	86	10 - 98.8
Phenol-d5		2.57	mg/Kg	1	2.67	96	10 - 105

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		2.59	mg/Kg	1	2.67	97	10 - 114
2-Fluorobiphenyl		2.71	mg/Kg	1	2.67	101	10 - 122
2,4,6-Tribromophenol		2.91	mg/Kg	1	2.67	109	10 - 117
Terphenyl-d14		2.75	mg/Kg	1	2.67	103	10 - 116

Sample: 91022 - HGLSB27-05-0708

Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	27098	Date Analyzed:	2006-06-06	Analyzed By:	RR
Prep Batch:	23659	Sample Preparation:	2006-05-30	Prepared By:	TS
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**0.565**	**0.565**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**8.84**	**8.84**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Chromium	J	**0.456**	<1.00	<0.125	mg/Kg	1	0.125	1	0.125172
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91022 - HGLSB27-05-0708

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26756	Date Analyzed:	2006-05-23	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		104	mg/Kg	1	150	70	62.8 - 115

Sample: 91022 - HGLSB27-05-0708

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	26822	Date Analyzed:	2006-05-24	Analyzed By:	KB
Prep Batch:	23551	Sample Preparation:	2006-05-24	Prepared By:	KB

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.701	mg/Kg	10	0.100	70	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.903	mg/Kg	10	0.100	90	71.9 - 123.7

Sample: 91022 - HGLSB27-05-0708

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825	
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889	
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929	
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463	
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171	
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368	
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~8.69~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~3.07~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U

continued . . .

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sample 91022 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		452	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		503	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		499	µg/Kg	10	50.0	100	78 - 120

Sample: 91023 - HGLSB3301-0809

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver		**1.20**	**1.20**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386

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Sample: 91023 - HGLSB3301-0809

Analysis: Al, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**3420**	**3420**	<27.0	mg/Kg	100	0.270	10	0.27

Sample: 91023 - HGLSB3301-0809

Analysis: As, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774

Sample: 91023 - HGLSB3301-0809

Analysis: Ba, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**27.4**	**27.4**	<0.601	mg/Kg	1	0.601	1	0.600628

Sample: 91023 - HGLSB3301-0809

Analysis: Be, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	J	**0.109**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008

Sample: 91023 - HGLSB3301-0809

Analysis: Ca, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**135000**	**135000**	<13.7	mg/Kg	20	0.683	50	0.683

Sample: 91023 - HGLSB3301-0809

Analysis: Cd, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	U	<0.0795	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491

Sample: 91023 - HGLSB3301-0809

Analysis: Co, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt		**1.20**	**1.20**	<0.164	mg/Kg	1	0.164	1	0.163974

Sample: 91023 - HGLSB3301-0809

Analysis: Cr, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**3.13**	**3.13**	<0.125	mg/Kg	1	0.125	1	0.125172

Sample: 91023 - HGLSB3301-0809

Analysis: Cu, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper		**2.30**	**2.30**	<0.268	mg/Kg	1	0.268	0.5	0.26781

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Sample: 91023 - HGLSB3301-0809

Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**3000**	**3000**	<20.8	mg/Kg	100	0.208	10	0.208

Sample: 91023 - HGLSB3301-0809

Analysis:	Hg, Total	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27204	Date Analyzed:	2006-06-09	Analyzed By:	TP
Prep Batch:	23857	Sample Preparation:	2006-06-08	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088

Sample: 91023 - HGLSB3301-0809

Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**1010**	**1010**	<0.291	mg/Kg	1	0.291	50	0.291

Sample: 91023 - HGLSB3301-0809

Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**2470**	**2470**	<0.263	mg/Kg	1	0.263	5	0.263

Sample: 91023 - HGLSB3301-0809

Analysis:	Mn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**47.9**	**47.9**	<0.295	mg/Kg	1	0.295	1	0.295

Sample: 91023 - HGLSB3301-0809

Analysis: Na, Total
QC Batch: 26894
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-26
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: TP
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**994**	**994**	<0.0820	mg/Kg	1	0.0820	50	0.082

Sample: 91023 - HGLSB3301-0809

Analysis: Ni, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel	J	**2.43**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898

Sample: 91023 - HGLSB3301-0809

Analysis: Pb, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.650	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424

Sample: 91023 - HGLSB3301-0809

Analysis: PCB
QC Batch: 27095
Prep Batch: 23778

Analytical Method: S 8082
Date Analyzed: 2006-06-05
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046

continued ...

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sample 91023 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[17]	0.00730	mg/Kg	0.16	0.100	46	50.4 - 128.7

Sample: 91023 - HGLSB3301-0809

Analysis:	Pesticides	Analytical Method:	S 8081A	Prep Method:	S 3550
QC Batch:	27113	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00500	mg/Kg	0.16	0.100	31	10 - 171
Deca chlorobiphenyl		0.00840	mg/Kg	0.16	0.100	52	10 - 179

[17] Surrogate out due to peak interference.

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Sample: 91023 - HGLSB3301-0809

Analysis: Sb, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536

Sample: 91023 - HGLSB3301-0809

Analysis: Se, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141

Sample: 91023 - HGLSB3301-0809

Analysis: Semivolatiles
QC Batch: 27154
Prep Batch: 23540

Analytical Method: S 8270C
Date Analyzed: 2006-05-31
Sample Preparation: 2006-05-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252

continued . . .

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sample 91023 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475

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sample 91023 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Fluoranthene	J	**0.0853**	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.30	mg/Kg	1	2.67	86	10 - 98.8
Phenol-d5		2.57	mg/Kg	1	2.67	96	10 - 105
Nitrobenzene-d5		2.59	mg/Kg	1	2.67	97	10 - 114
2-Fluorobiphenyl		2.71	mg/Kg	1	2.67	101	10 - 122
2,4,6-Tribromophenol		2.91	mg/Kg	1	2.67	109	10 - 117
Terphenyl-d14		2.75	mg/Kg	1	2.67	103	10 - 116

Sample: 91023 - HGLSB3301-0809

Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512

Sample: 91023 - HGLSB3301-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26756	Date Analyzed:	2006-05-23	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		105	mg/Kg	1	150	70	62.8 - 115

Sample: 91023 - HGLSB3301-0809

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.759	mg/Kg	10	0.100	76	68 - 129.6
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	71.9 - 123.7

Sample: 91023 - HGLSB3301-0809

Analysis: V, Total
QC Batch: 26829
Prep Batch: 23546

Analytical Method: S 6010B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-24

Prep Method: S 3050B
Analyzed By: RR
Prepared By: DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium	J	**6.26**	<10.0	<0.126	mg/Kg	1	0.126	10	0.125985

Sample: 91023 - HGLSB3301-0809

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306

continued . . .

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sample 91023 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044	
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064	
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346	
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151	
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378	
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786	
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57	
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331	
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639	
Methylene chloride	JB	~~7.54~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119	50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362	
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419	
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257	
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627	
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593	
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524	
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044	
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075	
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622	
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644	
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485	
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547	
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836	
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435	
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457	
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547	
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596	
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561	
Toluene	JB	~~3.34~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112	10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325	
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505	
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552	
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688	
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826	
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289	
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376	
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714	
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426	
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796	
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679	
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703	
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126	
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504	
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13	
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048	
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421	
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21	
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041	
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535	
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387	

continued . . .

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sample 91023 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		456	µg/Kg	10	50.0	91	42 - 129
Toluene-d8		504	µg/Kg	10	50.0	101	93 - 107
4-Bromofluorobenzene (4-BFB)		500	µg/Kg	10	50.0	100	78 - 120

Sample: 91023 - HGLSB3301-0809

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**14.1**	**14.1**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91024 - HGLSB33-02-0809

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl	[18]	0.00760	mg/Kg	0.16	0.100	48	50.4 - 128.7

Sample: 91024 - HGLSB33-02-0809

Analysis: Pesticides
QC Batch: 27113
Prep Batch: 23778

Analytical Method: S 8081A
Date Analyzed: 2006-06-05
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00540	mg/Kg	0.16	0.100	34	10 - 171
Deca chlorobiphenyl		0.00820	mg/Kg	0.16	0.100	51	10 - 179

Sample: 91024 - HGLSB33-02-0809

Analysis: Semivolatiles
QC Batch: 27154
Prep Batch: 23540

Analytical Method: S 8270C
Date Analyzed: 2006-05-31
Sample Preparation: 2006-05-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321

continued ...

[18] Surrogate out due to peak interference.

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sample 91024 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166

continued . . .

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sample 91024 continued . . .

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.60	mg/Kg	1	2.67	60	10 - 98.8
Phenol-d5		1.75	mg/Kg	1	2.67	66	10 - 105
Nitrobenzene-d5		1.74	mg/Kg	1	2.67	65	10 - 114
2-Fluorobiphenyl		1.75	mg/Kg	1	2.67	66	10 - 122
2,4,6-Tribromophenol		2.59	mg/Kg	1	2.67	97	10 - 117
Terphenyl-d14	[19]	3.28	mg/Kg	1	2.67	123	10 - 116

[19] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

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Sample: 91024 - HGLSB33-02-0809

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)	
Total Aluminum		**5260**	**5260**	<27.0	mg/Kg	100	0.270	10	0.27	
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536	
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774	
Total Barium		**39.3**	**39.3**	<0.601	mg/Kg	1	0.601	1	0.600628	
Total Beryllium	J	**0.188**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008	J
Total Cadmium	J	**0.224**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491	J
Total Calcium		**151000**	**151000**	<13.7	mg/Kg	20	0.683	50	0.683	
Total Chromium		**4.81**	**4.81**	<0.125	mg/Kg	1	0.125	1	0.125172	
Total Cobalt		**1.80**	**1.80**	<0.164	mg/Kg	1	0.164	1	0.163974	
Total Copper		**3.14**	**3.14**	<0.268	mg/Kg	1	0.268	0.5	0.26781	
Total Iron		**4270**	**4270**	<20.8	mg/Kg	100	0.208	10	0.208	
Total Lead		**1.32**	**1.32**	<0.650	mg/Kg	1	0.650	1	0.650424	
Total Magnesium		**4920**	**4920**	<0.263	mg/Kg	1	0.263	5	0.263	
Total Manganese		**47.9**	**47.9**	<0.295	mg/Kg	1	0.295	1	0.295	
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088	
Total Nickel	J	**3.40**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898	J
Total Potassium		**1350**	**1350**	<0.291	mg/Kg	1	0.291	50	0.291	
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141	
Total Silver		**1.30**	**1.30**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386	
Total Sodium		**1270**	**1270**	<0.0820	mg/Kg	1	0.0820	50	0.082	
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512	
Total Vanadium		**10.8**	**10.8**	<0.126	mg/Kg	1	0.126	10	0.125985	
Total Zinc		**19.6**	**19.6**	<0.124	mg/Kg	1	0.124	1	0.124	

Sample: 91024 - HGLSB33-02-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26756	Date Analyzed:	2006-05-23	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		109	mg/Kg	1	150	73	62.8 - 115

Sample: 91024 - HGLSB33-02-0809

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Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.695	mg/Kg	10	0.100	70	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.999	mg/Kg	10	0.100	100	71.9 - 123.7

Sample: 91024 - HGLSB33-02-0809

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.37~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457

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sample 91024 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~2.78~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutad	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluorom	8	µg/Kg	10	50.0	92	42 - 129
Toluene-d8	1	µg/Kg	10	50.0	100	93 - 107
4-Bromofluorob	6	µg/Kg	10	50.0	99	78 - 120

Sample: 91025 - HGLSB33-02-0809

Analysis:	PCB	Analytical Method:	S 8082	Prep Method:	S 3550
QC Batch:	27095	Date Analyzed:	2006-06-05	Analyzed By:	AG
Prep Batch:	23778	Sample Preparation:	2006-06-01	Prepared By:	AG

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Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total PCB	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1016 (PCB-1016)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1221 (PCB-1221)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1232 (PCB-1232)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1242 (PCB-1242)	U	<0.000269	<0.00160	<0.000269	mg/Kg	0.16	0.00168	0.01	0.00168
Aroclor 1248 (PCB-1248)	U	<0.000736	<0.00160	<0.000736	mg/Kg	0.16	0.00460	0.01	0.0046
Aroclor 1254 (PCB-1254)	U	<0.000101	<0.00160	<0.000101	mg/Kg	0.16	0.000634	0.01	0.000634
Aroclor 1260 (PCB-1260)	U	<0.000108	<0.00160	<0.000108	mg/Kg	0.16	0.000675	0.01	0.000675

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.00830	mg/Kg	0.16	0.100	52	50.4 - 128.7

Sample: 91025 - HGLSB33-02-0809

Analysis: Pesticides
QC Batch: 27113
Prep Batch: 23778

Analytical Method: S 8081A
Date Analyzed: 2006-06-05
Sample Preparation: 2006-06-01

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
alpha-BHC	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
gamma-BHC (Lindane)	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
beta-BHC	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Heptachlor	U	<0.000240	<0.000800	<0.000240	mg/Kg	0.16	0.00150	0.005	0.0015
delta-BHC	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Aldrin	U	<0.000400	<0.000800	<0.000400	mg/Kg	0.16	0.00250	0.005	0.0025
Heptachlor Epoxide	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
gamma-Chlordane	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
alpha-Chlordane	U	<0.000368	<0.000800	<0.000368	mg/Kg	0.16	0.00230	0.005	0.0023
Endosulfan I	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
p,p-DDE	U	<0.000256	<0.000800	<0.000256	mg/Kg	0.16	0.00160	0.005	0.0016
Dieldrin	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
Endrin	U	<0.000384	<0.000800	<0.000384	mg/Kg	0.16	0.00240	0.005	0.0024
p,p-DDD	U	<0.000208	<0.000800	<0.000208	mg/Kg	0.16	0.00130	0.005	0.0013
Endosulfan II	U	<0.000336	<0.000800	<0.000336	mg/Kg	0.16	0.00210	0.005	0.0021
p,p-DDT	U	<0.000464	<0.000800	<0.000464	mg/Kg	0.16	0.00290	0.005	0.0029
Endrin aldehyde	U	<0.000496	<0.000800	<0.000496	mg/Kg	0.16	0.00310	0.005	0.0031
Endosulfan sulfate	U	<0.000224	<0.000800	<0.000224	mg/Kg	0.16	0.00140	0.005	0.0014
Methoxychlor	U	<0.000320	<0.000800	<0.000320	mg/Kg	0.16	0.00200	0.005	0.002
Endrin Ketone	U	<0.000288	<0.000800	<0.000288	mg/Kg	0.16	0.00180	0.005	0.0018
Toxaphene	U	<0.0140	<0.0160	<0.0140	mg/Kg	0.16	0.0877	0.1	0.0877
Technical Chlordane	U	<0.00509	<0.0160	<0.00509	mg/Kg	0.16	0.0318	0.1	0.0318

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00490	mg/Kg	0.16	0.100	31	10 - 171
Deca chlorobiphenyl		0.00760	mg/Kg	0.16	0.100	48	10 - 179

Sample: 91025 - HGLSB33-02-0809

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Analysis: Semivolatiles
QC Batch: 27154
Prep Batch: 23540

Analytical Method: S 8270C
Date Analyzed: 2006-05-31
Sample Preparation: 2006-05-23

Prep Method: S 3550
Analyzed By: AG
Prepared By: AG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0517	<0.250	<0.0517	mg/Kg	1	0.0517	0.25	0.0517
n-Nitrosodimethylamine	U	<0.0321	<0.250	<0.0321	mg/Kg	1	0.0321	0.25	0.0321
2-Picoline	U	<0.0182	<0.250	<0.0182	mg/Kg	1	0.0182	0.25	0.0182
Methyl methanesulfonate	U	<0.0199	<0.250	<0.0199	mg/Kg	1	0.0199	0.25	0.0199
Ethyl methanesulfonate	U	<0.0353	<0.250	<0.0353	mg/Kg	1	0.0353	0.25	0.0353
Phenol	U	<0.0308	<0.250	<0.0308	mg/Kg	1	0.0308	0.25	0.0308
Aniline	U	<0.0484	<0.250	<0.0484	mg/Kg	1	0.0484	0.25	0.0484
bis(2-chloroethyl)ether	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
2-Chlorophenol	U	<0.0329	<0.250	<0.0329	mg/Kg	1	0.0329	0.25	0.0329
1,3-Dichlorobenzene (meta)	U	<0.0429	<0.250	<0.0429	mg/Kg	1	0.0429	0.25	0.0429
1,4-Dichlorobenzene (para)	U	<0.0378	<0.250	<0.0378	mg/Kg	1	0.0378	0.25	0.0378
Benzyl alcohol	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
1,2-Dichlorobenzene (ortho)	U	<0.0364	<0.250	<0.0364	mg/Kg	1	0.0364	0.25	0.0364
2-Methylphenol	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
bis(2-chloroisopropyl)ether	U	<0.0344	<0.250	<0.0344	mg/Kg	1	0.0344	0.25	0.0344
4-Methylphenol / 3-Methylphenol	U	<0.0392	<0.250	<0.0392	mg/Kg	1	0.0392	0.25	0.0392
Acetophenone	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
n-Nitrosodi-n-propylamine	U	<0.0444	<0.250	<0.0444	mg/Kg	1	0.0444	0.25	0.0444
Hexachloroethane	U	<0.0372	<0.250	<0.0372	mg/Kg	1	0.0372	0.25	0.0372
Nitrobenzene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
n-Nitrosopiperidine	U	<0.0316	<0.250	<0.0316	mg/Kg	1	0.0316	0.25	0.0316
Isophorone	U	<0.0552	<0.250	<0.0552	mg/Kg	1	0.0552	0.25	0.0552
2-Nitrophenol	U	<0.0252	<0.250	<0.0252	mg/Kg	1	0.0252	0.25	0.0252
2,4-Dimethylphenol	U	<0.0564	<0.250	<0.0564	mg/Kg	1	0.0564	0.25	0.0564
bis(2-chloroethoxy)methane	U	<0.0381	<0.250	<0.0381	mg/Kg	1	0.0381	0.25	0.0381
Benzoic acid	U	<0.121	<0.250	<0.121	mg/Kg	1	0.121	0.25	0.121
2,4-Dichlorophenol	U	<0.0374	<0.250	<0.0374	mg/Kg	1	0.0374	0.25	0.0374
1,2,4-Trichlorobenzene	U	<0.0338	<0.250	<0.0338	mg/Kg	1	0.0338	0.25	0.0338
a,a-Dimethylphenethylamine	U	<0.0115	<0.250	<0.0115	mg/Kg	1	0.0115	0.25	0.0115
Naphthalene	U	<0.0377	<0.250	<0.0377	mg/Kg	1	0.0377	0.25	0.0377
4-Chloroaniline	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,6-Dichlorophenol	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobutadiene	U	<0.0373	<0.250	<0.0373	mg/Kg	1	0.0373	0.25	0.0373
n-Nitroso-di-n-butylamine	U	<0.0402	<0.250	<0.0402	mg/Kg	1	0.0402	0.25	0.0402
4-Chloro-3-methylphenol	U	<0.0460	<0.250	<0.0460	mg/Kg	1	0.0460	0.25	0.046
1-Methylnaphthalene	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
2-Methylnaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1,2,4,5-Tetrachlorobenzene	U	<0.0340	<0.250	<0.0340	mg/Kg	1	0.0340	0.25	0.034
Hexachlorocyclopentadiene	U	<0.0209	<0.250	<0.0209	mg/Kg	1	0.0209	0.25	0.0209
2,4,6-Trichlorophenol	U	<0.0403	<0.250	<0.0403	mg/Kg	1	0.0403	0.25	0.0403
2,4,5-Trichlorophenol	U	<0.0442	<0.250	<0.0442	mg/Kg	1	0.0442	0.25	0.0442
2-Chloronaphthalene	U	<0.0410	<0.250	<0.0410	mg/Kg	1	0.0410	0.25	0.041
1-Chloronaphthalene	U	<0.0417	<0.250	<0.0417	mg/Kg	1	0.0417	0.25	0.0417
2-Nitroaniline	U	<0.0411	<0.250	<0.0411	mg/Kg	1	0.0411	0.25	0.0411
Dimethylphthalate	U	<0.0531	<0.250	<0.0531	mg/Kg	1	0.0531	0.25	0.0531
Acenaphthylene	U	<0.0465	<0.250	<0.0465	mg/Kg	1	0.0465	0.25	0.0465
2,6-Dinitrotoluene	U	<0.0454	<0.250	<0.0454	mg/Kg	1	0.0454	0.25	0.0454
3-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
Acenaphthene	U	<0.0461	<0.250	<0.0461	mg/Kg	1	0.0461	0.25	0.0461

continued . . .

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sample 91025 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
2,4-Dinitrophenol	U	<0.0113	<0.250	<0.0113	mg/Kg	1	0.0113	0.25	0.0113
Dibenzofuran	U	<0.0480	<0.250	<0.0480	mg/Kg	1	0.0480	0.25	0.048
Pentachlorobenzene	U	<0.0431	<0.250	<0.0431	mg/Kg	1	0.0431	0.25	0.0431
4-Nitrophenol	U	<0.0166	<0.250	<0.0166	mg/Kg	1	0.0166	0.25	0.0166
1-Naphthylamine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
2,4-Dinitrotoluene	U	<0.0471	<0.250	<0.0471	mg/Kg	1	0.0471	0.25	0.0471
2-Naphthylamine	U	<0.0361	<0.250	<0.0361	mg/Kg	1	0.0361	0.25	0.0361
2,3,4,6-Tetrachlorophenol	U	<0.0523	<0.250	<0.0523	mg/Kg	1	0.0523	0.25	0.0523
Fluorene	U	<0.0435	<0.250	<0.0435	mg/Kg	1	0.0435	0.25	0.0435
Diethylphthalate	U	<0.0643	<0.250	<0.0643	mg/Kg	1	0.0643	0.25	0.0643
4-Chlorophenyl-phenylether	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
4-Nitroaniline	U	<0.0278	<0.250	<0.0278	mg/Kg	1	0.0278	0.25	0.0278
4,6-Dinitro-2-methylphenol	U	<0.0670	<0.250	<0.0670	mg/Kg	1	0.0670	0.25	0.067
Diphenylamine	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Diphenylhydrazine	U	<0.0555	<0.250	<0.0555	mg/Kg	1	0.0555	0.25	0.0555
4-Bromophenyl-phenylether	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Phenacetin	U	<0.0352	<0.250	<0.0352	mg/Kg	1	0.0352	0.25	0.0352
Hexachlorobenzene	U	<0.0584	<0.250	<0.0584	mg/Kg	1	0.0584	0.25	0.0584
4-Aminobiphenyl	U	<0.0349	<0.250	<0.0349	mg/Kg	1	0.0349	0.25	0.0349
Pentachlorophenol	U	<0.0400	<0.250	<0.0400	mg/Kg	1	0.0400	0.25	0.04
Pentachloronitrobenzene	U	<0.0532	<0.250	<0.0532	mg/Kg	1	0.0532	0.25	0.0532
Pronamide	U	<0.0368	<0.250	<0.0368	mg/Kg	1	0.0368	0.25	0.0368
Phenanthrene	U	<0.0438	<0.250	<0.0438	mg/Kg	1	0.0438	0.25	0.0438
Anthracene	U	<0.0565	<0.250	<0.0565	mg/Kg	1	0.0565	0.25	0.0565
Di-n-butylphthalate	U	<0.0475	<0.250	<0.0475	mg/Kg	1	0.0475	0.25	0.0475
Fluoranthene	U	<0.0456	<0.250	<0.0456	mg/Kg	1	0.0456	0.25	0.0456
Benzidine	U	<0.0178	<0.250	<0.0178	mg/Kg	1	0.0178	0.25	0.0178
Pyrene	U	<0.124	<0.250	<0.124	mg/Kg	1	0.124	0.25	0.124
p-Dimethylaminoazobenzene	U	<0.0407	<0.250	<0.0407	mg/Kg	1	0.0407	0.25	0.0407
Butylbenzylphthalate	U	<0.150	<0.250	<0.150	mg/Kg	1	0.150	0.25	0.15
Benzo(a)anthracene	U	<0.0538	<0.250	<0.0538	mg/Kg	1	0.0538	0.25	0.0538
3,3-Dichlorobenzidine	U	<0.0427	<0.250	<0.0427	mg/Kg	1	0.0427	0.25	0.0427
Chrysene	U	<0.0609	<0.250	<0.0609	mg/Kg	1	0.0609	0.25	0.0609
bis(2-ethylhexyl)phthalate	U	<0.191	<0.250	<0.191	mg/Kg	1	0.191	0.25	0.191
Di-n-octylphthalate	U	<0.182	<0.250	<0.182	mg/Kg	1	0.182	0.25	0.182
Benzo(b)fluoranthene	U	<0.0712	<0.250	<0.0712	mg/Kg	1	0.0712	0.25	0.0712
7,12-Dimethylbenz(a)anthracene	U	<0.0371	<0.250	<0.0371	mg/Kg	1	0.0371	0.25	0.0371
Benzo(k)fluoranthene	U	<0.0536	<0.250	<0.0536	mg/Kg	1	0.0536	0.25	0.0536
Benzo(a)pyrene	U	<0.0525	<0.250	<0.0525	mg/Kg	1	0.0525	0.25	0.0525
3-Methylcholanthrene	U	<0.0466	<0.250	<0.0466	mg/Kg	1	0.0466	0.25	0.0466
Dibenzo(a,j)acridine	U	<0.0399	<0.250	<0.0399	mg/Kg	1	0.0399	0.25	0.0399
Indeno(1,2,3-cd)pyrene	U	<0.0490	<0.250	<0.0490	mg/Kg	1	0.0490	0.25	0.049
Dibenzo(a,h)anthracene	U	<0.0533	<0.250	<0.0533	mg/Kg	1	0.0533	0.25	0.0533
Benzo(g,h,i)perylene	U	<0.0610	<0.250	<0.0610	mg/Kg	1	0.0610	0.25	0.061

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		2.02	mg/Kg	1	2.67	76	10 - 98.8
Phenol-d5		2.15	mg/Kg	1	2.67	80	10 - 105
Nitrobenzene-d5		2.24	mg/Kg	1	2.67	84	10 - 114
2-Fluorobiphenyl		2.24	mg/Kg	1	2.67	84	10 - 122

continued ...

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		2.57	mg/Kg	1	2.67	96	10 - 117
Terphenyl-d14		3.11	mg/Kg	1	2.67	116	10 - 116

Sample: 91025 - HGLSB33-02-0809

Analysis:	TAL Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	26829	Date Analyzed:	2006-05-25	Analyzed By:	RR
Prep Batch:	23546	Sample Preparation:	2006-05-24	Prepared By:	DS
QC Batch:	26894	Date Analyzed:	2006-05-26	Analyzed By:	TP
Analysis:	TAL Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	27264	Date Analyzed:	2006-06-12	Analyzed By:	TP
Prep Batch:	23910	Sample Preparation:	2006-06-10	Prepared By:	TP

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum		**4190**	**4190**	<27.0	mg/Kg	100	0.270	10	0.27
Total Antimony	U	<0.992	<10.0	<0.992	mg/Kg	1	0.992	10	0.992536
Total Arsenic	U	<0.228	<1.00	<0.228	mg/Kg	1	0.228	1	0.227774
Total Barium		**29.3**	**29.3**	<0.601	mg/Kg	1	0.601	1	0.600628
Total Beryllium	J	**0.150**	<5.00	<0.00800	mg/Kg	1	0.00800	5	0.008
Total Cadmium	J	**0.136**	<0.500	<0.0795	mg/Kg	1	0.0795	0.5	0.079491
Total Calcium		**147000**	**147000**	<13.7	mg/Kg	20	0.683	50	0.683
Total Chromium		**3.76**	**3.76**	<0.125	mg/Kg	1	0.125	1	0.125172
Total Cobalt		**1.48**	**1.48**	<0.164	mg/Kg	1	0.164	1	0.163974
Total Copper		**2.98**	**2.98**	<0.268	mg/Kg	1	0.268	0.5	0.26781
Total Iron		**3720**	**3720**	<20.8	mg/Kg	100	0.208	10	0.208
Total Lead	J	**0.684**	<1.00	<0.650	mg/Kg	1	0.650	1	0.650424
Total Magnesium		**3400**	**3400**	<0.263	mg/Kg	1	0.263	5	0.263
Total Manganese		**37.4**	**37.4**	<0.295	mg/Kg	1	0.295	1	0.295
Total Mercury	U	<0.00880	<0.0400	<0.00880	mg/Kg	1	0.00880	0.04	0.0088
Total Nickel	J	**2.73**	<10.0	<0.222	mg/Kg	1	0.222	10	0.221898
Total Potassium		**1210**	**1210**	<0.291	mg/Kg	1	0.291	50	0.291
Total Selenium	U	<0.767	<1.00	<0.767	mg/Kg	1	0.767	1	0.767141
Total Silver		**1.29**	**1.29**	<0.0444	mg/Kg	1	0.0444	0.2	0.044386
Total Sodium		**1210**	**1210**	<0.820	mg/Kg	10	0.0820	50	0.082
Total Thallium	U	<0.512	<1.00	<0.512	mg/Kg	1	0.512	1	0.512
Total Vanadium		**10.1**	**10.1**	<0.126	mg/Kg	1	0.126	10	0.125985
Total Zinc		**16.9**	**16.9**	<0.124	mg/Kg	1	0.124	1	0.124

Sample: 91025 - HGLSB33-02-0809

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	26756	Date Analyzed:	2006-05-23	Analyzed By:	DS
Prep Batch:	23478	Sample Preparation:	2006-05-22	Prepared By:	DS

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	<7.28	<50.0	<7.28	mg/Kg	1	7.28	50	7.28

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		106	mg/Kg	1	150	71	62.8 - 115

Sample: 91025 - HGLSB33-02-0809

Analysis: TPH GRO
QC Batch: 26855
Prep Batch: 23578

Analytical Method: S 8015B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	<1.21	<1.00	<1.21	mg/Kg	10	0.121	0.1	0.121

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[20]	0.606	mg/Kg	10	0.100	61	68 - 129.6
4-Bromofluorobenzene (4-BFB)		0.965	mg/Kg	10	0.100	96	71.9 - 123.7

Sample: 91025 - HGLSB33-02-0809

Analysis: Volatiles
QC Batch: 26929
Prep Batch: 23645

Analytical Method: S 8260B
Date Analyzed: 2006-05-25
Sample Preparation: 2006-05-25

Prep Method: S 5030B
Analyzed By: JG
Prepared By: JG

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.825	<10.0	<0.825	µg/Kg	10	0.0825	1	0.0825
Dichlorodifluoromethane	U	<0.889	<10.0	<0.889	µg/Kg	10	0.0889	1	0.0889
Chloromethane (methyl chloride)	U	<0.929	<10.0	<0.929	µg/Kg	10	0.0929	1	0.0929
Vinyl Chloride	U	<0.463	<10.0	<0.463	µg/Kg	10	0.0463	1	0.0463
Bromomethane (methyl bromide)	U	<1.71	<50.0	<1.71	µg/Kg	10	0.171	5	0.171
Chloroethane	U	<3.68	<10.0	<3.68	µg/Kg	10	0.368	1	0.368
Trichlorofluoromethane	U	<0.306	<10.0	<0.306	µg/Kg	10	0.0306	1	0.0306
Acetone	U	<17.0	<100	<17.0	µg/Kg	10	1.70	10	1.7044
Iodomethane (methyl iodide)	U	<0.640	<50.0	<0.640	µg/Kg	10	0.0640	5	0.064
Carbon Disulfide	U	<0.346	<10.0	<0.346	µg/Kg	10	0.0346	1	0.0346
Acrylonitrile	U	<1.51	<10.0	<1.51	µg/Kg	10	0.151	1	0.151
2-Butanone (MEK)	U	<3.78	<50.0	<3.78	µg/Kg	10	0.378	5	0.378
4-Methyl-2-pentanone (MIBK)	U	<7.86	<50.0	<7.86	µg/Kg	10	0.786	5	0.786
2-Hexanone	U	<5.70	<50.0	<5.70	µg/Kg	10	0.570	5	0.57
trans 1,4-Dichloro-2-butene	U	<1.33	<100	<1.33	µg/Kg	10	0.133	10	0.1331
1,1-Dichloroethene	U	<0.639	<10.0	<0.639	µg/Kg	10	0.0639	1	0.0639
Methylene chloride	JB	~~7.30~~	<50.0	7.48	µg/Kg	10	0.119	5	0.119 50.0 U
MTBE	U	<0.362	<10.0	<0.362	µg/Kg	10	0.0362	1	0.0362
trans-1,2-Dichloroethene	U	<0.419	<10.0	<0.419	µg/Kg	10	0.0419	1	0.0419
1,1-Dichloroethane	U	<0.257	<10.0	<0.257	µg/Kg	10	0.0257	1	0.0257
cis-1,2-Dichloroethene	U	<0.627	<10.0	<0.627	µg/Kg	10	0.0627	1	0.0627
2,2-Dichloropropane	U	<0.593	<10.0	<0.593	µg/Kg	10	0.0593	1	0.0593
1,2-Dichloroethane (EDC)	U	<0.524	<10.0	<0.524	µg/Kg	10	0.0524	1	0.0524

continued . . .

[20] TFT surrogate recovery outside normal limits. ICV/CCV and BFB surrogate recovery show the method to be in control.

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sample 91025 continued ...

Parameter	Flag	SQL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SQL	MQL (Unadjusted)	MDL (Unadjusted)
Chloroform	U	<0.440	<10.0	<0.440	µg/Kg	10	0.0440	1	0.044
1,1,1-Trichloroethane	U	<0.750	<10.0	<0.750	µg/Kg	10	0.0750	1	0.075
1,1-Dichloropropene	U	<0.622	<10.0	<0.622	µg/Kg	10	0.0622	1	0.0622
Benzene	U	<0.644	<10.0	<0.644	µg/Kg	10	0.0644	1	0.0644
Carbon Tetrachloride	U	<0.485	<10.0	<0.485	µg/Kg	10	0.0485	1	0.0485
1,2-Dichloropropane	U	<0.547	<10.0	<0.547	µg/Kg	10	0.0547	1	0.0547
Trichloroethene (TCE)	U	<0.836	<10.0	<0.836	µg/Kg	10	0.0836	1	0.0836
Dibromomethane (methylene bromide)	U	<0.435	<10.0	<0.435	µg/Kg	10	0.0435	1	0.0435
Bromodichloromethane	U	<0.457	<10.0	<0.457	µg/Kg	10	0.0457	1	0.0457
2-Chloroethyl vinyl ether	U	<0.547	<50.0	<0.547	µg/Kg	10	0.0547	5	0.0547
cis-1,3-Dichloropropene	U	<0.596	<10.0	<0.596	µg/Kg	10	0.0596	1	0.0596
trans-1,3-Dichloropropene	U	<0.561	<10.0	<0.561	µg/Kg	10	0.0561	1	0.0561
Toluene	JB	~~2.90~~	<10.0	3.11	µg/Kg	10	0.112	1	0.112 10.0 U
1,1,2-Trichloroethane	U	<3.25	<10.0	<3.25	µg/Kg	10	0.325	1	0.325
1,3-Dichloropropane	U	<0.505	<10.0	<0.505	µg/Kg	10	0.0505	1	0.0505
Dibromochloromethane	U	<0.552	<10.0	<0.552	µg/Kg	10	0.0552	1	0.0552
1,2-Dibromoethane (EDB)	U	<0.688	<10.0	<0.688	µg/Kg	10	0.0688	1	0.0688
Tetrachloroethene (PCE)	U	<0.826	<10.0	<0.826	µg/Kg	10	0.0826	1	0.0826
Chlorobenzene	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
1,1,1,2-Tetrachloroethane	U	<0.289	<10.0	<0.289	µg/Kg	10	0.0289	1	0.0289
Ethylbenzene	U	<0.376	<10.0	<0.376	µg/Kg	10	0.0376	1	0.0376
m,p-Xylene	U	<0.714	<10.0	<0.714	µg/Kg	10	0.0714	1	0.0714
Bromoform	U	<0.426	<10.0	<0.426	µg/Kg	10	0.0426	1	0.0426
Styrene	U	<0.796	<10.0	<0.796	µg/Kg	10	0.0796	1	0.0796
o-Xylene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
1,1,2,2-Tetrachloroethane	U	<0.703	<10.0	<0.703	µg/Kg	10	0.0703	1	0.0703
2-Chlorotoluene	U	<1.26	<10.0	<1.26	µg/Kg	10	0.126	1	0.126
1,2,3-Trichloropropane	U	<0.504	<10.0	<0.504	µg/Kg	10	0.0504	1	0.0504
Isopropylbenzene	U	<1.30	<10.0	<1.30	µg/Kg	10	0.130	1	0.13
Bromobenzene	U	<0.480	<10.0	<0.480	µg/Kg	10	0.0480	1	0.048
n-Propylbenzene	U	<0.421	<10.0	<0.421	µg/Kg	10	0.0421	1	0.0421
1,3,5-Trimethylbenzene	U	<2.10	<10.0	<2.10	µg/Kg	10	0.210	1	0.21
tert-Butylbenzene	U	<0.410	<10.0	<0.410	µg/Kg	10	0.0410	1	0.041
1,2,4-Trimethylbenzene	U	<0.535	<10.0	<0.535	µg/Kg	10	0.0535	1	0.0535
1,4-Dichlorobenzene (para)	U	<0.387	<10.0	<0.387	µg/Kg	10	0.0387	1	0.0387
sec-Butylbenzene	U	<0.632	<10.0	<0.632	µg/Kg	10	0.0632	1	0.0632
1,3-Dichlorobenzene (meta)	U	<0.534	<10.0	<0.534	µg/Kg	10	0.0534	1	0.0534
p-Isopropyltoluene	U	<0.679	<10.0	<0.679	µg/Kg	10	0.0679	1	0.0679
4-Chlorotoluene	U	<0.675	<10.0	<0.675	µg/Kg	10	0.0675	1	0.0675
1,2-Dichlorobenzene (ortho)	U	<0.475	<10.0	<0.475	µg/Kg	10	0.0475	1	0.0475
n-Butylbenzene	U	<0.979	<10.0	2.24	µg/Kg	10	0.0979	1	0.0979
1,2-Dibromo-3-chloropropane	U	<1.92	<50.0	<1.92	µg/Kg	10	0.192	5	0.1915
1,2,3-Trichlorobenzene	U	<3.64	<50.0	<3.64	µg/Kg	10	0.364	5	0.364
1,2,4-Trichlorobenzene	U	<2.28	<50.0	<2.28	µg/Kg	10	0.228	5	0.228
Naphthalene	U	<4.41	<50.0	7.58	µg/Kg	10	0.441	5	0.441
Hexachlorobutadiene	U	<3.24	<50.0	<3.24	µg/Kg	10	0.324	5	0.324

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		452	µg/Kg	10	50.0	90	42 - 129
Toluene-d8		506	µg/Kg	10	50.0	101	93 - 107

continued ...

Validated EPA Level 3 (Verification), Quality by Design, February 21, 2007

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		502	µg/Kg	10	50.0	100	78 - 120

Method Blank (1)

QC Batch: 26754
Prep Batch: 23476

Date Analyzed: 2006-05-22
QC Preparation: 2006-05-22

Analyzed By: DS
Prepared By: JL

Parameter	Flag	Result	Units	Reporting Limits
DRO		0.510	mg/L	1.19

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.6	mg/L	0.1	150	91	58.9 - 118

Method Blank (1)

QC Batch: 26755
Prep Batch: 23478

Date Analyzed: 2006-05-22
QC Preparation: 2006-05-22

Analyzed By: DS
Prepared By: JL

Parameter	Flag	Result	Units	Reporting Limits
DRO		<7.28	mg/Kg	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	150	90	42.6 - 130

Method Blank (1)

QC Batch: 26756
Prep Batch: 23478

Date Analyzed: 2006-05-23
QC Preparation: 2006-05-22

Analyzed By: DS
Prepared By: JL

Parameter	Flag	Result	Units	Reporting Limits
DRO		<7.28	mg/Kg	7.28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	42.6 - 130

Method Blank (1)

QC Batch: 26781
Prep Batch: 23513

Date Analyzed: 2006-05-23
QC Preparation: 2006-05-23

Analyzed By: KB
Prepared By: KB

Validated EPA Level 3 (Verification), Quality by Design, February 21, 2007

Quality by Design

Laboratory Quality Assurance Consulting

97 Puhili Street
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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils and Water
Dates of Sampling: May 16 and May 20, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. ARS-06-01000
Purchase Order No. P0000715
QBD Job No. 1296K

Reviewed and approved,

Thomas S. Davis 12/19/06

Thomas S. Davis, Principal Date

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Attachments

Attachment 1 Reviewed Laboratory Forms

A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in Los Alamos National Laboratory RRES-Remediation Program's Standard Operating Procedures 15.06, R1, ICN1, *Routine Validation of Gamma Spectroscopy Data*, SOP-15.07, R1, ICN1, *Routine Validation of Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Data*, or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections which include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package consisting of a 273-page laboratory report from American Radiation Services of Port Allen, Louisiana, a subcontracting laboratory to TraceAnalysis, Inc. in Lubbock, Texas, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

No results were flagged as unusable due to QC failures and all results were acceptable. A discussion of the QC criteria and data usability is presented in this report.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 900.0 M	Method 901.1 M
90827 (HGLSB27-03-1113)	ARS-06-01000-001	Soil	X	X
90828 (HGLSB27-03-1618)	ARS-06-01000-002	Soil	X	X
90829 (HGLSB27-02-0608)	ARS-06-01000-003	Soil	X	X
90830 (HGLSB27-02-1113)	ARS-06-01000-004	Soil	X	X
90831 (HGLSB27-01-0608)	ARS-06-01000-005	Soil	X	X
90832 (HGLSB27-04-0810)	ARS-06-01000-006	Soil	X	X
90834 (SBDup03)	ARS-06-01000-007	Soil	X	X
90836 (HGLSD27-01-0002)	ARS-06-01000-008	Soil	X	X
90835-4 (HGLGW27-03-051606)	ARS-06-01001-001	Water	NR	NR
90835-10 (HGLGW27-03-051606) F	ARS-06-01001-002	Water	NR	NR
90837-5 (HGLGW27-02-051606)	ARS-06-01001-003	Water	NR	NR
90837-6 (HGLGW27-02-051606) F	ARS-06-01001-004	Water	NR	NR
90838-9 (GWDup-01)	ARS-06-01001-005	Water	NR	NR
90838-11 (GWDup-01) F	ARS-06-01001-006	Water	NR	NR
91061-8 (HGLRB07-052006-TCL)	ARS-06-01001-007	Water	NR	NR

Key:

Method 900.0 M	=	Gross α and β by low background proportional counting
Method 901.1 M	=	Gamma Radiation by gamma spectroscopy
NR	=	Not Reported
F	=	Filtered

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
All	All	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable except as noted below.

Discussion: QBD noted that the raw data supplied in this report for gamma analysis were for the water samples that were originally submitted in as a single set with soil samples. The water samples had been split into a different reporting SDG number and the soil sample results were reported in this data set. No raw data was provided for the soil samples. The reviewer checked other SDGs and determined that the raw data for the soil samples in this SDG were not provided in any data package. No further action was taken because this data review is a Level 3 validation and a review of the raw data is outside the scope of work that was requested.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The chain of custody showed 13 samples were submitted to the laboratory for analysis. This SDG provided the results for the eight soil samples submitted but not for the five water samples submitted. The water results were submitted under another batch SDG identification.

E. Review of Radiological Analyses

EPA Methods 900.0M and 901.1M

1. Technical Holding Times and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

Where provided, all initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment, field, and trip blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit except as noted below.

Discussion: AM-241 was found in the method blank associated with the gamma analysis for all samples, but was not found in the samples. No data qualifier flags are recommended.

4. Precision and Accuracy

MS/MSDs

There was no MS/MSD data provided in this SDG. The laboratory measured precision and accuracy with the analysis of an LCS/LCSD.

Laboratory Control Samples

Results for RPD and percent recovery were reviewed for LCS/LCSDs to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

Sample Duplicates

There was no sample duplicate data provided in this SDG. The laboratory measured precision with the analysis of an LCS/LCSD.

5. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

6. Field Duplicates

Field duplicates were collected and analyzed. Sample 90834 (SBDup03) is a field duplicate of 90836 (HGLSD27-01-0002). Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in the table below, were not detected.

Table 3. Radiological Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	90830 (HGLSB27-02-1113)	90834 (SBDup03)	
K-40	5.027	5.563	10.1
Tl-208	0.084	0.115	31.2
Pb-210	1.555	<MDC	NC
Bi-214	0.371	0.351	5.5
Pb-214	0.341	0.491	36.1
Ra-228	<MDC	0.353	NC
Th-228	0.270	0.330	20.0
Gross α	<MDC	<MDC	NC
Gross β	5.107	5.717	11.3

Key: <MDC = Less than the MDC
NC = Not calculable

7. Laboratory Contact

There was no verbal or written communication with the laboratory.

8. Other Comments

None.

9. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced methods.

Attachment 1 Reviewed Laboratory Forms

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90836
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-008
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	0.778	0.592	0.779	0.371	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
K-40	10.971	1.395	0.902	0.410	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
SC-46	-0.011	0.095	0.091	0.042	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
CO-60	-0.046	0.109	0.087	0.039	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
CS-137	1.014	0.113	0.093	0.044	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
TL-208	0.148	0.056	0.079	0.037	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
PB-210	3.620	1.058	1.502	0.728	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
BI-212	-0.503	1.424	1.343	0.632	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
BI-214	0.528	0.113	0.166	0.078	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
PB-214	0.592	0.109	0.165	0.078	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-223	0.038	0.167	0.250	0.122	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-226	2.881	1.309	1.941	0.940	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-228	0.530	0.230	0.333	0.155	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
TH-228	0.533	0.133	0.139	0.067	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
U-235	0.187	0.437	0.542	0.263	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA

7-3-06
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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VALIDATED Level 3

Quality by Design
December 19, 2006

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90834
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-007
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	0.451	0.557	0.646	0.305	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
K-40	5.563	1.039	1.081	0.502	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
SC-46	-0.019	0.100	0.086	0.040	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
CO-60	0.061	0.086	0.092	0.042	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
CS-137	0.037	0.084	0.090	0.042	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
TL-208	0.115	0.052	0.075	0.035	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
PB-210	0.741	0.738	1.220	0.585	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
BI-212	0.629	1.436	1.451	0.686	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
BI-214	0.351	0.122	0.176	0.083	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
PB-214	0.491	0.091	0.133	0.062	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-223	-0.234	0.196	0.211	0.102	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-226	0.838	0.860	1.413	0.674	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-228	0.353	0.152	0.256	0.117	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
TH-228	0.330	0.093	0.100	0.047	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
U-235	0.148	0.329	0.401	0.192	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA

7-3-06
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

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December 19, 2006

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90832
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-006
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	0.020	0.977	0.831	0.392	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
K-40	2.198	0.838	1.126	0.511	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
SC-46	0.035	0.113	0.101	0.047	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
CO-60	-0.215	0.230	0.102	0.046	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
CS-137	0.099	0.110	0.118	0.056	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
TL-208	0.032	0.138	0.121	0.057	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
PB-210	0.842	1.007	1.684	0.816	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
BI-212	0.631	1.712	1.583	0.742	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
BI-214	0.326	0.118	0.162	0.075	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
PB-214	0.354	0.103	0.174	0.082	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-223	-0.205	0.357	0.366	0.178	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-226	2.336	2.443	2.479	1.201	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
RA-228	0.228	0.402	0.404	0.187	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
TH-228	0.184	0.101	0.158	0.076	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA
U-235	-0.007	0.843	0.770	0.375	pCi/g	ARS-007/EPA 901.1M	6/9/06 12:15	JMB	NA

7-3-06
Quality Assurance Review

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Quality by Design
December 19, 2006

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90831
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-005
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	-0.096	0.580	0.610	0.287	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
K-40	1.869	0.548	0.522	0.220	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
SC-46	0.031	0.062	0.071	0.032	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
CO-60	-0.020	0.084	0.072	0.032	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
CS-137	0.072	0.074	0.094	0.044	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
TL-208	0.055	0.036	0.054	0.025	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
PB-210	1.186	0.769	1.170	0.562	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
BI-212	0.301	0.848	0.971	0.445	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
BI-214	0.129	0.077	0.117	0.053	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
PB-214	0.201	0.074	0.133	0.062	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
RA-223	-0.077	0.126	0.154	0.074	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
RA-226	1.193	1.061	1.451	0.695	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
RA-228	0.061	0.301	0.318	0.147	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
TH-228	0.086	0.062	0.097	0.045	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA
U-235	-0.235	0.310	0.344	0.164	pCi/g	ARS-007/EPA 901.1M	6/9/06 10:35	JMB	NA

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90830
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-004
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	0.019	0.502	0.551	0.258	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
K-40	5.027	0.988	1.016	0.468	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
SC-46	-0.041	0.091	0.079	0.036	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
CO-60	-0.030	0.109	0.082	0.037	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
CS-137	0.033	0.071	0.082	0.038	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
TL-208	0.084	0.045	0.067	0.031	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
PB-210	1.555	0.815	1.255	0.605	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
BI-212	0.366	1.177	1.251	0.587	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
BI-214	0.371	0.104	0.153	0.072	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
PB-214	0.341	0.089	0.146	0.069	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
RA-223	-0.067	0.147	0.182	0.087	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
RA-226	0.933	1.301	1.679	0.809	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
RA-228	0.188	0.152	0.241	0.109	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
TH-228	0.270	0.095	0.125	0.060	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
U-235	0.100	0.076	0.102	0.049	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90829
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-003
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	-0.034	0.723	0.701	0.330	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
K-40	2.747	0.795	0.943	0.427	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
SC-46	0.009	0.105	0.099	0.046	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
CO-60	-0.008	0.107	0.091	0.041	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
CS-137	0.050	0.090	0.100	0.047	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
TL-208	0.070	0.046	0.072	0.033	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
PB-210	0.898	0.767	1.253	0.597	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
BI-212	0.080	1.336	1.275	0.593	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
BI-214	0.351	0.119	0.165	0.077	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
PB-214	0.364	0.091	0.141	0.066	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
RA-223	-0.011	0.186	0.221	0.106	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
RA-226	2.578	1.487	1.949	0.938	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
RA-228	0.301	0.357	0.408	0.191	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
TH-228	0.108	0.080	0.126	0.060	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA
U-235	0.174	0.088	0.119	0.057	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:26	JMB	NA

7-3-06
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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90828
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-002
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	-0.254	1.151	0.933	0.446	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
K-40	10.600	1.326	0.722	0.315	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
SC-46	0.038	0.128	0.112	0.052	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
CO-60	-0.065	0.184	0.121	0.056	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
CS-137	-0.021	0.147	0.113	0.053	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
TL-208	0.152	0.065	0.099	0.047	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
PB-210	1.009	0.998	1.657	0.806	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
BI-212	-0.190	2.179	1.738	0.825	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
BI-214	0.579	0.120	0.156	0.072	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
PB-214	0.505	0.113	0.178	0.084	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
RA-223	-0.016	0.364	0.390	0.191	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
RA-226	1.078	1.188	1.983	0.957	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
RA-228	0.293	0.170	0.332	0.153	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
TH-228	0.480	0.133	0.188	0.091	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA
U-235	0.066	0.072	0.121	0.058	pCi/g	ARS-007/EPA 901.1M	6/8/06 15:55	JMB	NA

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90827
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-001
Date Received: 05/24/06
Report Date: 07/03/06 12:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.342	0.336	0.927	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	3.664	0.624	1.527	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

Quality Assurance Review 7-3-06

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ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90836
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-008
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	3.060	0.514	1.030	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	16.596	0.975	1.868	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

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ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90834
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-007
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.710	0.383	1.004	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	5.717	0.715	1.654	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

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ARS Sample Delivery Group:	ARS1-06-01000	**Request or PO Number:**	AFC002
Client Sample ID:	90832	**ARS Sample ID:**	ARS1-06-01000-006
Sample Collection Date:	05/16/06	**Date Received:**	05/24/06
Sample Matrix:	Soil/Solid	**Report Date:**	07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-0.278	0.452	1.357	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	0.872	0.590	1.630	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

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ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90831
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-005
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.178	0.378	1.080	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	2.096	0.577	1.498	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

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ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90830
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-004
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.705	0.365	0.952	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	5.107	0.634	1.450	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

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ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90829
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-003
Date Received: 05/24/06
Report Date: 07/03/06 12:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-0.624	0.390	1.233	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	3.973	0.651	1.587	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

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ARS Sample Delivery Group: ARS1-06-01000
Client Sample ID: 90828
Sample Collection Date: 05/16/06
Sample Matrix: Soil/Solid

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01000-002
Date Received: 05/24/06
Report Date: 07/03/06 12:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.541	0.350	0.932	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA
GROSS BETA	7.889	0.758	1.691	NA	pCi/g	EPA 900.0M	6/20/06 8:18	TS	NA

7-3-06
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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Water
Dates of Sampling: May 16 and May 20, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. ARS-06-01001
Purchase Order No. P0000715
QBD Job No. 1296L

Reviewed and approved,

Thomas S. Davis, Principal — 12/19/06 Date

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Attachments

Attachment 1 Reviewed Laboratory Forms

A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in Los Alamos National Laboratory RRES-Remediation Program's Standard Operating Procedures 15.06, R1, ICN1, *Routine Validation of Gamma Spectroscopy Data*, SOP-15.07, R1, ICN1, *Routine Validation of Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Data*, or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections which include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package consisting of a 273-page laboratory report from American Radiation Services of Port Allen, Louisiana, a subcontracting laboratory to TraceAnalysis, Inc. in Lubbock, Texas, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

No results were flagged as unusable due to QC failures. All other results were acceptable, although some received less severe qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Matrix	Method 900.0 M	Method 901.1 M
90827 (HGLSB27-03-1113)	ARS-06-01000-001	Soil	NR	NR
90828 (HGLSB27-03-1618)	ARS-06-01000-002	Soil	NR	NR
90829 (HGLSB27-02-0608)	ARS-06-01000-003	Soil	NR	NR
90830 (HGLSB27-02-1113)	ARS-06-01000-004	Soil	NR	NR
90831 (HGLSB27-01-0608)	ARS-06-01000-005	Soil	NR	NR
90832 (HGLSB27-04-0810)	ARS-06-01000-006	Soil	NR	NR
90834 (SBDup03)	ARS-06-01000-007	Soil	NR	NR
90836 (HGLSD27-01-0002)	ARS-06-01000-008	Soil	NR	NR
90835-4 (HGLGW27-03-051606)	ARS-06-01001-001	Water	X	X
90835-4 (HGLGW27-03-051606)F	ARS-06-01001-002	Water	X	X
90835-10 (HGLGW27-03-051606) F	ARS-06-01001-003	Water	X	X
90835-4 (HGLGW27-03-051606)F	ARS-06-01001-004	Water	X	X
90837-5 (HGLGW27-02-051606)	ARS-06-01001-005	Water	X	X
90837-5 (HGLGW27-02-051606)F	ARS-06-01001-006	Water	X	X
90837-6 (HGLGW27-02-051606) F	ARS-06-01001-007	Water	X	X

Key:

Method 900.0 M	=	Gross α and β by low background proportional counting
Method 901.1 M	=	Gamma Radiation by gamma spectroscopy
NR	=	Not Reported
F	=	Filtered

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
All	All	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The chain of custody showed 13 samples were submitted to the laboratory for analysis. This SDG provided the results for the four soil samples submitted but not for the eight water samples submitted. The soil results were reported under another SDG identification number.

E. Review of Radiological Analyses

EPA Methods 900.0M and 901.1M

1. Technical Holding Times and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

Where provided, all initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All criteria were reviewed for method acceptance. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment, field, and trip blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit except as noted below.

Discussion: AM-241 was found in the method blank associated with the gamma analysis for all samples, but was not found in the samples. No data qualifier flags are recommended.

4. Precision and Accuracy

MS/MSDs

Results for precision (RPD) and accuracy (percent recovery) were reviewed for spikes and duplicate spikes (MS/MSDs or BS/BSDs) to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. The percent recoveries were acceptable except as noted below:

Discussion: The recovery for gross-alpha was out of the criteria of 75 to 125% percent at -54 percent in the MS/MSD pair associated with all water samples. Since the LCS/LCSD pair were acceptable, only

the result for this analyte in the sample spiked, Sample 90835-4 (HGLGW27-03-051606), which was below the MDC, has been flagged "UJ" to indicate an estimated MDC value as listed in Table 3.

The recovery for gross-beta was out of the criteria of 75 to 125% percent at 172 percent, in the MS associated with all water samples. Since the recovery indicated a high bias, and the sample result is non-detect, no data qualifier flags are recommended.

Table 3. Radiological Data Qualifiers Due to Accuracy Deviations

Sample ID	Target Compound Affected	Type of Deviation	Anomaly	Criteria	Flag
90835-4 (HGLGW27-03-051606)	Gross Alpha	MS	%R= -54	%R=75-125	63.963 UJ

Laboratory Control Samples

Results for RPD and percent recovery were reviewed for LCS/LCSDs to determine that the checks were analyzed at the frequency required by the referenced method and the results met the requirements of the project. All data reviewed were acceptable.

Sample Duplicates

There was no sample duplicate data provided in this SDG. The laboratory measured precision with the analysis of an LCS/LCSD.

5. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

6. Field Duplicates

Field duplicates were collected and analyzed. Sample 90838-11 (GWDup-01) F is a field duplicate of Sample 90835-4 (HGLGW27-03-051606). Sample 90838-9 (GWDup-01) is a field duplicate Sample 90835-4 (HGLGW27-03-051606). Test results were reviewed, and where positive results were found, the RPD was calculated. All analytes, except those listed in the table below, were not detected.

Table 3. Radiological Field Duplicates and RPD

Compound	Sample Result	Duplicate Result	RPD
	90835-10 (HGLGW27-03-051606) F	90838-11 (GWDup-01) F	
Ra-228	<MDC	16.098	NC

Compound	Sample Result	Duplicate Result	RPD
	90835-4 (HGLGW27-03-051606)	90838-9 (GWDup-01)	
Bi-214	<MDC	10.550	NC
Ra-223	<MDC	6.928	NC
U-235	<MDC	23.911	NC

Key: <MDC = Less than the MDC
NC = Not calculable

7. Laboratory Contact

There was no verbal or written communication with the laboratory.

8. Other Comments

None.

9. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced methods.

Attachment 1 Data Qualifier Flag Definitions

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.[1]

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Attachment 2 Summary Table of Data Qualifier Flags

HydroGeoLogic, Inc.

Project Name: Holloman AFB RCRA Facility
Type of Samples: Water
Dates of Sampling: May 16 and 20, 2006

Sample ID	Target Compound Affected	Type of Deviation	Anomaly	Criteria	Flag
90835-4 (HGLGW27-03-051606)	Gross Alpha	MS	%R= -54	%R=75-125	63.963 UJ

Attachment 3 Revised/Reviewed Laboratory Forms

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01001
Client Sample ID: 90835-4
Sample Collection Date: 05/16/06
Sample Matrix: Aqueous

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01001-001
Date Received: 05/25/06
Report Date: 07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	13.257	16.386	27.301	13.164	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
K-40	4.548	52.738	90.755	44.134	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
SC-46	-0.666	2.160	3.240	1.533	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
CO-60	-0.284	2.444	3.590	1.673	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
CS-137	-2.306	4.679	8.101	3.972	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
TL-208	1.813	3.667	6.372	3.115	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
PB-210	57.044	64.355	107.601	53.198	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
BI-212	18.726	31.081	49.783	23.801	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
PB-212	3.045	6.920	11.662	5.763	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
BI-214	4.311	9.205	16.202	7.962	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
PB-214	8.571	12.331	12.308	6.048	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
RA-223	6.344	3.918	7.122	3.482	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
RA-226	24.880	77.090	130.244	64.382	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
RA-228	-4.493	14.693	24.194	11.783	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA
U-235	5.677	11.507	19.306	9.444	pCi/L	EPA 901.1	6/7/06 17:23	JMB	NA

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01001
Client Sample ID: 90835-10
Sample Collection Date: 05/16/06
Sample Matrix: Aqueous

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01001-002
Date Received: 05/25/06
Report Date: 07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	3.603	14.051	21.659	10.441	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
K-40	-12.896	32.883	58.020	28.042	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
SC-46	0.226	2.017	2.977	1.420	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
CO-60	0.312	2.406	3.429	1.619	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
CS-137	-0.301	2.117	3.037	1.456	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
TL-208	0.343	3.155	5.394	2.641	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
PB-210	22.473	59.621	100.639	49.766	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
BI-212	20.228	28.300	43.186	20.725	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
PB-212	-2.970	4.405	7.597	3.739	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
BI-214	7.672	7.067	12.537	6.158	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
PB-214	2.928	5.014	9.511	4.669	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
RA-223	6.903	3.642	6.343	3.101	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
RA-226	-10.644	74.359	126.348	62.517	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
RA-228	8.926	8.469	13.338	6.406	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
U-235	22.630	8.808	15.676	7.651	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01001
Client Sample ID: 90837-5
Sample Collection Date: 05/16/06
Sample Matrix: Aqueous

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01001-003
Date Received: 05/25/06
Report Date: 07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	-2.541	15.584	24.601	11.846	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
K-40	20.619	49.122	83.591	40.634	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
SC-46	-0.811	1.935	2.874	1.356	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
CO-60	-0.576	2.428	3.523	1.647	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
CS-137	-0.325	4.085	7.018	3.436	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
TL-208	0.312	3.653	6.263	3.065	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
PB-210	23.087	58.617	98.927	48.900	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
BI-212	23.774	23.818	39.441	18.702	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
PB-212	3.433	5.505	9.911	4.892	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
BI-214	6.874	8.270	14.679	7.210	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
PB-214	3.990	6.416	12.358	6.080	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
RA-223	2.204	3.549	6.346	3.099	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
RA-226	11.873	76.650	129.775	64.196	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
RA-228	8.862	8.871	14.598	6.989	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA
U-235	11.106	10.586	18.059	8.834	pCi/L	EPA 901.1	6/8/06 17:40	JMB	NA

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90837-6	**ARS Sample ID:**	ARS1-06-01001-004
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	5.352	13.971	21.753	10.469	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
K-40	53.060	40.391	66.404	32.184	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
SC-46	-0.654	2.278	3.231	1.543	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
CO-60	-0.378	2.367	3.301	1.550	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
CS-137	3.190	2.093	3.403	1.636	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
TL-208	1.437	3.496	5.953	2.917	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
PB-210	20.510	60.561	102.310	50.573	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
BI-212	33.180	29.665	46.852	22.514	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
BI-214	12.230	12.370	11.127	5.448	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
PB-214	4.570	4.207	10.005	4.912	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
RA-223	9.675	3.944	6.914	3.383	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
RA-226	-8.073	84.643	129.756	64.186	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
RA-228	13.888	8.598	14.092	6.769	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
TH-228	-9.276	9.531	7.644	3.760	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA
U-235	13.002	16.337	18.084	8.845	pCi/L	EPA 901.1	6/26/06 16:26	JMB	NA

7-6-06
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2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90838-9	**ARS Sample ID:**	ARS1-06-01001-005
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	4.996	15.104	23.341	11.261	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
K-40	-10.189	38.564	67.412	32.684	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
SC-46	-0.781	2.225	3.152	1.503	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
CO-60	-0.674	2.606	3.398	1.603	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
CS-137	-2.437	2.521	3.409	1.638	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
TL-208	1.820	3.797	6.451	3.166	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
PB-210	7.570	62.068	105.180	52.006	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
BI-212	10.197	30.411	45.475	21.822	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
PB-212	-1.821	4.779	8.199	4.037	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
BI-214	10.550	4.660	7.859	3.813	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
PB-214	4.816	4.203	9.454	4.636	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
RA-223	6.928	3.905	6.773	3.312	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
RA-226	-16.191	79.309	134.835	66.723	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
RA-228	5.481	8.811	20.806	10.134	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
U-235	23.911	9.512	16.902	8.253	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA

Quality Assurance Review 7-6-06

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AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90838-11	**ARS Sample ID:**	ARS1-06-01001-006
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:55

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	13.801	15.512	26.016	12.531	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
K-40	-22.160	46.557	81.946	39.752	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
SC-46	-1.142	2.152	3.124	1.477	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
CO-60	1.843	2.324	3.774	1.768	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
CS-137	-0.892	4.544	7.817	3.831	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
TL-208	2.634	3.986	6.733	3.297	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
PB-210	2.565	63.572	107.836	53.326	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
BI-212	17.415	30.788	49.185	23.521	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
PB-212	4.533	6.376	11.662	5.764	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
BI-214	6.007	8.800	15.647	7.687	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
PB-214	4.990	5.854	12.034	5.913	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
RA-223	1.658	3.776	6.694	3.270	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
RA-226	-36.694	75.891	129.534	64.040	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
RA-228	16.098	8.864	15.392	7.370	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA
U-235	10.354	10.811	18.414	9.001	pCi/L	EPA 901.1	6/9/06 17:28	JMB	NA

7-6-06
Quality Assurance Review

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FD

Quality by Design
December 19, 2006

AMERICAN RADIATION SERVICES, INC.

2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-06-01001
Client Sample ID: 91061-8
Sample Collection Date: 05/16/06
Sample Matrix: Aqueous

Request or PO Number: AFC002
ARS Sample ID: ARS1-06-01001-007
Date Received: 05/25/06
Report Date: 07/06/06 11:55

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
BE-7	7.617	6.230	16.004	7.521	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
K-40	-37.513	49.275	87.316	42.430	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
SC-46	-1.119	2.056	3.009	1.419	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
CO-60	-1.409	2.448	3.386	1.572	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
CS-137	1.136	4.181	7.122	3.483	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
TL-208	2.825	4.187	7.070	3.465	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
PB-210	-18.479	63.216	107.682	53.245	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
BI-212	38.089	35.690	59.134	28.489	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
PB-212	3.498	6.096	10.789	5.327	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
BI-214	0.146	9.183	15.691	7.708	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
PB-214	2.373	15.913	12.415	6.103	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
RA-223	0.067	3.678	6.519	3.182	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
RA-226	-1.742	81.618	138.501	68.519	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
RA-228	4.181	8.624	13.803	6.574	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA
U-235	15.658	11.034	18.994	9.290	pCi/L	EPA 901.1	6/13/06 17:11	JMB	NA

7-6-06
Quality Assurance Review

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90835-4	**ARS Sample ID:**	ARS1-06-01001-001
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	68.963	58.928	98.293	47.369	pCi/L	EPA 900	6/8/06 7:40	XP	NA UJ
GROSS BETA	-38.830	21.761	38.421	18.852	pCi/L	EPA 900	6/8/06 7:40	XP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review

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1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	91061-8	**ARS Sample ID:**	ARS1-06-01001-007
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:55

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.337	0.470	0.791	0.377	pCi/L	EPA 900	6/8/06 7:40	KP	NA
GROSS BETA	0.138	0.500	0.846	0.415	pCi/L	EPA 900	6/8/06 7:40	KP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review

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ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90838-11	**ARS Sample ID:**	ARS1-06-01001-006
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-130.890	54.205	105.611	50.848	pCi/L	EPA 900	6/8/06 7:40	KP	NA
GROSS BETA	4.134	23.015	39.802	19.545	pCi/L	EPA 900	6/8/06 7:40	KP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review

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ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90838-9	**ARS Sample ID:**	ARS1-06-01001-005
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	2.349	39.915	69.654	33.299	pCi/L	EPA 900	6/8/06 7:40	KP	NA
GROSS BETA	5.652	19.763	33.593	16.465	pCi/L	EPA 900	6/8/06 7:40	KP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review

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ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90837-6	**ARS Sample ID:**	ARS1-06-01001-004
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	5.468	43.726	75.813	36.338	pCi/L	EPA 900	6/8/06 7:40	KP	NA
GROSS BETA	8.272	19.921	33.733	16.538	pCi/L	EPA 900	6/8/06 7:40	KP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review

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ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90837-5	**ARS Sample ID:**	ARS1-06-01001-003
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-78.767	45.206	84.088	40.589	pCi/L	EPA 900	6/8/06 7:40	KP	NA
GROSS BETA	24.835	20.696	34.822	17.081	pCi/L	EPA 900	6/8/06 7:40	KP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review 7-6-06

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ARS Sample Delivery Group:	ARS1-06-01001	**Request or PO Number:**	AFC002
Client Sample ID:	90835-10	**ARS Sample ID:**	ARS1-06-01001-002
Sample Collection Date:	05/16/06	**Date Received:**	05/25/06
Sample Matrix:	Aqueous	**Report Date:**	07/06/06 11:54

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	50.713	44.870	74.196	35.375	pCi/L	EPA 900	6/8/06 7:40	KP	NA
GROSS BETA	-9.308	21.797	37.404	18.352	pCi/L	EPA 900	6/8/06 7:40	KP	NA

NOTES: Matrix Spike did not meet acceptance criteria for EPA 900.0. Per client request, reported results without passing Matrix Spike.

Quality Assurance Review 7-6-06

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December 19, 2006

Quality by Design

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EPA Level 3
DATA VALIDATION REPORT

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soils
Dates of Sampling: May 18, 2006

Prepared for

HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, Virginia 20170

SDG No. D6F010162
Purchase Order No. P0000715
QBD Job No. 1296Q

Reviewed and approved,

Thomas S. Davis 12/19/06

Thomas S. Davis, Principal Date

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Attachments

Attachment 1 Data Qualifier Flag Definitions
Attachment 2 Summary Table of Data Qualifier Flags
Attachment 3 Revised Laboratory Forms

A. Abbreviations and Acronyms

Acronym/ Abbreviation	Definition
%D	percent difference
%R	percent recovery
µg/l	micrograms per liter
µg/kg	micrograms per kilogram
AA	atomic absorption
BFB	bromofluorobenzene
BNA	base/neutral/acid compounds
BS	blank spike
BSD	blank spike duplicate
CCB	continuing calibration blank
CCC	calibration check compound
CCS	continuing calibration standard
CCV	continuing calibration verification
CF	calibration factor
CLP	Contract Laboratory Program
COC	chain of custody record
CRA	contract required standard at the CRDL for graphite furnace AA method
CRDL	contract required detection limit
CRI	contract required standard at the CRDL for ICP method
CRQL	contract required quantitation limit
CV	coefficient of variation
CVAA	cold vapor atomic absorption
4,4'-DDD	4,4'-dechlorodiphenyldichloroethane
4,4'-DDE	4,4'-dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
DFTPP	decafluorotriphenylphosphine
DHG	dissolved hydrogen gas
DRO	diesel range organics
DQO	data quality objective
EB	equipment blank
EICP	extracted ion current profile
EPA	U.S. Environmental Protection Agency
ER	equipment rinsate
FB	field blank
GC/ECD	gas chromatography/electron capture detector

Acronym/ Abbreviation	Definition
GC/ELCD	gas chromatography/electrolytic conductivity detector (Hall detector)
GC/FID	gas chromatography/flame ionization detector
GC/PID	gas chromatography/photoionization detector
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GLP	good laboratory practices
GRO	gasoline range organics
GPC	gel permeation chromatography
HPLC	high-performance liquid chromatography
HRGC	high resolution gas chromatography
HRMS	high resolution mass spectrometry
ICB	initial calibration blank
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDL	instrument detection limit
IR	infrared spectroscopy
IS	internal standards
LCS	laboratory control standard
LCSD	laboratory control standard duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MS	matrix spike
MSA	method of standard addition
MSD	matrix spike duplicate
m/z	mass to charge ration
NIST	National Institute of Standards and Technology
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PE	performance evaluation
PEM	performance evaluation mixture
PPB	parts per billion
PPM	parts per million
PPT	parts per trillion
PNA	polynuclear aromatic hydrocarbon
PQL	practical quantitation limit
QA	quality assurance

Acronym/ Abbreviation	Definition
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RF	response factor
RIC	reconstructed ion chromatograph
RPD	relative percent difference
RRF	relative response factor
RRT	relative retention time
RSD	relative standard deviation
RT	retention time
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
SPCC	system performance check compound
SRM	standard reference material
TB	trip blank
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TPH-G	total petroleum hydrocarbons - gasoline
TPH-D	total petroleum hydrocarbons - diesel
UV/VIS	ultraviolet/visible
VOA	volatile organic analysis

B. Introduction

Laboratory Sciences, Inc., d.b.a. *Quality by Design* (QBD), has completed an EPA Level 3 Data Validation on the submitted data packages in accordance with Purchase Order No. P0000715.

The reporting format and criteria for recommending data qualifying flags for this data set are described in the EPA *"Functional Guidelines for Evaluating Organics Analyses,"* as revised, 1999; the *Baseline Quality Assurance Project Plan, Holloman Air Force Base, New Mexico*, November, 2003; the *Quality Assurance Project Plan Addendum Supplemental RCRA Facility Investigation, Holloman Air Force Base, Alamogordo, New Mexico*, July 2005; or using criteria listed in the method referenced. Data may be qualified for any of the following reasons:

1. By the laboratory prior to receipt by the reviewer
2. Because of laboratory deviation from the designated method
3. Because the data may not meet the criteria listed in the reference above
4. By the professional judgment of the reviewer

This data validation report consists of several sections, each of which are formatted to follow *Functional Guidelines*, but which also include subsections discussing QBD contacts with the laboratory, other comments, and a summary table of data qualifiers.

The data set consists of an electronic data package of a 512-page laboratory report from Severn Trent Laboratory in Denver, Colorado, and contains data for the samples shown in Table 1. The data reviewers and senior reviewers are shown in Table 2.

Each data set includes an analytical data package for each sample, copies of the completed COC forms, and a QC data package. The analytical data package includes analytical results, blank sample results, both laboratory and client sample identifications, appropriate dates but not times, method reporting limits, method references, surrogate recoveries as appropriate, the laboratory's name and address, and the initials of the person releasing the data. The custody forms include the receipt of the sample but not the laboratory's internal tracking. The QC data package includes a tabular list of the laboratory's sample identification, spiking concentrations, recoveries, percentage calculations, and acceptance windows.

No results were flagged as unusable due to QC failures but samples with multiple results were flagged "X" to indicate that more technically valid results were available. All other results were acceptable, although some received less severe qualification. A discussion of the QC criteria and data usability is presented in this report. A listing of all qualified results with the final qualifier flag is presented in tabular form in Attachment 2.

Table 1. Sample Identification and Analysis

Sample Identification	Laboratory Identification	Sample Matrix	Method 8141A	Method 8151A
91023 (HGLSB3301-0809)	D6F010162-001	Soil	X	X
91024 (HGLSB3302-0809)	D6F010162-002	Soil	X	X
91025 (HGLSB3303-0809)	D6F010162-003	Soil	X	X

Key:

Method 8141A = Pesticides by GC
Method 8151A = Herbicides by GC

Table 2. Data Package, Reviewer, and Senior Reviewer

Analysis	SDG Number	Reviewer	Senior Reviewer
All	All	Lorraine Davis	Thomas Davis

C. Laboratory Report and Supporting Documentation

The laboratory report and supporting documentation were reviewed to determine that the data package supported the level of validation requested. The data package was checked for pagination, appropriate signatures and approvals, an adequate case narrative, and possible subcontracting. The supporting data was checked for completeness and to determine that the information necessary for validation was present. The laboratory documentation was acceptable.

D. Chain-of-Custody

The COC documentation associated with this SDG was reviewed to determine that all samples listed on the COC form were reported in the laboratory deliverables, that a date and time of sampling was provided, and that the sample custody trail was complete. Sample condition upon receipt was reviewed to determine that the samples were not compromised during shipping. All custody and shipping documentation was reviewed to determine if GLP were employed when errors occurred. All data reviewed were acceptable, except as noted below.

Discussion: The date and time relinquished and the date and time received by the laboratory do not match on the COC form. Also, the shipping waybill was not referenced and appropriate physical custody could not be documented by obtaining shipping information from the courier service. However, the laboratory did document that the custody seals were intact, indicating that the shipping was not tampered with and the COC was maintained, so no data qualifier flags are recommended.

E. Review of Organophosphate Pesticide Analyses by GC

EPA Method 8141A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable, except as noted below.

Discussion: The samples in Preparation Batches 6152429 were re-extracted because a single result in the LCS was out of criteria. The re-extracted samples in Preparation Batch 6160553 exceeded the holding time of 14 days by nine days. Because the LCS percent recovery for a single analyte was only slightly exceeded, the reviewer's opinion is that the error introduced by the holding time exceedence is greater than the error introduced by the poor recovery that was documented by the LCS. Therefore, so the re-extracted samples have been flagged "X" to indicate that a more technically sound value is available, as listed in Table 3. The samples that were associated with the LCS exceedence have been flagged elsewhere in this report.

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91023 (HGLSB3301-0809)RE	Azinphos-methyl	Holding time	HT=23 dy	HT=14 dy	3.5	UJ
91023 (HGLSB3301-0809)RE	Bolstar	Holding time	HT=23 dy	HT=14 dy	4.2	UJ
91023 (HGLSB3301-0809)RE	Chlorpyrifos	Holding time	HT=23 dy	HT=14 dy	6.5	UJ
91023 (HGLSB3301-0809)RE	Coumaphos	Holding time	HT=23 dy	HT=14 dy	2.8	UJ
91023 (HGLSB3301-0809)RE	Demeton (total)	Holding time	HT=23 dy	HT=14 dy	7.5	UJ
91023 (HGLSB3301-0809)RE	Demeton-O	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91023 (HGLSB3301-0809)RE	Demeton-S	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91023 (HGLSB3301-0809)RE	Diazinon	Holding time	HT=23 dy	HT=14 dy	7.3	UJ
91023 (HGLSB3301-0809)RE	Dichlorvos	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91023 (HGLSB3301-0809)RE	Dimethoate	Holding time	HT=23 dy	HT=14 dy	11	J

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91023 (HGLSB3301-0809)RE	Disulfoton	Holding time	HT=23 dy	HT=14 dy	7.7	UJ
91023 (HGLSB3301-0809)RE	EPN	Holding time	HT=23 dy	HT=14 dy	3.7	UJ
91023 (HGLSB3301-0809)RE	Ethoprop	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91023 (HGLSB3301-0809)RE	Ethyl parathion	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91023 (HGLSB3301-0809)RE	Famphur	Holding time	HT=23 dy	HT=14 dy	3.2	UJ
91023 (HGLSB3301-0809)RE	Fensulfothion	Holding time	HT=23 dy	HT=14 dy	2.9	UJ
91023 (HGLSB3301-0809)RE	Fenthion	Holding time	HT=23 dy	HT=14 dy	11	UJ
91023 (HGLSB3301-0809)RE	Malathion	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91023 (HGLSB3301-0809)RE	Merphos	Holding time	HT=23 dy	HT=14 dy	9.4	UJ
91023 (HGLSB3301-0809)RE	Methyl parathion	Holding time	HT=23 dy	HT=14 dy	6.4	UJ
91023 (HGLSB3301-0809)RE	Mevinphos	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91023 (HGLSB3301-0809)RE	Naled	Holding time	HT=23 dy	HT=14 dy	6	UJ
91023 (HGLSB3301-0809)RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=23 dy	HT=14 dy	7.8	UJ
91023 (HGLSB3301-0809)RE	Phorate	Holding time	HT=23 dy	HT=14 dy	5.7	UJ
91023 (HGLSB3301-0809)RE	Ronnel	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91023 (HGLSB3301-0809)RE	Sulfotepp	Holding time	HT=23 dy	HT=14 dy	6.3	UJ
91023 (HGLSB3301-0809)RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=23 dy	HT=14 dy	4.4	UJ
91023 (HGLSB3301-0809)RE	Thionazin	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91023 (HGLSB3301-0809)RE	Tokuthion	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91023 (HGLSB3301-0809)RE	Trichloronate	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91024 (HGLSB3302-0809)RE	Azinphos-methyl	Holding time	HT=23 dy	HT=14 dy	3.5	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91024 (HGLSB3302-0809)RE	Bolstar	Holding time	HT=23 dy	HT=14 dy	4.2	UJ
91024 (HGLSB3302-0809)RE	Chlorpyrifos	Holding time	HT=23 dy	HT=14 dy	6.5	UJ
91024 (HGLSB3302-0809)RE	Coumaphos	Holding time	HT=23 dy	HT=14 dy	2.8	UJ
91024 (HGLSB3302-0809)RE	Demeton (total)	Holding time	HT=23 dy	HT=14 dy	7.5	UJ
91024 (HGLSB3302-0809)RE	Demeton-O	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91024 (HGLSB3302-0809)RE	Demeton-S	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91024 (HGLSB3302-0809)RE	Diazinon	Holding time	HT=23 dy	HT=14 dy	7.3	UJ
91024 (HGLSB3302-0809)RE	Dichlorvos	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91024 (HGLSB3302-0809)RE	Dimethoate	Holding time	HT=23 dy	HT=14 dy	22	UJ
91024 (HGLSB3302-0809)RE	Disulfoton	Holding time	HT=23 dy	HT=14 dy	7.7	UJ
91024 (HGLSB3302-0809)RE	EPN	Holding time	HT=23 dy	HT=14 dy	3.7	UJ
91024 (HGLSB3302-0809)RE	Ethoprop	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91024 (HGLSB3302-0809)RE	Ethyl parathion	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91024 (HGLSB3302-0809)RE	Famphur	Holding time	HT=23 dy	HT=14 dy	3.2	UJ
91024 (HGLSB3302-0809)RE	Fensulfothion	Holding time	HT=23 dy	HT=14 dy	2.9	UJ
91024 (HGLSB3302-0809)RE	Fenthion	Holding time	HT=23 dy	HT=14 dy	11	UJ
91024 (HGLSB3302-0809)RE	Malathion	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91024 (HGLSB3302-0809)RE	Merphos	Holding time	HT=23 dy	HT=14 dy	9.4	UJ
91024 (HGLSB3302-0809)RE	Methyl parathion	Holding time	HT=23 dy	HT=14 dy	6.4	UJ
91024 (HGLSB3302-0809)RE	Mevinphos	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91024 (HGLSB3302-0809)RE	Naled	Holding time	HT=23 dy	HT=14 dy	6	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91024 (HGLSB3302-0809)RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=23 dy	HT=14 dy	7.8	UJ
91024 (HGLSB3302-0809)RE	Phorate	Holding time	HT=23 dy	HT=14 dy	5.7	UJ
91024 (HGLSB3302-0809)RE	Ronnel	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91024 (HGLSB3302-0809)RE	Sulfotepp	Holding time	HT=23 dy	HT=14 dy	6.3	UJ
91024 (HGLSB3302-0809)RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=23 dy	HT=14 dy	4.4	UJ
91024 (HGLSB3302-0809)RE	Thionazin	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91024 (HGLSB3302-0809)RE	Tokuthion	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91024 (HGLSB3302-0809)RE	Trichloronate	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91025 (HGLSB3303-0809)RE	Azinphos-methyl	Holding time	HT=23 dy	HT=14 dy	3.5	UJ
91025 (HGLSB3303-0809)RE	Bolstar	Holding time	HT=23 dy	HT=14 dy	4.2	UJ
91025 (HGLSB3303-0809)RE	Chlorpyrifos	Holding time	HT=23 dy	HT=14 dy	6.5	UJ
91025 (HGLSB3303-0809)RE	Coumaphos	Holding time	HT=23 dy	HT=14 dy	2.8	UJ
91025 (HGLSB3303-0809)RE	Demeton (total)	Holding time	HT=23 dy	HT=14 dy	7.5	UJ
91025 (HGLSB3303-0809)RE	Demeton-O	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91025 (HGLSB3303-0809)RE	Demeton-S	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91025 (HGLSB3303-0809)RE	Diazinon	Holding time	HT=23 dy	HT=14 dy	7.3	UJ
91025 (HGLSB3303-0809)RE	Dichlorvos	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91025 (HGLSB3303-0809)RE	Dimethoate	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91025 (HGLSB3303-0809)RE	Disulfoton	Holding time	HT=23 dy	HT=14 dy	7.7	UJ
91025 (HGLSB3303-0809)RE	EPN	Holding time	HT=23 dy	HT=14 dy	3.7	UJ
91025 (HGLSB3303-0809)RE	Ethoprop	Holding time	HT=23 dy	HT=14 dy	4.9	UJ

Table 3. OP Pesticide Data Qualifiers Due to Holding Time Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91025 (HGLSB3303-0809)RE	Ethyl parathion	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91025 (HGLSB3303-0809)RE	Famphur	Holding time	HT=23 dy	HT=14 dy	3.2	UJ
91025 (HGLSB3303-0809)RE	Fensulfothion	Holding time	HT=23 dy	HT=14 dy	2.9	UJ
91025 (HGLSB3303-0809)RE	Fenthion	Holding time	HT=23 dy	HT=14 dy	11	UJ
91025 (HGLSB3303-0809)RE	Malathion	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91025 (HGLSB3303-0809)RE	Merphos	Holding time	HT=23 dy	HT=14 dy	9.4	UJ
91025 (HGLSB3303-0809)RE	Methyl parathion	Holding time	HT=23 dy	HT=14 dy	6.4	UJ
91025 (HGLSB3303-0809)RE	Mevinphos	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91025 (HGLSB3303-0809)RE	Naled	Holding time	HT=23 dy	HT=14 dy	6	UJ
91025 (HGLSB3303-0809)RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=23 dy	HT=14 dy	7.8	UJ
91025 (HGLSB3303-0809)RE	Phorate	Holding time	HT=23 dy	HT=14 dy	5.7	UJ
91025 (HGLSB3303-0809)RE	Ronnel	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91025 (HGLSB3303-0809)RE	Sulfotepp	Holding time	HT=23 dy	HT=14 dy	6.3	UJ
91025 (HGLSB3303-0809)RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=23 dy	HT=14 dy	4.4	UJ
91025 (HGLSB3303-0809)RE	Thionazin	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91025 (HGLSB3303-0809)RE	Tokuthion	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91025 (HGLSB3303-0809)RE	Trichloronate	Holding time	HT=23 dy	HT=14 dy	6.2	UJ

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable, except as noted below.

Discussion: The case narrative stated that a continuing calibration associated with the samples in Preparation Batch 6160553 had an analyte with a percent difference greater than the acceptance criteria of less than 15 percent. However, the results for the samples in this batch have been flagged "X" elsewhere in this report, and no additional data qualifiers are recommended.

The continuing calibration associated with the samples in Preparation Batch 6152429 for methyl parathion, merphos, and fensulfothion had percent differences that were out of the criteria of less than 15 percent. However, all sample results were not detected and the continuing calibration on the confirmatory column was acceptable, so no data qualifier flags are recommended.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable, except as noted below.

Discussion: Surrogate percent recoveries were out of the acceptance criteria for several of the method blanks and LCS. However, no data qualifier flags are recommended because the surrogates are evaluated separately in the samples.

5. Precision and Accuracy

A MS/MSD pair was not analyzed with this set of analyses. The laboratory analyzed a single BS to measure accuracy. Except as noted, all percent recoveries were within laboratory, method, or QAPP criteria.

Discussion: Since no measurement of precision was available for these samples, normally the associated positive results would be flagged "J" to indicate an estimated value. However, all sample results were not detected, so no data qualifier flags are recommended.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable, except as noted below.

Discussion: The recovery for phorate was out of the criteria of 58 to 106 percent at 52 percent in the LCS associated with all samples. Since there were no other measurements for accuracy, the associated results, which were not detected, have been flagged "UJ" to indicate an estimated reporting limit, as listed in Table 4.

Table 4. OP Pesticide Data Qualifiers Due to LCS Deviations

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91023 (HGLSB3301-0809)	Phorate	LCS	%R=53	%R=58-106	20	UJ
91024 (HGLSB3302-0809)	Phorate	LCS	%R=53	%R=58-106	20	UJ
91025 (HGLSB3303-0809)	Phorate	LCS	%R=53	%R=58-106	20	UJ

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

No field duplicates were identified with this group of samples.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data, as qualified, are acceptable for use. The analyses were generally within the requirements of the referenced method.

F. Review of Chlorphenoxy Herbicides by GC

EPA Method 8151A

1. Timeliness and a Check for Errors

The laboratory data packages were reviewed and compared against the COC and supporting documentation to determine that samples were properly preserved and analyzed within the technical holding times, and that no deviations from proper handling and identification occurred. All data reviewed were acceptable.

2. Initial and Continuing Calibration

All initial and continuing calibration quality control criteria were reviewed to determine that no TCL analytes had initial calibration percent RSDs or continuing calibration percent differences greater than allowed by the method. All data reviewed were acceptable.

3. Blanks and Checks for Contamination

The frequency of analysis and the results for instrument and method blank analyses were reviewed. Equipment and field blanks were also evaluated if identified in the group of samples. Either no analytes were detected or, if detected, levels were below the reporting limit.

4. Surrogate Recovery

Surrogate spikes were added to all samples, QC checks, and blanks as required by the referenced method. All data reviewed were acceptable.

5. Precision and Accuracy

A MS/MSD pair was not analyzed with this set of analyses. The laboratory analyzed a single BS to measure accuracy. Except as noted, all percent recoveries were within laboratory, method, or QAPP criteria.

Discussion: Since no measurement of precision was available for these samples, normally the associated positive results would be flagged "J" to indicate an estimated value. However, all sample results were not detected, so no data qualifier flags are recommended.

6. Second Source Calibration Checks

The frequency of analysis and percent recoveries of the second source calibration verifications were reviewed. All data reviewed were acceptable.

7. Compound Quantitation and Reported Detection Limits

Using judgment based upon the information provided and typical calibration and extraction procedures, it appears as if no quantitation exceeded the typical highest calibration standard for the test, that dilutions were reported for samples with high values, and that reporting limits have been correctly adjusted for dilutions and extraction amounts. The reporting limits met method or contractual requirements. All data reviewed were acceptable.

8. Field Duplicates

No field duplicates were identified with this group of samples.

9. Laboratory Contact

There was no verbal or written communication with the laboratory.

10. Other Comments

None.

11. Data Use and Overall Assessment

The data are acceptable for use. The analyses were generally within the requirements of the referenced method.

Attachment 1 Data Qualifier Flag Definitions

Organics

U = The analyte was analyzed for but not detected above the numerical quantitation limit.

J = The analyte was analyzed for and was positively identified, but the associated numerical value is an estimated quantity.

UJ = The analyte was analyzed for but was not detected above the reporting level, but the reporting level is an estimated level.

R = The data are unusable for all purposes. The analyte was analyzed for, but the target analyte might not be present.

X = The data should not be used because more technically sound data are available.

N = The analysis indicates presumptive evidence of the presence of the analyte.

NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Attachment 2 Summary Table of Data Qualifier Flags

Project Name: Holloman Air Force Base RCRA Facility Investigation
Project No. AFC002-037-VAL
Types of Samples: Soil
Dates of Sampling: May 18, 2006

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91023 (HGLSB3301-0809)	Phorate	LCS	%R=53	%R=58-106	20	UJ
91023 (HGLSB3301-0809)RE	Azinphos-methyl	Holding time	HT=23 dy	HT=14 dy	3.5	UJ
91023 (HGLSB3301-0809)RE	Bolstar	Holding time	HT=23 dy	HT=14 dy	4.2	UJ
91023 (HGLSB3301-0809)RE	Chlorpyrifos	Holding time	HT=23 dy	HT=14 dy	6.5	UJ
91023 (HGLSB3301-0809)RE	Coumaphos	Holding time	HT=23 dy	HT=14 dy	2.8	UJ
91023 (HGLSB3301-0809)RE	Demeton (total)	Holding time	HT=23 dy	HT=14 dy	7.5	UJ
91023 (HGLSB3301-0809)RE	Demeton-O	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91023 (HGLSB3301-0809)RE	Demeton-S	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91023 (HGLSB3301-0809)RE	Diazinon	Holding time	HT=23 dy	HT=14 dy	7.3	UJ
91023 (HGLSB3301-0809)RE	Dichlorvos	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91023 (HGLSB3301-0809)RE	Dimethoate	Holding time	HT=23 dy	HT=14 dy	11	J
91023 (HGLSB3301-0809)RE	Disulfoton	Holding time	HT=23 dy	HT=14 dy	7.7	UJ
91023 (HGLSB3301-0809)RE	EPN	Holding time	HT=23 dy	HT=14 dy	3.7	UJ
91023 (HGLSB3301-0809)RE	Ethoprop	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91023 (HGLSB3301-0809)RE	Ethyl parathion	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91023 (HGLSB3301-0809)RE	Famphur	Holding time	HT=23 dy	HT=14 dy	3.2	UJ
91023 (HGLSB3301-0809)RE	Fensulfothion	Holding time	HT=23 dy	HT=14 dy	2.9	UJ
91023 (HGLSB3301-0809)RE	Fenthion	Holding time	HT=23 dy	HT=14 dy	11	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91023 (HGLSB3301-0809)RE	Malathion	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91023 (HGLSB3301-0809)RE	Merphos	Holding time	HT=23 dy	HT=14 dy	9.4	UJ
91023 (HGLSB3301-0809)RE	Methyl parathion	Holding time	HT=23 dy	HT=14 dy	6.4	UJ
91023 (HGLSB3301-0809)RE	Mevinphos	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91023 (HGLSB3301-0809)RE	Naled	Holding time	HT=23 dy	HT=14 dy	6	UJ
91023 (HGLSB3301-0809)RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=23 dy	HT=14 dy	7.8	UJ
91023 (HGLSB3301-0809)RE	Phorate	Holding time	HT=23 dy	HT=14 dy	5.7	UJ
91023 (HGLSB3301-0809)RE	Ronnel	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91023 (HGLSB3301-0809)RE	Sulfotepp	Holding time	HT=23 dy	HT=14 dy	6.3	UJ
91023 (HGLSB3301-0809)RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=23 dy	HT=14 dy	4.4	UJ
91023 (HGLSB3301-0809)RE	Thionazin	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91023 (HGLSB3301-0809)RE	Tokuthion	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91023 (HGLSB3301-0809)RE	Trichloronate	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91024 (HGLSB3302-0809)	Phorate	LCS	%R=53	%R=58-106	20	UJ
91024 (HGLSB3302-0809)RE	Azinphos-methyl	Holding time	HT=23 dy	HT=14 dy	3.5	UJ
91024 (HGLSB3302-0809)RE	Bolstar	Holding time	HT=23 dy	HT=14 dy	4.2	UJ
91024 (HGLSB3302-0809)RE	Chlorpyrifos	Holding time	HT=23 dy	HT=14 dy	6.5	UJ
91024 (HGLSB3302-0809)RE	Coumaphos	Holding time	HT=23 dy	HT=14 dy	2.8	UJ
91024 (HGLSB3302-0809)RE	Demeton (total)	Holding time	HT=23 dy	HT=14 dy	7.5	UJ
91024 (HGLSB3302-0809)RE	Demeton-O	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91024 (HGLSB3302-0809)RE	Demeton-S	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91024 (HGLSB3302-0809)RE	Diazinon	Holding time	HT=23 dy	HT=14 dy	7.3	UJ
91024 (HGLSB3302-0809)RE	Dichlorvos	Holding time	HT=23 dy	HT=14 dy	7.4	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91024 (HGLSB3302-0809)RE	Dimethoate	Holding time	HT=23 dy	HT=14 dy	22	UJ
91024 (HGLSB3302-0809)RE	Disulfoton	Holding time	HT=23 dy	HT=14 dy	7.7	UJ
91024 (HGLSB3302-0809)RE	EPN	Holding time	HT=23 dy	HT=14 dy	3.7	UJ
91024 (HGLSB3302-0809)RE	Ethoprop	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91024 (HGLSB3302-0809)RE	Ethyl parathion	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91024 (HGLSB3302-0809)RE	Famphur	Holding time	HT=23 dy	HT=14 dy	3.2	UJ
91024 (HGLSB3302-0809)RE	Fensulfothion	Holding time	HT=23 dy	HT=14 dy	2.9	UJ
91024 (HGLSB3302-0809)RE	Fenthion	Holding time	HT=23 dy	HT=14 dy	11	UJ
91024 (HGLSB3302-0809)RE	Malathion	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91024 (HGLSB3302-0809)RE	Merphos	Holding time	HT=23 dy	HT=14 dy	9.4	UJ
91024 (HGLSB3302-0809)RE	Methyl parathion	Holding time	HT=23 dy	HT=14 dy	6.4	UJ
91024 (HGLSB3302-0809)RE	Mevinphos	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91024 (HGLSB3302-0809)RE	Naled	Holding time	HT=23 dy	HT=14 dy	6	UJ
91024 (HGLSB3302-0809)RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=23 dy	HT=14 dy	7.8	UJ
91024 (HGLSB3302-0809)RE	Phorate	Holding time	HT=23 dy	HT=14 dy	5.7	UJ
91024 (HGLSB3302-0809)RE	Ronnel	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91024 (HGLSB3302-0809)RE	Sulfotepp	Holding time	HT=23 dy	HT=14 dy	6.3	UJ
91024 (HGLSB3302-0809)RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=23 dy	HT=14 dy	4.4	UJ
91024 (HGLSB3302-0809)RE	Thionazin	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91024 (HGLSB3302-0809)RE	Tokuthion	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91024 (HGLSB3302-0809)RE	Trichloronate	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91025 (HGLSB3303-0809)	Phorate	LCS	%R=53	%R=58-106	20	UJ
91025 (HGLSB3303-0809)RE	Azinphos-methyl	Holding time	HT=23 dy	HT=14 dy	3.5	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91025 (HGLSB3303-0809)RE	Bolstar	Holding time	HT=23 dy	HT=14 dy	4.2	UJ
91025 (HGLSB3303-0809)RE	Chlorpyrifos	Holding time	HT=23 dy	HT=14 dy	6.5	UJ
91025 (HGLSB3303-0809)RE	Coumaphos	Holding time	HT=23 dy	HT=14 dy	2.8	UJ
91025 (HGLSB3303-0809)RE	Demeton (total)	Holding time	HT=23 dy	HT=14 dy	7.5	UJ
91025 (HGLSB3303-0809)RE	Demeton-O	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91025 (HGLSB3303-0809)RE	Demeton-S	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91025 (HGLSB3303-0809)RE	Diazinon	Holding time	HT=23 dy	HT=14 dy	7.3	UJ
91025 (HGLSB3303-0809)RE	Dichlorvos	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91025 (HGLSB3303-0809)RE	Dimethoate	Holding time	HT=23 dy	HT=14 dy	7.4	UJ
91025 (HGLSB3303-0809)RE	Disulfoton	Holding time	HT=23 dy	HT=14 dy	7.7	UJ
91025 (HGLSB3303-0809)RE	EPN	Holding time	HT=23 dy	HT=14 dy	3.7	UJ
91025 (HGLSB3303-0809)RE	Ethoprop	Holding time	HT=23 dy	HT=14 dy	4.9	UJ
91025 (HGLSB3303-0809)RE	Ethyl parathion	Holding time	HT=23 dy	HT=14 dy	5.3	UJ
91025 (HGLSB3303-0809)RE	Famphur	Holding time	HT=23 dy	HT=14 dy	3.2	UJ
91025 (HGLSB3303-0809)RE	Fensulfothion	Holding time	HT=23 dy	HT=14 dy	2.9	UJ
91025 (HGLSB3303-0809)RE	Fenthion	Holding time	HT=23 dy	HT=14 dy	11	UJ
91025 (HGLSB3303-0809)RE	Malathion	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91025 (HGLSB3303-0809)RE	Merphos	Holding time	HT=23 dy	HT=14 dy	9.4	UJ
91025 (HGLSB3303-0809)RE	Methyl parathion	Holding time	HT=23 dy	HT=14 dy	6.4	UJ
91025 (HGLSB3303-0809)RE	Mevinphos	Holding time	HT=23 dy	HT=14 dy	4.6	UJ
91025 (HGLSB3303-0809)RE	Naled	Holding time	HT=23 dy	HT=14 dy	6	UJ
91025 (HGLSB3303-0809)RE	O,O,O-Triethyl phosphorothioate	Holding time	HT=23 dy	HT=14 dy	7.8	UJ
91025 (HGLSB3303-0809)RE	Phorate	Holding time	HT=23 dy	HT=14 dy	5.7	UJ

Sample Identification	Parameter	Type of Deviation	Anomaly	Criteria	Result	Flag
91025 (HGLSB3303-0809)RE	Ronnel	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91025 (HGLSB3303-0809)RE	Sulfotepp	Holding time	HT=23 dy	HT=14 dy	6.3	UJ
91025 (HGLSB3303-0809)RE	Tetrachlorvinphos (Stirophos)	Holding time	HT=23 dy	HT=14 dy	4.4	UJ
91025 (HGLSB3303-0809)RE	Thionazin	Holding time	HT=23 dy	HT=14 dy	5.6	UJ
91025 (HGLSB3303-0809)RE	Tokuthion	Holding time	HT=23 dy	HT=14 dy	6.2	UJ
91025 (HGLSB3303-0809)RE	Trichloronate	Holding time	HT=23 dy	HT=14 dy	6.2	UJ

Attachment 3 Revised/Reviewed Laboratory Forms

Trace Analysis Inc

Client Sample ID: 91025

GC Semivolatiles

Lot-Sample #...: D6F010162-003 **Work Order #...:** H6HWF1AA **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:20 **Date Received..:** 06/01/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 19:13
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	69	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91024

GC Semivolatiles

Lot-Sample #...: D6F010162-002 **Work Order #...:** H6HWD1AA **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:35 **Date Received..:** 06/01/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 18:32
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	55	(30 - 138)

VALIDATED Level 3

FD

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91023

GC Semivolatiles

Lot-Sample #...: D6F010162-001 **Work Order #...:** H6HV91AC **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:00 **Date Received..:** 06/01/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/05/06
Prep Batch #...: 6152231 **Analysis Time..:** 17:06
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	80	ug/kg	4.8
2,4,5-T	ND	20	ug/kg	3.8
2,4,5-TP (Silvex)	ND	20	ug/kg	1.8
Dinoseb	ND	12	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	56	(30 - 138)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91025

GC Semivolatiles

Lot-Sample #...: D6F010162-003 **Work Order #...:** H6HWF2AC **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:20 **Date Received..:** 06/01/06
Prep Date.....: 06/10/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6160553 **Analysis Time..:** 01:00
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	103	(37 - 124)
Triphenyl phosphate	93	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91025

GC Semivolatiles

Lot-Sample #...:	D6F010162-003	**Work Order #...:**	H6HWF1AC	**Matrix.....:**	SOLID
Date Sampled...:	05/18/06 16:20	**Date Received..:**	06/01/06		
Prep Date.....:	06/01/06	**Analysis Date..:**	06/06/06		
Prep Batch #...:	6152429	**Analysis Time..:**	20:33		
Dilution Factor:	1				
		Method.....:	SW846 8141A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Azinphos-methyl	ND	13	ug/kg	3.5	
Bolstar	ND	13	ug/kg	4.2	
Chlorpyrifos	ND	20	ug/kg	6.5	
Coumaphos	ND	13	ug/kg	2.8	
Demeton (total)	ND	39	ug/kg	7.5	
Diazinon	ND	22	ug/kg	7.3	
Dichlorvos	ND	23	ug/kg	7.4	
Dimethoate	ND	22	ug/kg	7.1	
Disulfoton	ND	48	ug/kg	7.7	
Ethoprop	ND	15	ug/kg	4.9	
Ethyl parathion	ND	18	ug/kg	5.3	
Famphur	ND	13	ug/kg	3.2	
Fensulfothion	ND	13	ug/kg	2.9	
Fenthion	ND	33	ug/kg	11	
Malathion	ND	15	ug/kg	4.6	
Merphos	ND	30	ug/kg	9.4	
Methyl parathion	ND	20	ug/kg	6.4	
Mevinphos	ND	15	ug/kg	4.6	
Naled	ND	33	ug/kg	6.0	
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8	
Phorate	ND	20	ug/kg	5.7	J
Ronnel	ND	18	ug/kg	5.6	
Sulfotepp	ND	20	ug/kg	6.3	
Thionazin	ND	18	ug/kg	5.6	
Tokuthion	ND	20	ug/kg	6.2	
Trichloronate	ND	20	ug/kg	6.2	
EPN	ND	13	ug/kg	3.7	
Demeton-O	ND	39	ug/kg	5.3	
Demeton-S	ND	15	ug/kg	4.9	
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4	

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	51	(37 - 124)
Triphenyl phosphate	94	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91024

GC Semivolatiles

Lot-Sample #...: D6F010162-002 **Work Order #...:** H6HWD2AC **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:35 **Date Received..:** 06/01/06
Prep Date.....: 06/10/06 **Analysis Date..:** 06/14/06
Prep Batch #...: 6160553 **Analysis Time..:** 00:28
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	91	(37 - 124)
Triphenyl phosphate	79	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91024

GC Semivolatiles

Lot-Sample #...: D6F010162-002 **Work Order #...:** H6HWD1AC **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:35 **Date Received..:** 06/01/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6152429 **Analysis Time..:** 20:01
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	64	(37 - 124)
Triphenyl phosphate	100	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91023

GC Semivolatiles

Lot-Sample #...: D6F010162-001 **Work Order #...:** H6HV92AD **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:00 **Date Received..:** 06/01/06
Prep Date.....: 06/10/06 **Analysis Date..:** 06/13/06
Prep Batch #...: 6160553 **Analysis Time..:** 23:56
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Azinphos-methyl	ND	13	ug/kg	3.5
Bolstar	ND	13	ug/kg	4.2
Chlorpyrifos	ND	20	ug/kg	6.5
Coumaphos	ND	13	ug/kg	2.8
Demeton (total)	ND	39	ug/kg	7.5
Diazinon	ND	22	ug/kg	7.3
Dichlorvos	ND	23	ug/kg	7.4
Dimethoate	ND	22	ug/kg	7.1
Disulfoton	ND	48	ug/kg	7.7
Ethoprop	ND	15	ug/kg	4.9
Ethyl parathion	ND	18	ug/kg	5.3
Famphur	ND	13	ug/kg	3.2
Fensulfothion	ND	13	ug/kg	2.9
Fenthion	ND	33	ug/kg	11
Malathion	ND	15	ug/kg	4.6
Merphos	ND	30	ug/kg	9.4
Methyl parathion	ND	20	ug/kg	6.4
Mevinphos	ND	15	ug/kg	4.6
Naled	ND	33	ug/kg	6.0
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8
Phorate	ND	20	ug/kg	5.7
Ronnel	ND	18	ug/kg	5.6
Sulfotepp	ND	20	ug/kg	6.3
Thionazin	ND	18	ug/kg	5.6
Tokuthion	ND	20	ug/kg	6.2
Trichloronate	ND	20	ug/kg	6.2
EPN	ND	13	ug/kg	3.7
Demeton-O	ND	39	ug/kg	5.3
Demeton-S	ND	15	ug/kg	4.9
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	86	(37 - 124)
Triphenyl phosphate	81	(50 - 150)

VALIDATED Level 3

Quality by Design
December 19, 2006

Trace Analysis Inc

Client Sample ID: 91023

GC Semivolatiles

Lot-Sample #...: D6F010162-001 **Work Order #...:** H6HV91AD **Matrix.....:** SOLID
Date Sampled...: 05/18/06 16:00 **Date Received..:** 06/01/06
Prep Date.....: 06/01/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6152429 **Analysis Time..:** 19:29
Dilution Factor: 1

Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL	
Azinphos-methyl	ND	13	ug/kg	3.5	
Bolstar	ND	13	ug/kg	4.2	
Chlorpyrifos	ND	20	ug/kg	6.5	
Coumaphos	ND	13	ug/kg	2.8	
Demeton (total)	ND	39	ug/kg	7.5	
Diazinon	ND	22	ug/kg	7.3	
Dichlorvos	ND	23	ug/kg	7.4	
Dimethoate	ND	22	ug/kg	7.1	
Disulfoton	ND	48	ug/kg	7.7	
Ethoprop	ND	15	ug/kg	4.9	
Ethyl parathion	ND	18	ug/kg	5.3	
Famphur	ND	13	ug/kg	3.2	
Fensulfothion	ND	13	ug/kg	2.9	
Fenthion	ND	33	ug/kg	11	
Malathion	ND	15	ug/kg	4.6	
Merphos	ND	30	ug/kg	9.4	
Methyl parathion	ND	20	ug/kg	6.4	
Mevinphos	ND	15	ug/kg	4.6	
Naled	ND	33	ug/kg	6.0	
O,O,O-Triethylphosphoro-thioate	ND	39	ug/kg	7.8	
Phorate	ND	20	ug/kg	5.7	J
Ronnel	ND	18	ug/kg	5.6	
Sulfotepp	ND	20	ug/kg	6.3	
Thionazin	ND	18	ug/kg	5.6	
Tokuthion	ND	20	ug/kg	6.2	
Trichloronate	ND	20	ug/kg	6.2	
EPN	ND	13	ug/kg	3.7	
Demeton-O	ND	39	ug/kg	5.3	
Demeton-S	ND	15	ug/kg	4.9	
Tetrachlorvinphos (Stirophos)	ND	15	ug/kg	4.4	

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Chlormefos	52	(37 - 124)
Triphenyl phosphate	105	(50 - 150)

VALIDATED Level 3

FO

Quality by Design
December 19, 2006

APPENDIX F

SD-27 NON-HAZARDOUS WASTE MANIFEST

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1	
NM6572124422	Drum-01		HydroGeoLogic

GENERATOR

3. Generator's Name and Mailing Address: Holloman Air Force Base, Attn: Michael Porto, 550 Tabosa Ave., Holloman AFB, NM 88330-8458

4. Generator's Phone (505) 572-3931

Environmental Investigation, Bldg 149, Holloman AFB, NM 88330

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
Rhino Environmental Services, Inc.	NA	(915) 886-4355 or (800) 762-0241
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
NA	NA	NA
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
Rhino's DP 1051, 1.7 mls N of NM/TX state line, Hwy 54. Otero County. NM	NA	(915) 886-4355 or (800) 762-0241, Fax: (915) 886-4358

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous Hydrocarbon Impacted Soil	3	Drum	1	yd^3
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above: Non-RCRA, Non-DOT, Non-Hazardous Jet Fuel Impacted Soil

E. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information

Cell M

HydroGeoLogic contat: Sara Gillette
Phone: (703) 326-7823
Fax: (703) 471-4180
Email: sgillette@hgl.com

PO # P0000632
Project # FFC002
Prime Contract #
F41624-03-D-8602

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Deborah J Hartell	Deborah J Hartell	09	12	06

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Jose L. Ojeda		9	12	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space: Line 5 address: PO Box 310, Canutillo, TX 79835

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Jose		9	12	06