CAFB97

#SWA CAFB / AOC-D

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 27th FIGHTER WING (ACC)
CANNON AIR FORCE BASE, NEW MEXICO

Colonel David E. Clary
Commander, 27th Fighter Wing
100 S DL Ingram Blvd Suite 100
Cannon AFB NM 88103-5214

19 SEP 1997

ENTERED

Mr. Benito J. Garcia, Chief
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo
PO Box 26110
Santa Fe NM 87502

Dear Mr. Garcia

Enclosed for your review and approval is the Final Site Investigation (SI) Report for Area of Concern D (AOC-D). Response to comments issued 22 Aug 97 by the Hazardous and Radioactive Waste Bureau are also included for your review.

Questions regarding these documents and the Cannon AFB restoration program may be directed towards Mr. John S. Pike or Mr. Sanford D. Hutsell, of my Civil Engineer Environmental Flight, at (505) 784-4348. I look forward to the continued cooperation between our organizations in addressing the environmental restoration concerns of Cannon AFB.

RECEIVED SEP 1997

Sincerely

David E. Clary

DAVID E. CLARY, Colonel, USAF
Commander

Attachments:
1. Final SI Report for AOC-D
2. Response to Comments, 22 Aug 97

cc:
EPA (B. Sturdivant)
NMED (C. Will) Hazardous and Radioactive Waste Bureau w/o Attachments
HQ ACC CES/ESVW (M. Patterson) w/o Attachment

RESPONSE TO COMMENTS DATEDAUGUST 22, 1997

FINAL SITE INSPECTION REPORT
AREA OF CONCERN - D
CANNON AFB, NM

Comments by: **New Mexico Environment Department**

No.	Sec./Pg.No.	Comment

1. 1.0 **Executive Summary**

The Workplan states, at pages 3-4 and 3-5, that if headspace screening indicates the presence of VOC, a boring will be completed to 20 feet below the debris/native soil interface and three samples will be taken from the boring. The Report does not state that headspace screening was done for all borings. At page 1-1, paragraph three, line two, revise to state that no visible PACM was encountered and headspace results were at or below background levels, and thus no soil samples were collected.

Response: Agreed. The text on page 1-1, paragraph 3, line 2 will be replaced with the following text:

"No visible PACM was encountered down to a depth of 10 feet in any of these borings and headspace screening results for all the borings were below background levels. Thus no soil samples were collected."

The sentence starting with "Drilling at 2 of these ....." in line 4 of the same paragraph will be modified as follows:

".....the presence of visible PACM and all headspace screening results for these borings were below background levels."

2. 2.2 **Project Objectives**

At page 2-2, revise to include as a completed task that headspace screening was done for all nine borings.

No.	Sec./Pg.No.	Comment

Response: Agreed. The fourth bullet on page 2-2 will be modified as follows:

"Drilling of nine soil borings. Headspace screening of soil at every 2-foot interval in all nine borings. Sampling and chemical analyses of three soil samples from one boring."

3. 2.4 **Previous Site Investigations**

HRMB was given verbal assurance that there was no historical evidence of disposal of other than construction debris at AOC-D. At page 2-14, the Report states that information provided by the Base and USACE indicates that the site may have received unknown contaminants or contaminant sources. Include a more specific statement in the Report about what information is known, if any, about the possibility of hazardous constituents having been disposed of at the site.

Response: Agreed. No other contaminants or contaminant sources are known to have been disposed of in the pit. The second sentence in Section 2.4, page 2-14, will be rephrased as follows:

"According to the information provided by the Base and USACE, a pit existed at the site in mid-1950s which recieved debris generated from demolition of a number of buildings at the Base."

4. 3.2 **Subsurface Drilling**

At page 3-1, line 12, revise to state that headspace screening results were at or below background for all six borings. At line 16, revise to state that headspace screening results were below background for borings SB-07 and SB-09.

Response: Agreed. The sentence starting with "No debris was encountered ...." in line 12, page 3-1 will be replaced by the following text:

No.	Sec./Pg.No.	Comment

"No debris was encountered in the six (6) planned borings and all headspace screening results were below background levels. Drilling in these borings was thus terminated at 10 feet bgs."

The sentence ending with ".....borings SB-07 and SB-09." in line 16, page 3-1 will be modified as follows:

".....borings SB-07 and SB-09 and all headspace screening results were below background levels."

5. 3.3.2 **Soil Sampling**

At page 3-2, paragraph one, line three, revise to state that headspace screening results for split spoons from all nine borings were at or below background levels.

Response: Agreed. The sentence starting with "All headspace screening results for ..." on page 3-2, Section 3.3.2, paragraph 1, line 3, will be modified as follows:

"Headspace screening results for soil samples collected from split spoons at 2-foot intervals at all nine borings were below background levels."

6. 4.0 **Analytical Results**

No results are given in the Report for the headspace screening for each boring, other than the information given in the drilling logs at Appendix II. The drilling logs describe Field Screening Results, in column d, as "HS=0" for SB-01 through SB-06, SB-08, and SB-09, and "HS=2" for two depths in SB-07. There is no explanation of what those numbers mean in terms of units or analytes nor what their relationship is to background levels. Include in the Report the headspace screening detection limits, quality control and assurance, analytes, results and how background levels were determined for the headspace screening for all nine borings.

Response: Agreed. A new section (Section 3.3.3 – HEADSPACE

No.	Sec./Pg.No.	Comment

SCREENING) will be added to the Report. The existing Section 3.3.3 – SAMPLE LABELING, will be renumbered as Section 3.3.4.

"3.3.3 HEADSPACE SCREENING

Headspace screening was completed on soil collected at 2-foot intervals in all nine borings. The soil was collected immediately after opening the split spoon and placed in a clean wide-mouth glass jar. The mouth of the jar was covered with an aluminum foil and the lid of the jar (with a hole in the center) was tightly screwed over the foil. The jar was vigorously agitated for at least 15 seconds and then set aside for 10-15 minutes for the sample to adequately volatilize. A photoionization detector (PID) was used to measure volatilized organics in the jar. After the 10-15 minute volatilization time, the probe of the PID unit was quickly inserted through the aluminum foil without removing the lid and the reading was noted.

The PID instrument used for the project was a HNU DL-101 unit with a digital display. The HNU DL-101 unit measures organic vapors and gases in parts per million (ppm) with 0.1 ppm as the lowest measurable concentration. The HNU unit was calibrated each day prior to the beginning of drilling using isobutylene gas. The unit was recalibrated during the day if it exhibited erratic behavior. After calibration, three readings were taken at three different points along the perimeter of the AOC-D site. The average value of the three readings was considered to be the background value. Background readings were measured for each day of work.

Results of background measurements and headspace screening are presented in TABLE 3-1."

A review of the original drill logs showed that the "HS=2" entry for two depths in SB-07 is a typographical error. Entries should have been HS=0. Please find revised drill logs attached with this response.

No.	Sec./Pg.No.	Comment
7.	4.1	**Chemical Results**

At page 4-1, paragraph two, line four, include a statement that metals listed in Table 4-3 of the Workplan but not included in Table 4-2 of the Report were tested for and not detected. The metals in question are beryllium, cadmium, mercury, selenium, silver, and thallium.

Response: Agreed. The following sentence will be added at the end of paragraph 2, Section 4.1, page 4-1:

"In addition to metals listed in TABLE 4-2, the samples were also analyzed for beryllium, cadmium, mercury, selenium, silver, and thallium. Results for these metals were nondetects and are thus not reported in TABLE 4-2."

DATE	CODE	APPENDIX	RCRIS EVENT
10/1/1993		III	AOC A-D; Phase 1 QAPP
2/1/1996		III	AOC "D"; RFI WP draft
2/1/1996		III	AOC "D"; WP
4/17/1996		III	AOC "D"; EPA Approval with comments to draft RFI WP
5/1/1996		III	AOC "D"; Site Investigation Geophysical Survey RPT w/proposed soil boring locations
8/1/1996		III	AOC "D"; RFI WP □ Site Inspection
8/1/1996		III	AOC "D"; RFI WP revised
11/1/1996		III	AOC "D"; field work completed
11/1/1996		III	AOC "D"; HRMB verbal approval of boring locations
12/19/1996		III	AOC "D"; HRMB conditional approval w/mods to Draft RFI WP
1/31/1997		III	AOC "D"; response to NOD (of 12/19/96?)
2/21/1997		III	AOC "D"; Approval of Final WP (WP)
2/21/1997		III	AOC "D"; HRMB approval of WP & Survey RPT
6/1/1997		III	AOC "D"; Site Inspection RPT
6/25/1997		III	AOC "D"; Draft Site Inspection (SI) RPT
7/25/1997	CA190	III	AOC "D"; RFI RPT Rec'd
8/2/1997	CA155	III	AOC "D"; RFI RSI
8/29/1997		III	AOC "D"; EPA SI Supplemental Review comments
11/6/1997	CA200??????	III	AOC "D"; RFI APPROVAL

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FINAL

SITE INSPECTION (SI) REPORT

AREA OF CONCERN - D
CANNON AIR FORCE BASE
NEW MEXICO

CONTRACT NO. DACW45-94-D-0049
DELIVERY ORDER NO. 0004

SEPTEMBER 8, 1997

PREPARED FOR:

U.S. ARMY CORPS OF ENGINEERS
OMAHA DISTRICT
OMAHA, NEBRASKA

ATTN: MR. STEVE PETERSON

PREPARED BY:

IMS, P.C.
ENVIRONMENTAL & ENGINEERING
115 METRO PARK
ROCHESTER, NY 14623
TEL: (716) 427-0690

IMS P.C.
ENVIRONMENTAL & ENGINEERING

115 Metro Park
Rochester, New York 14623

Tel: 716-427-0690 Fax: 716-427-0012

September 8, 1997

Mr. Steve Peterson
U.S. Army Corps of Engineers
Omaha District
215 N. 17th Street
Omaha, NE 68102

RE: Site Inspection
Area of Concern (AOC) - D
Cannon Air Force Base, NM
Contract No. DACW45-93-D-0049

Dear Mr. Peterson:

IMS is pleased to submit a response to comments from the New Mexico Environment Department and the Final Site Inspection Report for the Area of Concern - D, Cannon Air Force Base, New Mexico. Six copies of the Final Report are enclosed.

Please call us at 716-427-0690 if we can be of further assistance.

Sincerely,

Praveen Srivastava

Praveen Srivastava, Ph.D., P.G.
Project Manager

Enclosures

c: Sanford Hutsell, 27CES/CEV
Cannon AFB, NM (5 copies)

Margaret Patterson, ACC CES/ESVW
Langley AFB, VA (2 copies)

Missouri River Lab
Omaha, NE (1 copy)

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ACC	Air Combat Command
ACM	Asbestos Containing Material
AFB	Air Force Base
AOC	Area of Concern
APR	Air Purifying Respirator
BEC	Base Environmental Coordinator
°C	Degree Centigrade
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
CLP	Contract Laboratory Program
COC	Chain-of-Custody
DQCR	Data Quality Control Report
°F	Degree Fahrenheit
FSP	Field Sampling Plan
GC/MS	Gas Chromatograph/Mass Spectrometer
gpm	Gallons per minute
HEPA	High Efficiency Particulate Air
HSA	Hollow Stem Auger
HQ	Headquarters
HTW	Hazardous and Toxic Waste

ID	Inside diameter
IDL	Instrument Detection Limit
IDW	Investigation Derived Waste
IMS	IMS, P.C. Environmental & Engineering
LCS	Laboratory Control Sample
MDL	Method Detection Limit
MRD	Missouri River Division
MS	Matrix Spike
MSD	Matrix Spike Duplicate
MSL	Mean Sea Level
OB&G	O'Brien & Gere
OVA	Organic Vapor Analyzer
PARCC	Precision, Accuracy, Representativeness, Completeness, Comparability
PACM	Presumed Asbestos Containing Material
PCM	Phase Contrast Microscopy
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PPE	Personal Protective Equipment
QA	Quality Assurance

QAPP	Quality Assurance Project Plan
QC	Quality Control
QCSR	Quality Control Summary Report
RPD	Relative Percent Difference
SB	Soil Boring
SDG	Sample Delivery Group
SI	Site Inspection
SOP	Standard Operating Procedure
SSHP	Site Safety and Health Plan
SVOC	Semivolatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TFW	Tactical Fighter Wing
TM	Technical Manager
TRPH	Total Recoverable Petroleum Hydrocarbons
TWA	Time Weighted Average
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
W-C	Woodward-Clyde
VOC	Volatile Organic Compounds

1.0
EXECUTIVE SUMMARY

IMS Environmental & Engineering (IMS) completed a Site Inspection (SI) of Area of Concern-D (AOC-D) at the Cannon Air Force Base, New Mexico. Site AOC-D was originally described as a pit, approximately 10 feet deep and underlying the tee box and fairway of Hole #7 of the Base golf course. The pit was reportedly used for the disposal of demolition debris, mixed with presumed asbestos containing material (PACM), derived from a large number of buildings at the Base that were demolished during the mid-1950s. The primary objective of the SI was to evaluate contamination of soil by asbestos, and to explore the possibility of any contamination by organic and inorganic chemicals.

A geophysical survey was conducted at the AOC-D to determine the presence or absence of any metal containers (contaminant sources) that may have been disposed of in the pit along with demolition debris. The geophysical survey indicated that no metal containers were buried at AOC-D.

Subsurface drilling was completed at six locations as proposed in the Final Work Plan (IMS, 1996). No visible PACM was encountered down to a depth of 10 feet in any of these borings and headspace screening results for all the borings were below background levels. Thus no soil samples were collected. Three new locations were chosen for additional drilling in consultation with the Base and the U.S. Army Corps of Engineers. Drilling at two of these locations down to a depth of 10 feet did not indicate the presence of visible PACM and all headspace screening results for these borings were below background levels. Non-friable PACM (most likely building wall siding board) chips were observed at one of the locations (SB-08) within 1 foot of the surface. A sample of this material was obtained. Drilling was continued to a depth of 25 feet but no visible asbestos or other contamination was observed below the 1 foot depth. Results of headspace screening, completed at 2 foot intervals, were at or below background levels. Soil samples were collected at depths of 7, 15 and 25 feet from SB-08 and were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs),

TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals and Total Recoverable Petroleum Hydrocarbons (TRPH).

All organic analytes were nondetects. Several metals were detected at concentrations above reporting limits. A comparison of metal concentrations with USEPA Region 6 Media Specific Screening Levels (USEPA, 1996) indicated that metal concentrations were either within the range of background concentrations or were below the screening levels.

In addition to the sample from SB-08, one sample of PACM was collected from the ground surface near SB-06. Both these samples were analyzed for their asbestos content. The sample collected from borehole SB-08 at 1 foot depth contained 20% asbestos and the surface sample contained 5% asbestos.

In summary, the SI completed at AOC-D did not indicate the presence of a debris pit at the site and indicated no contamination of the site by organics or inorganic (metal) contaminants. However, the siding board chips, collected from the surface and from shallow depth (1 foot) at one of the borings, were found to contain asbestos. The asbestos is of non-friable type and the occurrence of asbestos at the site appears to be of sporadic nature, with some chips lying on the ground surface and some buried at shallow depths. Although asbestos contained in the siding board chips poses no immediate danger to human health, removal of chips present on the ground surface is recommended to eliminate potential for future exposure.

2.0
GENERAL

2.1 INTRODUCTION

IMS Environmental & Engineering (IMS) completed a Site Inspection (SI) at Area of Concern - D (AOC - D) at Cannon Air Force Base (AFB), New Mexico. The SI included a geophysical survey, drilling of 9 soil borings, and collection and analysis of subsurface soil samples. This report presents results of the SI, including a description of the site location, background and setting; a discussion of geophysical and analytical results; and an evaluation of physical and chemical data acquired during the SI.

2.2 PROJECT OBJECTIVES

Objectives of the SI completed at AOC-D at Cannon AFB were:

- Confirm that the PACM actually contained asbestos. The objective was also to evaluate the nature and extent of soil contamination by asbestos, if found in the PACM.

- Determination of the presence or absence of any buried contaminant sources (e.g. drums)

- Determination of nature and extent of soil contamination by any organic or inorganic chemicals other than asbestos.

The following tasks were completed to provide data to achieve these objectives:

- Records review and evaluation

- Visual site inspection

- Preparation of a Field Sampling Plan (FSP), a Quality Assurance Project Plan (QAPP) and a Site Safety and Health Plan (SSHP).

- Completion of a geophysical survey to determine the presence or absence of metal containers (e.g. drums) that may have contained chemicals.

- Drilling of nine soil borings. Headspace screening of soil at every 2-foot interval in all nine borings. Sampling and analyses of three soil samples from one boring.

- Sampling of any visible PACM from boreholes during drilling operations. Analyses for the type and amount of asbestos in the samples.

- Sampling of PACM chips lying on the surface and analysis for the type and amount of asbestos.

2.3 SITE LOCATION, HISTORY AND SETTING

2.3.1 SITE LOCATION

The SI was completed at AOC - D which reportedly consists of an old pit currently located within the base golf course. According to Cannon AFB and USACE personnel, the pit is located under the fairway and tee box of the 7th hole (FIGURE 2-1). The pit was reportedly used for disposal of debris, potentially containing asbestos, derived from demolition of a large number of buildings at the Base during the mid-1950s. The site was discovered during a construction project to expand the base golf course from 9 to 18 holes. During that project, a bulldozer operator was pushing dirt into mounds that would be formed into tee-boxes and bunkers. The bulldozer removed about one foot of topsoil and exposed an area of non-friable asbestos debris. The asbestos debris was reportedly

pushed to the side, but was later placed between soil layers within the tee box. Chips of PACM, which appeared to be approximately 2" x 2" pieces of building wall siding board, were visible on the ground to the south of the tee box and the fairway at the time of the SI. The full lateral extent of the asbestos pit and soil contamination by asbestos were unknown prior to the SI. The maximum estimated thickness of the asbestos debris was 10 feet. The objective of the SI was to evaluate the vertical and lateral (if possible) extent of the asbestos debris; to determine the presence or absence of any potential contaminant sources (e.g. drums) with the help of geophysical methods; and to assess the nature and extent of any contamination by VOCs, SVOCs, metals, and TRPH.

2.3.2 CANNON AFB OPERATIONAL HISTORY

Cannon AFB is located in Curry County, New Mexico, approximately 7 miles west of the city of Clovis. The Base is situated on approximately 4,320 acres of land. The vicinity and site map of Cannon AFB is shown on FIGURE 2-1. Off-Base facilities include the Melrose Air Force Range (MAFR).

Cannon AFB dates back to 1929, when Portair Field was established on the site. Portair Field was a civilian passenger terminal for early commercial transcontinental flights. In 1942, the Army Air Corps took control of the civilian airfield and it became known as the Clovis Army Air Base. In early 1945, the Base was renamed Clovis Army Air Field. Flying, bombing, and gunnery classes continued through the end of World War II. By mid-1946, however, the airfield was placed on a reduced operational status and flying activities decreased. The installation was deactivated in May 1947. The types of aircraft stationed at Cannon AFB from 1942 to 1947 included B-17, B-24, and B-29 heavy bombers.

The Base was reassigned to the Tactical Air Command in July 1951. The first unit, the 140th Fighter-Bomber Wing, arrived in October of that year. The airfield was formally activated in November 1951 as Clovis Air Force Base. Between 1952 and 1957, the 50th and 388th Fighter-Bomber Wings were activated and, upon their transfer, were replaced by the 312th and 474th

Groups. Predominant aircraft stationed at Cannon AFB from 1951 to 1957 included the P-51 "Mustang" fighter and the F-86 "Sabre" fighter jet.

In June 1957, the Base became a permanent installation and was renamed Cannon Air Force Base in honor of the late General John K. Cannon, a former commander of the Tactical Air Command. In October 1957, the 312th and 474th Fighter-Bomber Groups were redesignated tactical fighter wings and 832nd Air Division was activated to oversee their activities.

In 1959, the 312th Tactical Fighter Wing (TFW) was deactivated and replaced at Cannon AFB by the 27th TFW. In December 1965, the Base's mission changed to that of a replacement training unit, and the 27th TFW became the largest such unit in the Tactical Air Command. The predominant aircraft stationed at Cannon AFB from 1957 to 1965 was the F-100 "Super Sabre" fighter jet.

The 832nd Air Division was deactivated in July 1975, leaving the 27th TFW the principal Air Force unit at Cannon AFB. In early 1981, the 27th TFW was designated a Rapid Deployment Joint Task Force member.

The primary mission of Cannon AFB has remained relatively unchanged since 1965, i.e., to develop and maintain an F-111 tactical fighter wing capable of day, night, and all-weather combat operations and to provide replacement training of combat aircrews for tactical organizations worldwide. Aircraft stationed at Cannon AFB since 1965 include the F-100 "Super Sabre" fighter jet (1857-1969), the F-111A (1969), the F-111E (1969-1971) and the F-111D (1971-present). There are approximately 70 F-111D aircraft assigned to Cannon AFB. The total work force on Cannon AFB numbers approximately 4,000, which includes 3,500 military and 450 civil service.

In 1992, Cannon AFB became part of the Air Combat Command (ACC) as a result of the overall realignment of Air Force Commands and the ongoing downsizing of the U.S. military. At present, the 27th Fighter Wing has three squadrons of the F-16 aircraft and one squadron of the F-111E aircraft at the Cannon AFB. The F-111E aircrafts are being phased out over the next few years,

which will leave only F-16 aircrafts at the Base.

2.3.3 PHYSIOGRAPHY

Cannon AFB is situated in the Southern High Plains Physiographic Province in the Llano Estacado subprovince. The Llano Estacado is a nearly flat plain sloping gently (10 to 15 feet per mile) to the east and southeast. Elevations in the eastern New Mexico portion of the Llano Estacado exceed 4,000 feet above mean sea level (MSL). In the vicinity of Cannon AFB, elevations range from 4,250 feet to 4,350 feet above MSL.

The most prominent geomorphic features in the vicinity of Cannon AFB are blowouts and broad, widely spaced valleys. Less common landforms are relict sand dunes located along the northeast side of the Portales Valley south of the Base. Relict dunes are not found on or near Cannon AFB.

Blowouts are broad shallow depressions which form as a result of soil erosion by wind. Blowouts commonly collect surface runoff from small to moderate sized drainage areas. During periods of rainfall, runoff collects in blowouts to form ephemeral playa lakes. Playas have no external surface drainage. Water is lost by infiltration to the soil and evaporation; without recharge, playa lakes persist for only a few days or weeks. Three playas are located within the Base, and several more are found to the north and east of the Base.

Stream valleys tend to be fairly broad and widely spaced. Streams are ephemeral and drainages are poorly developed. No streams exist on or near Cannon AFB. Running Water Draw and Frio Draw, located about 10 and 20 miles, respectively, north of Cannon AFB, are the nearest streams. These are second-order streams. Both streams are very straight, flow southeast, and have rectilinear drainage patterns with short laterals.

2.3.4 DEMOGRAPHICS AND LAND USE NEAR CANNON AFB

Cannon AFB is located just south of U.S. Highway 60-84 in a farming and ranching area. The majority of the land surrounding Cannon AFB is productive, irrigated farmland or grassland. The major crops are wheat, sorghum, sugar beets, corn, cotton, alfalfa, barley, and peanuts. The land is also used for cattle grazing, both for beef and dairy. Clovis is considered the "Cattle Capital of the Southwest." There were 32,767 people living in Clovis in 1990, while the Cannon AFB population was estimated to be 4,650 in 1990 (W-C 1991).

2.3.5 CLIMATE

The climate of east-central New Mexico is classified as tropical semiarid, with summer temperature and precipitation maxima. Average monthly temperatures range from a January low of 12°C (39°F) to a July high of 26°C (78°F). Extreme daily temperatures range from minus 24°C (minus 11°F) to 41°C (106°F) (Lee Wan and Associates 1990). Average monthly precipitation ranges from 1 cm (0.4 inches) in winter to 6.9 cm (2.7 inches) in July (AWS 1986). The maximum recorded 24-hour rainfall is 12.2 cm (4.8 inches), which occurred in August. Rainfall occurs on eight or more days per month during the summer precipitation maximum. Mean annual precipitation is approximately 41 cm (16 inches). The mean annual evapotranspiration rate is 181.4 cm/yr (71.4 inches/yr) (Lee Wan Associates 1990). Prevailing winds are from the west at an average of 5 km/hr (3.1 mph) during fall, winter, and spring. During the summer, winds are from the south at an average of 3.7 km/hr (2.3 mph).

Dust is frequently entrained into the atmosphere in this region because of gusty winds and the semiarid climate. The Texas Panhandle and eastern New Mexico area is considered the worst area in the United States for windblown dust. Occasionally, this windblown dust is of sufficient quantity to restrict visibility. Most of the seasonal dust storms occur in March and April, when the wind speeds are typically high (average 5 km/hr) (W-C 1991).

2.3.6 GEOLOGY

The near-surface stratigraphic units of interest at Cannon AFB are the Late Miocene-Late Pliocene-age Ogallala Formation and the Early Triassic Dockum Group as shown in FIGURE 2-2.

The Dockum Group consists of three formations. The stratigraphically lowest unit is the Santa Rosa Sandstone. Overlying the Santa Rosa Sandstone are the Chinle and Redonda Formations. The Chinle and Redonda Formations are composed mainly of red shales with lesser interbedded sands, and are known locally as "redbeds." The top of the Dockum Group is marked by an erosional nonconformity having relief of up to several hundred feet (Lee Wan and Associates 1990).

Overlying the Dockum Group redbeds is the Ogallala Formation. The Ogallala Formation extends from eastern New Mexico and Colorado into Texas, Oklahoma, Kansas, Nebraska and South Dakota. Drillers' logs from Cannon AFB indicate that the Ogallala Formation varies from 360 feet to 415 feet in thickness (FIGURE 2-2). The incised upper surface of Triassic redbeds strongly influences Ogallala thickness. Stream valleys in the post-Triassic unconformity are deep and tend dominantly east-west. Ogallala thickness may thus vary significantly over short north-south distances.

The Ogallala is erosionally truncated to the south along the abandoned Portales Valley, to the west along the Pecos River Valley, and to the north in a series of ephemeral stream valleys. The Ogallala Formation extends more than 125 miles to the east before terminating as an escarpment in Briscoe County, Texas. Springs and seeps are common along the erosional margins of the Ogallala.

The Ogallala dips gently and monoclinally to the southeast in the vicinity of Cannon AFB. As reported in Lee Wan and Associates (1990), data suggest that some Quaternary warping may have occurred; however, most of the structures are well to the northwest and southwest of Cannon AFB. No faults or buried structural lineaments are known in the vicinity of Cannon AFB.

The Ogallala Formation is composed of unconsolidated poorly sorted gravel, sand, silts, and clays.

The base of Ogallala is generally marked by a gravel, cobble, and boulder deposit. This basal member contains sediments derived from igneous and sedimentary rocks transported from the mountains to the west. The Ogallala Formation was laid down as stream and overbank deposits formed within coalescing alluvial fans. These fans form a broad pediment along the eastern flank of the Rocky Mountains. As is typical of alluvial deposits, Ogallala internal stratigraphy varies vertically and horizontally over short distances.

Caliche is a major feature of the Ogallala Formation, occurring as nearly continuous to discontinuous layers throughout. Caliche is hard, white to pale tan on fresh surfaces, weathering to gray, and has a chalky appearance. Caliche forms as calcium carbonate, leached from overlying sediments, precipitates in pore spaces of the host sediments. Precipitation is caused by the evaporation of downward percolating water. The caliche may thus mark the position of ancient vadose zones. As reported in Lee Wan and Associates (1990), radiocarbon dates for the upper "climax" caliche range from approximately 27,000 years to approximately 42,000 years.

Caliche is relatively soluble in acidic water ($pH < 7$) or in waters containing dissolved CO_2. The top surface of the upper "climax" caliche in fresh outcrop shows solution etching.

The Ogallala has numerous continuous to discontinuous caliche layers throughout its thickness. The uppermost caliche, termed the "climax" caliche, is pisolitic (consisting of spherical concentrically laminated aggregates 1 to 10 mm in diameter (Lee Wan and Associates 1990). The pisolites are thought to have formed as the caliche was repeatedly chemically-weathered and brecciated during Pleistocene pluvials (wet climate episodes) and later recemented during drier intervals. This upper caliche crops out around playas and the bounding escarpments of the Ogallala, and is locally termed "caprock". The "climax" caliche is typically 3 to 5 feet thick. Caliches which occur lower in the Ogallala are platy and harder. Caliche may be thin or absent below playas (W-C 1991).

2.3.7 HYDROGEOLOGY

The lower portion of the Ogallala Formation is the primary regional aquifer for both potable and irrigation water. No deeper aquifers are utilized in the vicinity of Cannon AFB. The Ogallala aquifer is part of the High Plains Aquifer which extends continuously from Wyoming and South Dakota into New Mexico and Texas. In east central New Mexico, the Ogallala aquifer rests on Dockum Group redbeds, which serve as the basal confining layer. The Ogallala is a water table, or unconfined, aquifer (Lee Wan and Associates 1990). The Ogallala aquifer has a southeasterly regional gradient of about 13 feet/mile. Well yields vary from less than one gallon per minute (gpm) in thin silts and sands, and up to 1,600 gpm in thick sands and gravels (Lee Wan and Associates 1990). Water quality is generally good, with the exception that hardness and fluorides are somewhat high (Lee Wan and Associates 1990).

At Cannon AFB, the depth to groundwater is greater than 200 feet, and the Ogallala aquifer has an average saturated thickness of 120 feet based on mid-1960s data. Saturated thickness ranges from 93 to 143 feet, and is influenced by the configuration of the erosional nonconformity surface marking the top of the Dockum Group. The local groundwater gradient is southeasterly at 7.5 feet/mile (Lee Wan and Associates 1990).

Recharge to the Ogallala is primarily through precipitation. Lee Wan and Associates (1990) reported that the recharge rate may be as much as 1.0 inch/year. Due to the high evapotranspiration rate and low precipitation, recharge probably occurs only during heavy rainfall events in which the infiltration capacity of the soil is exceeded and runoff occurs, or during cool months when precipitation exceeds evapotranspiration. Excess runoff flows to playas, and the presence of water in playas may allow deep percolation to the aquifer. The occurrence of this process is evidenced by the presence of clay deposits in, and thin or nonexistent caliche layers directly below, playas. Caliche is soluble in acidic rain waters, and is leached over time to form percolation pathways.

Discharge from the Ogallala occurs through well pumping and springs along the eroded margins of

the formation. Spring discharge does not occur on or near Cannon AFB. Domestic and irrigation water wells are common at and around the Base. The rate of discharge exceeds the rate of recharge. Water levels in the Ogallala have declined steadily from the 1930s to the present. A decline of 50 to 100 feet has been reported for the period from the 1930s to 1980 in the area around Clovis, New Mexico.

The dominant uses of ground water in the Cannon AFB area are for drinking and irrigation purposes. Numerous wells are found in the Cannon AFB area, most of which provide only irrigation water.

2.3.8 SOILS

Soils in the vicinity of Cannon AFB are classified as silty sand (SM) to clayey sand (SC) under the Unified Soil Classification System, and as aridisols (calciorthids) under the United States Department of Agriculture - Soil Conservation Service (USDA-SCS) Comprehensive Soil Classification System. The following summary is based on the Curry County Soil Survey as reported in Lee Wan and Associates (1990).

The most common soil type on the base is the Amarillo fine sandy loam, 0 to 2 percent slope phase. This soil consists of a thin sandy A horizon, well defined clayey B_{1-3} horizons, with a calcic B_3 horizon at depths below 40 inches. The calcic B_3 horizon lies on a calcic C horizon, or on caliche. The color of the surface soil is brown (7.5 YR 5/5, dry) and subsurface soils are reddish-brown (5 YR 4/4, dry) to yellowish-red (15 YR 5/6, dry). The calcic C horizon underlying the Amarillo Fine Sandy loam is white in color. The Amarillo fine sandy loam soil type is present on all relatively flat surfaces at the base but is also found on slopes associated with playas. A small area of Amarillo loamy fine sandy 0 to 2 percent slope phase is mapped in the southeast corner of the base.

Clovis fine sandy loams, 0-2 percent slope phase and 2-5 percent slope phase, are similar to Amarillo fine sandy loams. Clovis soils are reddish-brown on the surface and in the subsurface, with a white Calcic C horizon. In the Clovis soils, the depth to the calcic C horizon ranges from 28 to 56 inches.

The depth to caliche exceeds 56 inches. Clovis and Amarillo fine sandy loams occur in close association.

In a few limited areas, particularly along the steeper slopes around playas, Mausker fine sandy loam, 0 to 2 percent slope phase, and 2 to 5 percent phase are found. Mausker fine sandy loams have no B horizons and are very calcareous. Mausker fine sandy loam soils are brown (10 YR 5/3, dry) to light brown (7.15 YR 6/4, dry) at the surface with a pink to reddish-yellow (7.5 YR 7/5, dry) calcic C horizon. Associated with the Mausker fine sandy loam soils around the base Playa Lake are Potter fine sandy loam soils, 0 to 5 percent slope phase. This soil typically has a thin A horizon, greyish brown (10 YR 5/2, dry) in color, with no B horizon; similar to Mausker soils. Potter soils are shallow and strongly calcareous, and overlie hard consolidated caliche. The calcic C horizon is within two feet of the surface.

The A and B horizons of Amarillo and Clovis fine sandy loams are rapidly to moderately permeable. Mausker fine sandy loam A and Ac horizons are rapidly permeable. Permeabilities in calcic B and C horizons are moderate.

2.3.9 BIOLOGICAL RESOURCES

Land adjacent to Cannon AFB is primarily used for agriculture and little natural vegetation remains in the area. The wildlife species that are common to agricultural areas throughout the region include bobwhite quail and pheasant. The few playa lakes in the area are used by upland game for cover, by waterfowl for resting and feeding, and by wildlife in general for drinking. Nearby riverbeds also provide water sources during rainy seasons. During periods of low rainfall, the riverbeds are dry.

2.3.9.1 PLANT RESOURCES

The climate of the Base area is considered to be semiarid. The thin layer of topsoil in the vicinity of Cannon AFB is sandy loam, which is highly susceptible to wind erosion. The undisturbed natural

vegetation is mostly shortgrass prairie, including blue grama grassland and mixed grama grassland vegetation types, which have moderately fast recovery rates.

Much of the study area has been previously cleared for agricultural crops. The predominant land use of the region is rangeland, primarily for cattle grazing. In general, moderately grazed rangeland areas of the types occurring in the project area are highly productive in terms of both forage quality and quantity. The rangeland in the vicinity may support up to 15 to 20 head of cattle per section, depending on the rainfall. Large trees do not uniformly exist in the vicinity of the range except where planted around buildings and other structures on the Base. Woodlands composed of large shrubs and small trees are confined to riparian areas and playa lakes in the vicinity.

The following plants are candidate species for the Federal List of Endangered and Threatened Wildlife and Plants, and are found within a 50-mile radius of Cannon AFB: chatterbox orchid (*Epipactus gigantea*), spiny aster (*Aster harridus*), Whittmans milkvetch (*Asragalus witmanii*), dune unicorn plant (*Proboscidea sabulosa*), and the tall plains spruce (*Eupjorbia strictior*). The dune unicorn plant is also on the state endangered plant species list. No federally protected endangered plants are known to grow on the Base (Lee Wan and Associates, 1990).

2.3.9.2 WILDLIFE RESOURCES

The eastern New Mexico area contains many nongame wildlife species that are typical of the High Plains. Most of these species are distributed widely throughout the western United States. Species diversity is low in most habitats because of the low vegetation diversity. Most amphibian species are associated with riparian habitats and playa lakes. Reptiles are found in all terrestrial habitat types but are most abundant in scrub/grasslands. Nocturnal rodents are the most abundant members of the small mammal community.

Grasslands on the High Plains support a variety of seed-eating sparrows and other ground-dwelling birds, both as residents and migrants. Raptors (hawks and owls) are relatively abundant in all

habitats in the region. Insectivorous and tree-nesting species are most abundant in riparian areas. Shorebirds, waterbirds and migratory waterfowl in general use the rivers, playa lakes, and reservoirs of the region.

Two National Wildlife Refuges (NWRs) are located on the periphery of the Base area. The Grulla and Muleshoe NWRs are within 30 miles of Cannon AFB. These areas provide high-quality habitat for migratory and breeding waterfowl.

Big-game species in the area include mule deer, white-tailed deer, pronghorn, and barbary sheep. Pronghorn is the most abundant game animal in the area. Several species of upland game such as quail, ring-necked pheasant, and turkey are common in the area. Reservoirs (Ute Lake, Conchas Lake, and Clayton Lake) and playa lakes are important waterfowl habitats in the region. Numerous species of native and introduced fish inhabit the rivers, perennial streams, and reservoirs and support recreational fishing of warm-water species such as walleye, crappie, channel catfish, largemouth bass, and bluegill.

As determined by the regional office of the U.S. Fish and Wildlife Service, two federally listed endangered animal species, the bald eagle and peregrine falcon, are known to inhabit the area within a 50-mile radius of Cannon AFB. The New Mexico Department of Game and Fish also indicated that the state endangered Mississippi kite, Baird's sparrow, and the black-footed ferret may also occur in the vicinity of the Base. The federal- and state-protected species are listed in TABLE 2-1.

Within Curry County, the state-protected bird that is most likely to occur is the Mississippi kite. In New Mexico, since the early 1960s, this kite summers regularly and breeds in the Clovis region. The birds frequent the golf course at Cannon AFB. Two other state-protected birds within Curry County that may occur, but not regularly in recent time, are the McCown's longspur and Baird's sparrow. No information is available on the McCown's longspur in New Mexico; however, Baird's sparrow occurs mainly in autumn during migration in the eastern plains and southern lowlands. Migrants appear as early as the first week of August and move further south by November. The species seems

to have declined in abundance throughout its range in the Southwest due to the loss of shrubby shortgrass habitats. State-protected birds known to occur infrequently are the bald eagle and the peregrine falcon. The bald eagle migrates and winters from the northern border of New Mexico to the Gila, lower Rio Grande, middle Pecos, and Canadian valleys. It is seen occasionally in summer and as a breeding bird, with nests reported in the extreme northern and western parts of the state. Winter and migrant populations appear to have increased with reservoir construction. The peregrine falcon is widely distributed but population numbers are low. The American subspecies breeds statewide in New Mexico, but mainly west of the eastern plains.

2.4 PREVIOUS SITE INVESTIGATIONS

No investigations concerning soil contamination have been conducted at the AOC-D site previously. According to the information provided by the Base and USACE, a pit existed at the site in mid-1950s which received debris generated from demolition of a number of buildings at the Base.

TABLE 2-1
FEDERAL- AND STATE-PROTECTED ANIMALS POTENITALLY OCCURRING IN THE VICINITY OF CANNON AFB (CURRY COUNTY)

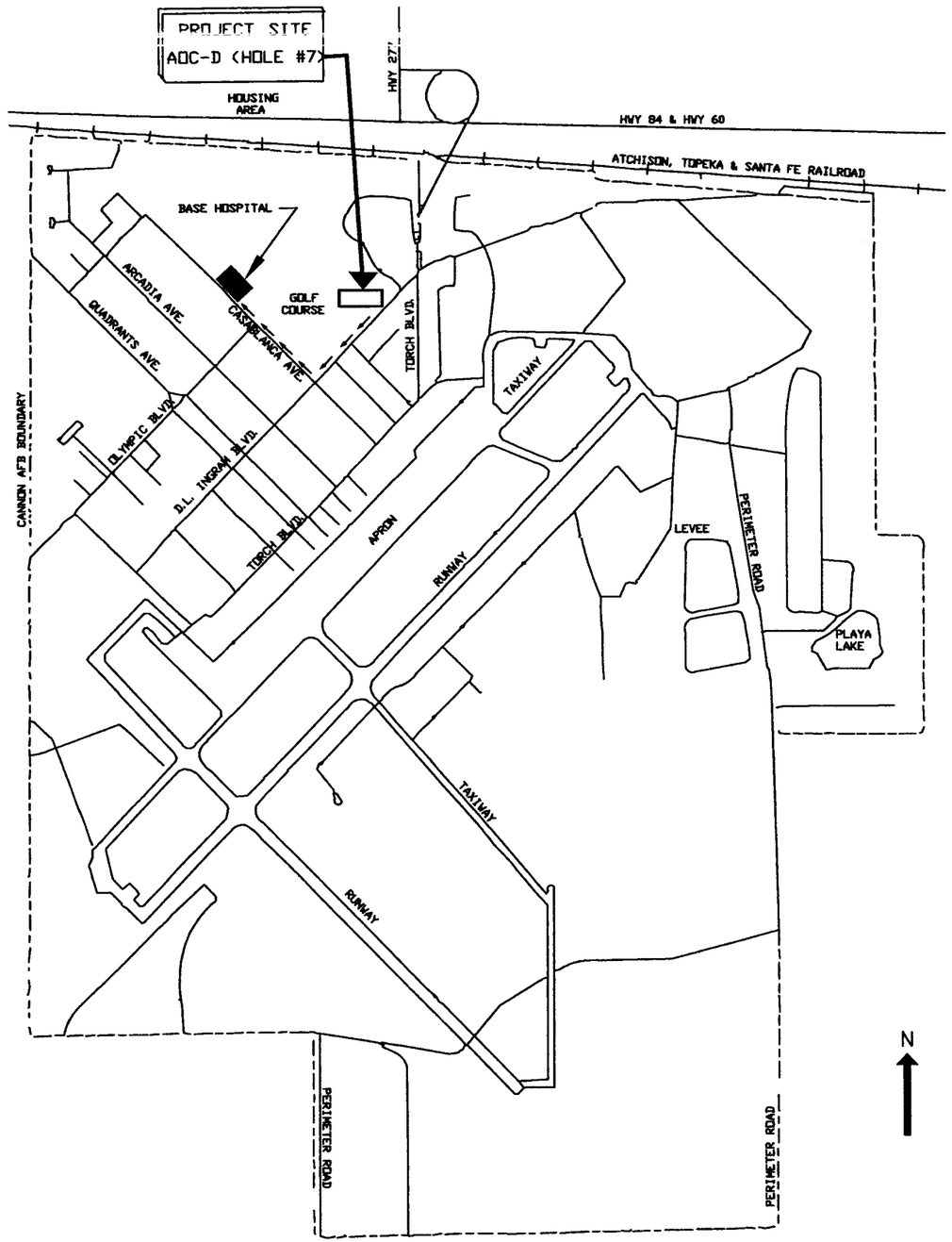
Common Name	Scientific Name	Federal Status	State Status
Birds			
Mississippi kite	Ictinia mississippiensis		Endangered (Group 2)
Baird's sparrow	Ammodramus baridii		Endangered (Group 2)
Bald eagle	Haliaectus leucocephalus	Endangered	Endangered (Group 2)
Peregrine falcon	Falco perigrinus	Endangered	Endangered (Group 1)
Mammals			
Black-footed ferret	Mustela nigripes	Endangered	Possibly Extinct

Endangered (Group 1): Species whose prospects of survival or recruitment within the state are in jeopardy.

Endangered (Group 2): Species whose prospects of survival or recruitment within the state are likely to become jeopardized in the foreseeable future.

Possibly Extinct: Potentially no longer in existence in the state.

Source: Lee Wan and Associates 1990

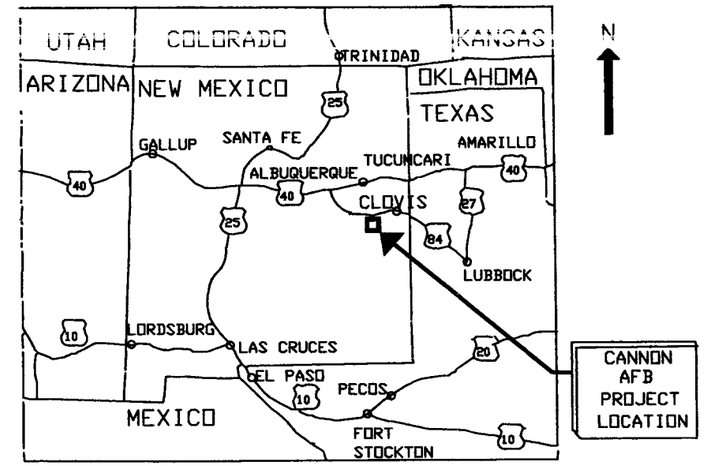


N

LOCATION PLAN

0 2000

1" = 2000'



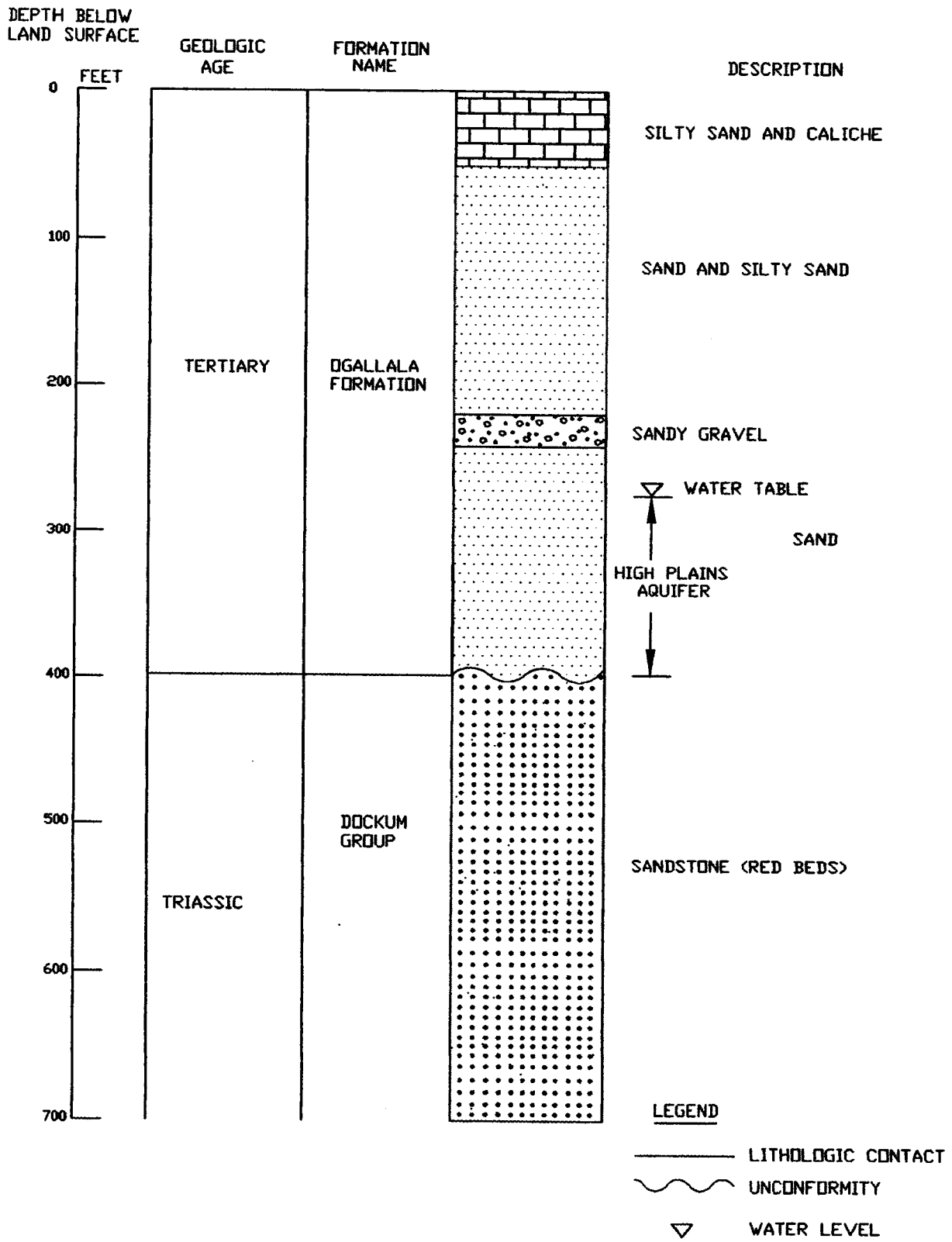
N

VICINITY MAP

NO SCALE

IMS, P.C. ENVIRONMENTAL & ENGINEERING	CANON AFB NEW MEXICO
U.S. ARMY CORPS OF ENGINEERS OMAHA, NEBRASKA	FIGURE 2-1 SITE MAP

C:\USERS\SRI\CANNON\FIG2-1



SOURCE: MODIFIED FROM GUTENTAG ET.AL. 1984

FIGURE 2-2
GENERALIZED GEOLOGIC SECTION
CANNON AFB, NEW MEXICO

PREPARED FOR:
U.S. ARMY CORPS OF ENGINEERS
OMAHA, NEBRASKA

C:\USERS\SRI\CANNON\GEO-SEC

3.1 GEOPHYSICAL SURVEY

A geophysical survey using the EM-61 method was completed at the AOC-D on April 17-18, 1996. The purpose of the geophysical survey was to identify any potential contaminant sources (i.e. drums or other metal containers), other than the PACM debris, buried at the site. A copy of the geophysical survey report is included in APPENDIX I of this report. Results of the geophysical survey did not indicate the presence of any buried drums or metal containers within the AOC-D investigation area.

3.2 SUBSURFACE DRILLING

Subsurface drilling was completed at AOC-D on November 19-20, 1996. A total of 6 soil borings were initially planned at the AOC-D to a maximum depth of 30 feet. The borings were numbered as SB-01 through SB-06 as shown in FIGURE 3-1. These soil borings were drilled, using a 4-1/4 inch inside diameter (ID) hollow stem auger (HSA). Soil was continuously logged using a stainless steel split spoon sampler, 3 inches in diameter and 2 feet in length. Standard Penetration Test (ASTM D-1586) procedures were followed during split spoon sampling. Hazardous and Toxic Waste (HTW) Drilling Logs were properly completed in the field for each boring. The HTW Drilling Logs are provided in APPENDIX II. Work plans stated that boring depths would extend to 20 feet below the debris/native soil interface. If no debris was encountered in the boring, the soil appeared to be undisturbed, and the headspace screening values did not exceed background values, the work plans stated that boring would extend to a depth of 10 feet below the ground surface (bgs) and no samples would be collected. No debris was encountered in the six (6) planned borings and all headspace screening results were below background levels. Drilling in these borings was thus terminated at 10 feet bgs. Upon consultation with the Base and the USACE, three more locations were selected for additional drilling and were numbered as SB-07 through SB-09. These locations are also shown in FIGURE 3-1. No PACM was observed up to a depth of 10 feet in borings SB-07

and SB-09 and all headspace screening results were below background levels. However, 3 chips of PACM (appearing to be pieces of a siding board) were encountered in boring SB-08 within 1 foot of the ground surface. A sample of the PACM chips was collected for asbestos analysis. SB-08 was drilled to a depth of 25 feet and soil samples were collected at depths of 7, 15 and 25 feet.

3.3 ASBESTOS AND SOIL SAMPLING AT AOC-D

3.3.1 SAMPLING FOR ASBESTOS

Non-friable PACM chips were observed only in one boring (SB-08) out of the 9 borings drilled, within 1 foot from the ground surface. A sample (CAN-D-SB-08-AB) of this material was collected. PACM chips were also observed on the ground surface near SB-06. A sample (CAN-D-AB-01) of this material was also obtained. Both these samples were placed in double ziploc bags, labeled, and shipped by overnight mail to the O'Brien & Gere (OB&G) Laboratory in Syracuse, New York.

3.3.2 SOIL SAMPLING

The Work Plan required collection of up to 3 soil samples from each boring if PACM or physical evidence of contamination (e.g. visual, headspace reading) were observed within the upper 10 feet. No physical evidence of contamination was observed during drilling operations at the site. Headspace screening results for soil samples collected from split spoons at 2-foot intervals at all nine borings were below background levels. PACM was encountered only in boring SB-08 within 1 foot from the surface. More fill, but no PACM, was observed below 1 foot and the native soil was encountered at a depth of 5 feet. The first soil sample was collected at a depth of 7 feet, 2 feet below the fill/native soil interface. The other two samples were collected at the middle (15 feet) and bottom (25 feet) of the boring. Sample collection field sheets for the soil sampling event are presented in APPENDIX III.

All 3 soil samples were placed in appropriate containers and shipped in a cooler containing ice by

overnight delivery to Inchcape Testing Services (ITS) based in Richardson, Texas. The samples were analyzed for TCL VOCs, TCL SVOCs, TRPHs and TAL metals.

3.3.3 HEADSPACE SCREENING

Headspace screening was completed on soil collected at 2-foot intervals in all nine borings. The soil was collected immediately after opening the split spoon and placed in a clean wide-mouth glass jar. The mouth of the jar was covered with an aluminum foil and the lid of the jar (with a hole in the center) was tightly screwed over the foil. The jar was vigorously agitated for at least 15 seconds and then set aside for 10-15 minutes for the sample to adequately volatilize. A photoionization detector (PID) was used to measure volatilized organics in the jar. After the 10-15 minute volatilization time, the probe of the PID unit was quickly inserted through the aluminum foil without removing the lid and the reading was noted.

The PID instrument used for the project was a HNU DL-101 unit with a digital display. The HNU DL-101 unit measures organic vapors and gases in parts per million (ppm) with 0.1 ppm as the lowest measurable concentration. The HNU unit was calibrated each day prior to the beginning of drilling using isobutylene gas. The unit was recalibrated during the day if it exhibited erratic behavior. After calibration, three readings were taken at three different points along the perimeter of the AOC-D site. The average value of the three readings was considered to be the background value. Background readings were measured for each day of work.

Results of background measurements and headspace screening are presented in TABLE 3-1.

3.3.4 SAMPLE LABELING

A consistent sample numbering system was used to allow easy retrieval of the sample information and identification of the sampling locations. Each sample had a unique number assigned to it, which identified the site, type of sample, sample location, and the series number at the location.

A list of codes used in sample numbers is given below:

CAN	Cannon AFB
D	Area of Concern - D
SB	Subsurface soil
AS	Air Sample
AB	Asbestos Sample

Following is an example of sample numbers:

CAN-D-SB01-05	Soil sample collected at a depth of 5 feet from soil boring SB-1 at the Area of Concern - D at Cannon AFB.
CAN-D-SB08-AB	Asbestos sample collected from soil boring SB-08 at the AOC-D, Cannon AFB.
CAN-D-AS01	Air sample 01 collected at AOC-D, Cannon AFB.

3.4 SHIPPING OF SAMPLES

All samples from the site retained for chemical analysis were shipped overnight via Federal Express to ITS in Richardson, Texas. Samples were packed in coolers with ice to keep the samples cool (4°C) until delivery at the laboratory. Plastic bubble wrap was used to prevent breakage of sample jars in the cooler. Asbestos samples packed in double ziploc bags were sent by Federal Express to OB&G Laboratory in Syracuse, New York. Custody seals were placed on coolers and other shipping containers to detect any tampering during shipping.

Chain-of-Custody (COC) forms were completed for all samples shipped. Copies of COC forms are included in APPENDIX IV. The name (s) of the individual(s) collecting samples were included on

the form. The field team member who delivered samples to the Federal Express office signed the COC form as relinquishing samples at the time the cooler was turned over to Federal Express personnel.

3.5 AIR MONITORING

Air quality was monitored using an HNU unit during field activities. The HNU unit was used to monitor organic vapor levels. At each monitoring station (e.g. boring location) an initial background air quality reading was obtained upwind of the work area. During field activities, measurements by HNU were taken in the breathing zone of the workers. HNU readings were either at or below background levels during the entire field work.

The HNU was calibrated each day prior to use. Calibrations were completed according to manufacturer's specifications using isobutylene as the calibration gas. The HNU unit was periodically response-checked to ensure that it was operating properly during use.

Air was also monitored for asbestos fibers. A personal asbestos air-monitoring pump and a cassette system was worn by the driller on the first day of drilling operations. Cassettes were changed at frequent intervals to assure adequate monitoring of air for asbestos fibers in the air. These cassettes were shipped to the OB&G Laboratory for asbestos analysis by Phase Contrast Microscopy (PCM). The total fiber count in the air during the 7-hour period varied from 0.019 to 0.275 fiber/cubic centimeter (cc). The average count during this period was about 0.1 fiber/cc, which is also the Permissible Exposure Limit (PEL) above which respirators are required. IMS drilling and sampling crew wore Tyvek suits and half-face respirators with combination high efficiency particulate air (HEPA)/organic vapor cartridges while drilling through the upper 10 feet of each boring, the interval where asbestos was expected. The field crew members were thus adequately protected against asbestos fibers. Nevertheless, it must be noted that PCM analysis is incapable of differentiating between asbestos and non-asbestos fibers. Quite likely a large proportion of fibers counted by PCM method may be non-asbestos fibers (wood, pollen, etc.) suspended in the air by 5-10 miles/hour wind

that was prevalent during drilling.

3.6 BOREHOLE ABANDONMENT

All soil borings, SB-01 through SB-09, at the AOC-D were abandoned by filling with a grout consisting of a mixture of cement, bentonite, and water. The sod, carefully removed and preserved prior to drilling, was replaced to its original location after grouting.

3.7 LOCATION AND ELEVATION SURVEY

Following drilling of soil borings, a location and elevation survey of all soil borings was completed by Lydick Engineers & Surveyors, registered in the State of New Mexico. Elevation of the ground surface was measured at each soil boring. The elevation data were referenced to the National Geodetic Vertical Datum (NGVD) of 1929 which is defined by MSL. In addition, State Plane Coordinates were determined for all boring locations. Land surface elevations, and state plane coordinates are presented in TABLE 3-1. A survey map showing locations of soil borings is presented in APPENDIX V.

TABLE 3-1

RESULTS OF FIELD HEADSPACE SCREENING

BORING NO.	DEPTH (FT)	DATE	HNU READING (PPM)	BORING NO.	DEPTH (FT)	DATE	HNU READING (PPM)
Background	-	11/19/96	0.9[1]	Background	-	11/20/96	0.5[2]
SB-01	0-2	11/19/96	0	SB-07	0-2	11/20/96	0
	2-4	11/19/96	0		2-4	11/20/96	0
	4-6	11/19/96	0		4-6	11/20/96	0
	6-8	11/19/96	0		6-8	11/20/96	0
	8-10	11/19/96	0		8-10	11/20/96	0
SB-02	0-2	11/19/96	0	SB-08	0-2	11/20/96	0
	2-4	11/19/96	0		2-4	11/20/96	0
	4-6	11/19/96	0		4-6	11/20/96	0
	6-8	11/19/96	0		6-8	11/20/96	0
	8-10	11/19/96	0		8-10	11/20/96	0
SB-03	0-2	11/19/96	0		10-12	11/20/96	0
	2-4	11/19/96	0		12-14	11/20/96	0
	4-6	11/19/96	0		14-16	11/20/96	0
	6-8	11/19/96	0		16-18	11/20/96	0
	8-10	11/19/96	0		18-20	11/20/96	0
SB-04	0-2	11/19/96	0		20-22	11/20/96	0
	2-4	11/19/96	0		22-24	11/20/96	0
	4-6	11/19/96	0		24-26	11/20/96	0
	6-8	11/19/96	0				
	8-10	11/19/96	0				
SB-05	0-2	11/19/96	0	SB-09	0-2	11/20/96	0
	2-4	11/19/96	0		2-4	11/20/96	0
	4-6	11/19/96	0		4-6	11/20/96	0
	6-8	11/19/96	0		6-8	11/20/96	0
	8-10	11/19/96	0		8-10	11/20/96	0
SB-06	0-2	11/19/96	0				
	2-4	11/19/96	0				
	4-6	11/19/96	0				
	6-8	11/19/96	0				
	8-10	11/19/96	0				

(1) Average of three readings: 0.8, 0.9 and 1.0 ppm.
(2) Average of three readings: 0.4, 0.5 and 0.6 ppm.

TABLE 3-2
SOIL BORING LOCATION AND
ELEVATION SURVEY DATA
AOC-D, CANNON AFB, NEW MEXICO

SOIL BORING	COORDINATES		ELEVATION Feet (above MSL)
	NORTHING	EASTING	
SB-01	1238301.810	805507.128	4297.798
SB-02	1238201.862	805628.831	4298.407
SB-03	1238180.923	805521.353	4297.408
SB-04	1238081.274	805585.380	4298.422
SB-05	1238256.434	805400.298	4296.895
SB-06	1238141.173	805425.158	4296.307
SB-07	1238294.657	805731.147	4302.233
SB-08	1238260.486	805284.151	4297.493
SB-09	1238184.537	805275.662	4296.588

4.1 CHEMICAL RESULTS

Three soil samples collected from SB-08 were submitted to ITS laboratory for TCL VOCs, TCL SVOCs, TAL metals and TRPH analyses. All analyses were performed according to the USEPA SW-846 methodology (USEPA, 1994a). TCL VOCs and TCL SVOCs analyses were performed by EPA methods 8260A and 8270B, respectively. TRPH analysis was performed by method 9071 modified, which includes infra-red (IR) analysis instead of the gravimetric analysis of the original USEPA method 9071. Soil samples submitted for TAL metals were analyzed by EPA method 6010 using inductively coupled plasma (ICP) mass spectrometry, except for arsenic, lead, selenium and thallium, which were analyzed by graphite furnace atomic absorption (GFAA) methods 7060, 7421, 7740 and 7841, respectively. Mercury was analyzed by cold vapor method 7471.

Results for organic analyses (i.e. VOC, SVOC and TRPH) were all nondetects (TABLE 4-1) and, therefore, data tables were not generated for these analyses. However, qualification of some nondetect organic data was required based on data validation, as discussed in the following sections. Several metals were reported above reporting limits (RLs). Metals results along with qualifications based on data validation are presented in TABLE 4-2. In addition to the metals listed in TABLE 4-2, the samples were also analyzed for beryllium, cadmium, mercury, selenium, silver, and thallium. Results for these metals were nondetects and are thus not reported in TABLE 4-2.

4.2 DATA VALIDATION

Results for the three soil samples were reported in SDG D96-13386. Summary analytical data forms along with QC data are presented in APPENDIX VI. A full data validation of organic (VOCs and SVOCs) and inorganic (TAL metals) analyses was completed according to USEPA National Functional Guidelines for Organic and Inorganic Data Review (USEPA, 1994b and 1994c).

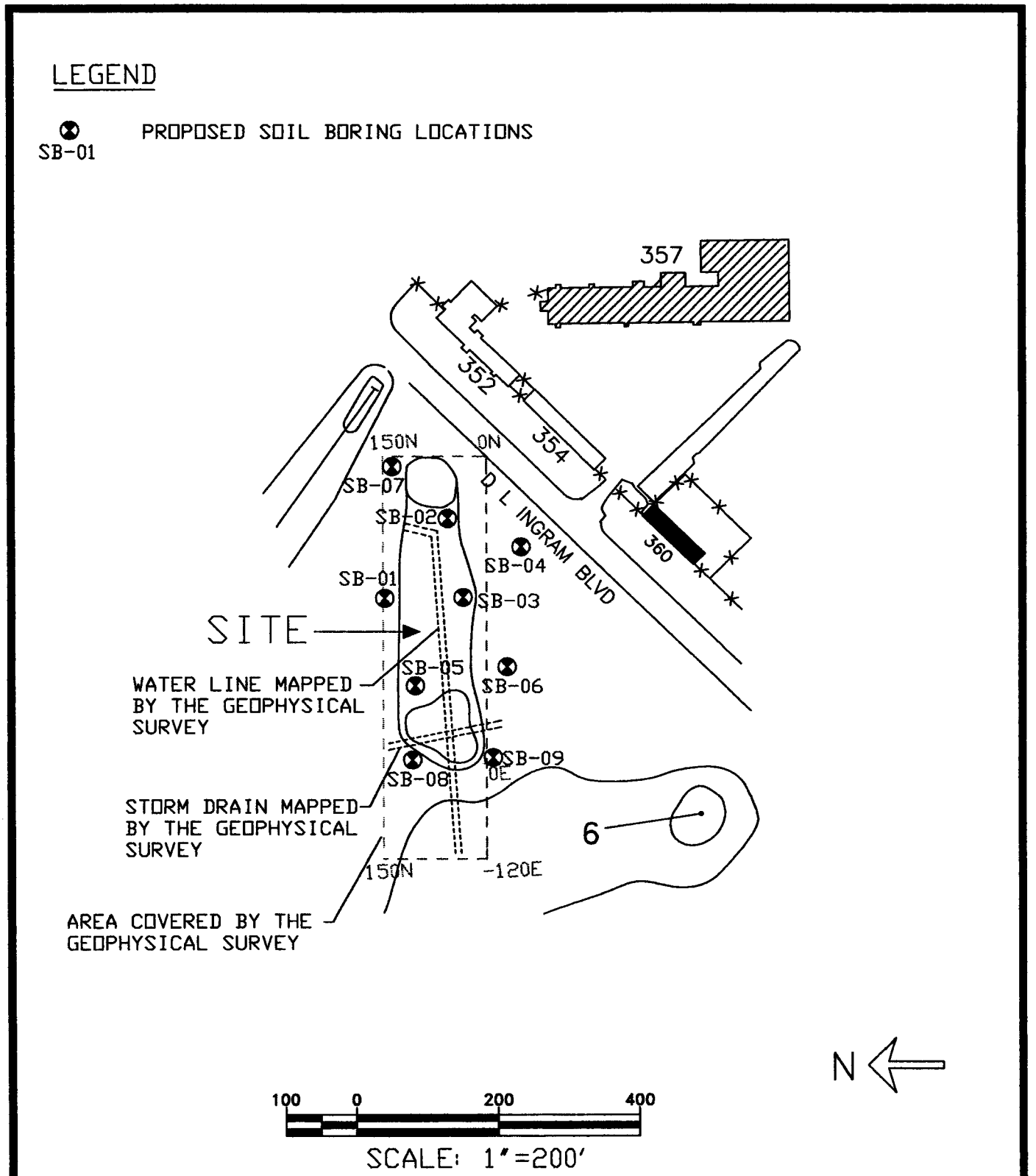


FIGURE 3-1

LOCATIONS OF SOIL BORING DRILLED AT AOC-D (HOLE #7)

CANNON AFB, NEW MEXICO

PREPARED FOR:

U.S. ARMY CORPS OF ENGINEERS

OMAHA, NEBRASKA

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4.1 CHEMICAL RESULTS

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Validation of TRPH data was completed by using general data evaluation criteria provided in the USEPA National Functional Guidelines for Organic Data Review (USEPA, 1994b) and by ensuring that proper method 9071 procedures were followed. Full details of the data validation process were presented in the QCSR (IMS, 1997) and a summary is presented below. Criteria evaluated for the full data validation of organic and inorganic analyses included:

- Laboratory Case Narrative
- Technical Holding Times
- GC/MS Instrument Performance Check (VOCs and SVOCs only)
- Initial Calibration and Continuing Calibration
- Method Blanks
- ICP Interference Check Samples (metals only)
- Surrogate Spike Recoveries (VOCs and SVOCs only)
- Matrix Spike/Matrix Spike Duplicate Samples
- Laboratory Control Samples
- Laboratory Duplicate Samples (metals only)
- ICP Serial Dilution (metals only)
- GFAA Quality Control (metals only)
- Internal Standards (organics only)

4.2.1 LABORATORY CASE NARRATIVE

The laboratory case narrative identified the following discrepancies which will be discussed below in respective sections:

- Percent differences (%D) for continuing calibration were outside the laboratory criteria for several VOCs and SVOCs.

- For SVOCs MSD analysis, surrogate phenol-d6 was recovered outside laboratory limits.

- For SVOCs analysis, MSD recovery for 4-nitrophenol was outside laboratory limits. Also, MS/MSD Relative Percent Difference (RPD) for 2,4-dinitrotoluene was outside laboratory limits.

- LCS recovery for magnesium was outside laboratory limits.

- MS/MSD recoveries for several metals were outside laboratory limits.

- RPD for laboratory duplicate sample analysis for barium, potassium, and mercury were outside laboratory limits.

4.2.2 TECHNICAL HOLDING TIMES

COC records, summary reports, laboratory run logs, raw data forms and chromatograms (for VOCs and SVOCs) were reviewed for transcription errors, accuracy and compliance with technical holding time requirements. Samples were preserved properly and analyzed within holding time requirements specified in the USEPA Guidelines.

4.2.3 GC/MS INSTRUMENT PERFORMANCE CHECK

Gas chromatogram/mass spectrometer (GC/MS) instrument performance checks (IPC) were performed for VOCs and SVOCs analyses to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of IPC included adherence to IPC frequency requirements, possible transcription/calculation errors, mass assignments, and ion abundance criteria. Instrument performance checks were performed within every 12 hour period during which samples were analyzed. Percent relative abundance values were recalculated and were found to be accurate. No transcription errors were noted between raw data and standard forms. All evaluation criteria were met and, therefore, no qualification of data based on GC/MS instrument performance checks was

required.

4.2.4 INITIAL AND CONTINUING CALIBRATION

Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run and of producing a linear calibration curve. Continuing calibration establishes the 12-hour relative response factors on which the quantitations are based and checks satisfactory performance of the instrument on a day-to-day basis.

VOCs and SVOCs

Criteria used in evaluating initial calibration for VOCs and SVOCs analyses included a review of concentrations of standards and recalculation of Relative Response Factors (RRF), mean RRF, and Percent Relative Standard Deviation (%RSD) for at least one compound associated with each internal standard. The evaluation also included verifying that the initial RRFs are greater than or equal to 0.05 and %RSDs are less than or equal to 30% for all target compounds and surrogates. Standards were run at proper concentrations. RRFs for all VOCs were determined to be greater than 0.05, except for 2-butanone (VOC) which had RRFs in the range 0.004 to 0.027. Values of %RSD for all VOCs met the 30% criterion. USEPA Guidelines require that results for any analyte with RRF(s) less than 0.05 be qualified as estimated **J** (if detected) or unusable **R** (if nondetect). All 2-butanone results were nondetects and were thus qualified as unusable **R**. All initial calibration evaluation criteria were met for SVOCs analyses and no qualification of data was required.

Evaluation of continuing calibration included review of data for frequency of continuing calibration, transcription errors, accuracy in calculation of continuing calibration RRFs, compliance with RRF criteria, accuracy in calculation of %D (between the mean RRFs of initial calibration and RRFs of continuing calibration) and compliance with %D criteria (±25%). The laboratory narrative indicated that values of %D for several VOCs were outside the laboratory criteria of ±20%. A review of data indicated that target compounds with %D above the USEPA criteria of ±25% were bromomethane

(54.9%), chloroethane (36.7%), and 2-butanone (27.8%). Continuing calibration RRFs for bromomethane and chloroethane met the 0.05 criterion but the RRF for 2-butanone (0.013) was below the criterion. Results for 2-butanone were qualified as unusable **R** above. Results for bromomethane and chloroethane were all nondetects and were qualified as **UJ** (results below an estimated RL).

The laboratory case narrative also stated that %D for several SVOCs were outside the laboratory criterion of ±20%. A review of data indicated that values of %D were above the USEPA criterion of ±25% for target compounds pyrene (39.6%) and benzo (g,h,i) perylene (26.3%), and surrogates 2-fluorophenol (26.3%) and terphenyl-d14 (30.9%). Although not indicated in the case narrative, %D for di-n-octylphthalate (25.9%) was also above the criterion. Results for all these compounds were nondetects and were accordingly qualified as **UJ**.

Metals

For ICP and GFAA analyses, correct numbers of standards and blanks were used for the initial calibration. Continuing calibrations were performed at the required frequency. Form II (Part 1)-IN and raw data sheets were reviewed for consistency and transcription errors. No errors were noted. Percent recoveries (%R) were recalculated for initial and continuing calibrations using true and found concentrations. No calculation errors were found and values of %R were within laboratory criteria. Correlation coefficients for GFAA analyses were recalculated and were found to be accurate. All correlation coefficients were within evaluation criteria (>0.995). All evaluation criteria were met and, therefore, qualification of data was not required.

4.2.5 METHOD BLANKS

The purpose of laboratory blank analyses is to determine the existence and magnitude of contamination resulting from laboratory activities. Method blanks for VOCs, SVOCs, and TRPH analyses were analyzed every 12 hours as required by USEPA Guidelines. For metals analyses,

initial calibration blanks, continuing calibration blanks, and preparation blanks were analyzed at proper frequencies. Summary sheets, raw data forms and chromatograms (VOCs and SVOCs only) were reviewed for accuracy and consistency. Method blank results for all analyses were nondetects and, therefore, qualification of data was not required.

4.2.6 SURROGATE SPIKE RECOVERIES

For VOCs and SVOCs analyses, laboratory performance on individual samples was established by means of surrogate spikes. All samples were spiked with surrogate compounds prior to sample purging. Surrogate spike results provide means to evaluate the overall accuracy and matrix effects for each sample. Sample summary sheets, raw data forms and chromatograms were reviewed for accuracy and consistency. Chromatogram retention times (RTs) were evaluated for compliance with laboratory criteria. Recovered concentrations and percent recoveries were recalculated and were determined to be accurate. No transcription errors were noted between Form II VOA (VOCs) or Form II SV (SVOCs) and raw data.

All surrogate recoveries for VOCs analyses were within laboratory criteria and, therefore, no qualification of data was required.

For SVOCs analyses, all surrogate recoveries were within laboratory criteria, except for high recovery of 120% for phenol-d6 for the MSD sample, which was outside the laboratory criteria of 24-113%. USEPA Guidelines provide that qualification of data is not required unless two or more surrogate compounds within the same fraction (base/neutral or acid) of a sample are outside the evaluation criteria. All other QC criteria were under control for the MSD sample and the associated results were nondetects. Qualification of data based on surrogate recoveries was thus not required.

4.2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATES

MS/MSD samples are analyzed to determine long term precision and accuracy of the analytical

method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. MS/MSD samples were analyzed at the required frequency of one MS and MSD per 20 samples. All MS/MSD recoveries and RPDs were recalculated and were found to be accurate.

VOCs, SVOC, TRPH

Raw data forms, summary forms, and Forms III VOA and Form III SV were reviewed for consistency and accuracy. No transcription errors were noted. All recovery and RPD values were within laboratory specified criteria. No qualification of data was required based on MS/MSD data.

Metals

As indicated in the laboratory case narrative, MS/MSD recoveries for barium, iron, lead, magnesium and potassium were outside the laboratory criteria of 75-125%. Also, MS recoveries for aluminum and calcium, and MSD recovery for arsenic were outside laboratory criteria. Although not indicated in the case narrative, MSD recovery for antimony was outside the laboratory criteria. Sample results for the MS/MSD sample (CAN-D-SB08-15) for calcium, iron and magnesium were 4x the spike level. No qualification of the data was required for these analytes. Results for other analytes, except antimony, were qualified as **J**. Results for antimony were nondetect and were qualified as **UJ**. Qualification of data based on MS/MSD results is summarized in the table below:

Analyte	MS %R	MSD %R	Criteria %R	Qualification
Aluminum	**51.5**	78.1	75-125	Sample results below 4x spike level. Qualify detects as **J** and nondetects as **UJ**.
Antimony	117.6	**131.6**	75-125	Sample results below 4x spike level. Qualify detects as **J** and nondetects as **UJ**.
Arsenic	77.3	**68.8**	75-125	Sample results below 4x spike level. Qualify detects as **J** and nondetects as **UJ**.

Barium	**67.8**	**42.3**	75-125	Sample results below 4x spike level. Qualify detects as **J** and nondetects as **UJ**.
Calcium	**150.4**	117	75-125	Sample results above 4x spike level. No qualification.
Iron	**300.2**	**473.9**	75-125	Sample results above 4x spike level. No qualification.
Lead	**157.9**	**161.5**	75-125	Sample results below 4x spike level. Qualify detects as **J** and nondetects as **UJ**.
Magnesium	**411.6**	**253.3**	75-125	Sample results above 4x spike level. No qualification.
Potassium	**135.2**	**145.5**	75-125	Sample results below 4x spike level. Qualify detects as **J** and nondetects as **UJ**.

4.2.8 LABORATORY CONTROL SAMPLES

LCS were analyzed to assess the accuracy of the analytical method and to demonstrate acceptable laboratory performance. LCS were analyzed at the required frequency of one LCS per SDG. Ten percent of recovered concentrations in the LCS were recalculated and were determined to be accurate. LCS percent recovery data were reviewed and recovery values recalculated. The calculations were found to be accurate.

VOCs, SVOCs, TRPH

All LCS recoveries were within laboratory criteria. Qualification of data based on LCS recoveries was thus not required.

Metals

As indicated in the laboratory case narrative, the LCS recovery for magnesium (73.6%) was below

the laboratory criteria of 75-125%. All results for magnesium were positive and were qualified as estimated **J** to indicate potential low bias.

4.2.9 LABORATORY DUPLICATE SAMPLES

Laboratory duplicate samples are analyzed during metals analyses to demonstrate acceptable method precision by the laboratory. Duplicate analyses also provide data for long-term precision of the analytical method on various methods. Duplicate samples were analyzed at the required frequency of one duplicate per group of samples. Raw data and Form VI-IN were reviewed and no transcription errors were noted. Ten percent of RPD values were recalculated and were found to be accurate. All RPD values met the ±25% criteria established in the USEPA Guidelines and, therefore, qualification of data was not required.

4.2.10 INTERNAL STANDARDS

Internal standards data were reviewed for VOCs and SVOCs analyses. Raw data and Forms VIII VOA and VIII SV were reviewed for consistency and transcription errors. No errors were noted. Internal standard (IS) performance criteria including area counts and retention times were reviewed to ensure that GC/MS sensitivity and response were stable during each analysis. Internal standard data were reviewed for initial calibration, continuing calibration, LCS, method blanks, MS/MSD, and samples. All IS area counts were within -50% to +100% of area counts of associated calibration standards. Also, all IS retention times were within 30 seconds of retention times of associated calibration standards, as required by the method. All criteria for internal standards were met and, therefore, qualification of data was not required.

4.2.11 ICP INTERFERENCE CHECK SAMPLES

For metals analysis, ICP interference check samples (ICS) were used to verify the laboratory's interelement and background correction factors. ICSs were analyzed at the required frequency. Raw

data and Form IV-IN were reviewed for transcription errors and no errors were found. Percent recoveries for solutions A and AB were recalculated and were found to be accurate. All %R values met the 80-120% criteria established in the USEPA Guidelines. No qualification of data was required.

4.2.12 ICP SERIAL DILUTION

The ICP serial dilution determines whether or not significant physical or chemical interferences exist due to the sample matrix during metals analyses by ICP methods. The laboratory reported serial dilution results from a 1:10 diluted sample with a serial dilution of 1:50. Values of %D for all analytes with concentration 50x the RL met the 10% criteria, except for barium (34.9%). Results for barium were reported above the RL and required qualification as estimated **J**. However, barium results were qualified above as **J** based on MS/MSD data and, therefore, no additional qualification was required.

4.2.13 GFAA QUALITY CONTROL

Postdigestion spikes (analytical spikes) establish the accuracy and precision of individual metal analysis. Raw data and Form XIV-IN were reviewed for transcription errors. No errors were noted. Review of the postdigestion spike recoveries indicated that all recoveries were within laboratory criteria. Ten percent spike recoveries were recalculated and were found to be accurate. No qualification of data was required.

4.3 CHEMICAL DATA QUALITY CONTROL SUMMARY

Precision and accuracy for the sampling and analysis event were measured by using surrogates, LCS, MS/MSD, analytical spikes (metals only) and ICP dilutions (metals only). Spike recoveries and other evaluation criteria were mostly within laboratory limits. Data were qualified in cases where the criteria were outside the laboratory limits. As mentioned earlier, results for VOC, SVOC, and

TRPH were nondetects (TABLE 4-1). Results above RLs were reported for several metals. Metals results with qualifications are presented in TABLE 4-2. In spite of the qualifications, the data were determined to be usable for decisions to be made for the site.

4.4 ASBESTOS RESULTS

Two samples of PACM were analyzed by OB&G Laboratory using Polarized Light Microscopy (PLM) method for the type and amount of asbestos present in the sample. Analytical results are presented in TABLE 4-3. The sample obtained from the upper 1 foot of SB-08 (CAN-D-SB08-AB) contained 20% chrysotile asbestos and 80% non-asbestos material. The sample collected at the surface near SB-06 (CAN-D-AB01) contained 5% chrysotile asbestos and 95% non-asbestos materials.

4.5 DATA EVALUATION

4.5.1 CHEMICAL DATA EVALUATION

A review of the organic analytical data (VOCs, SVOCs and TRPH) indicated that results for all organic analytes were below RLs (TABLE 4-1). A review of inorganic data (TABLE 4-2) indicated that several metals were above RLs. Metal concentrations were compared with USEPA Region 6 Media Specific Screening Levels (USEPA, 1996).

USEPA Region 6 screening levels for residential and industrial sites are shown in TABLE 4-4 along with metal concentrations detected at the AOC-D site. TABLE 4-4 shows that concentrations of all metals, except arsenic, in the soil at AOC-D are below the residential and industrial screening levels. Arsenic concentrations (0.509 J to 1.42 J mg/kg) are above residential screening levels for carcinogenic effects (0.32 mg/kg). However, the levels are below residential and industrial screening levels for noncarcinogenic effects (22 and 610 mg/kg, respectively) and industrial screening levels for carcinogenic effects (2 mg/kg). Arsenic concentrations in the soil at the site are also below

USEPA Region 6 soil screening levels for transfer to air (380 mg/kg) and transfer to ground water (15 mg/kg). Most significantly, arsenic concentrations observed at AOC-D were within the range of background concentrations (1.1-16.7 mg/kg) provided for the geographical area covered under USEPA Region 6 (USEPA, 1996) .

4.5.2 ASBESTOS DATA EVALUATION

Analysis of two PACM samples collected from AOC-D indicated that asbestos is present in siding board chips lying on the ground in the rough to the south of the fairway and in chips buried under the tee-box of Hole #7. Any material containing over 1% asbestos is considered an asbestos containing material (ACM). The percentage of asbestos in the two samples varied from 5% to 20%, with the remaining being gypsum, quartz, and other non-fibrous binding material. The siding board chips thus qualify as ACM. An assessment of the environmental hazard posed by the ACM chips is presented in Section 5.1.

TABLE 4-1
ORGANIC ANALYTICAL RESULTS
AOC - D, CANNON AFB

ANALYTES	SB08-07	SB08-15	SB08-25
VOLATILE ORGANICS (mg/kg) (Method 8260)	ND	ND	ND
SEMIVOLATILE ORGANICS (mg/kg) (Method 8270)	ND	ND	ND
TRPH (mg/kg) (Method 9071	ND	ND	ND

Note: See APPENDIX VI for analytical data tables.

TABLE 4-2
ANALYTICAL DATA SUMMARY OF DETECTED METALS
AOC-D, CANNON AFB

ANALYTES	CAN-D-SB08-07			CAN-D-SB08-15			CAN-D-SB08-25		
	Results	RL	Qual	Results	RL	Qual	Results	RL	Qual
METALS (mg/kg)									
Aluminum	2960	20	J	1920	20	J	7710	20	J
Antimony	<	10	UJ	<	10	UJ	<	10	UJ
Arsenic	0.509	0.5	J	1.42	0.5	J	0.679	0.5	J
Barium	43.5	2	J	206	2	J	81.3	2	J
Calcium	84200	50		277000	500		7610	50	
Chromium	3.92	2		<	2		5.97	2	
Cobalt	2.63	2		4.48	2		3.17	2	
Copper	3.14	1		2.52	1		5.86	1	
Iron	2120	10		1590	10		7060	10	
Lead	2.6	1	J	1.2	0.2	J	7.6	1	J
Magnesium	2830	10	J	5830	10	J	2010	10	J
Manganese	70	1		78.5	1		45	1	
Nickel	5.1	2		3.53	2		8.59	2	
Potassium	1010	100	J	404	100	J	2460	100	J
Sodium	127	100		147	100		152	100	
Vanadium	4.96	2		10.8	2		11.5	2	
Zinc	5.51	3		4.05	3		28.4	3	

RL Reporting Limit
< Less than the Reporting Limit
J Estimated
UJ Analyte below RL. The RL is approximate.

TABLE 4-3
ASBESTOS ANALYTICAL RESULTS
AOC-D, CANNON AFB

Description	Color	Asbestos		Non-Asbestos	
		%	Type	%	Type
CAN-D-SB08-AB	Brown	20.0	Chrysotile	60.0 20.0	Gypsum Other Non-fibrous
CAN-D-AB01	Brown	5.0	Chrysotile	55.0 20.0 20.0	Gypsum Quartz Other Non-fibrous

TABLE 4-4
DETECTED METAL CONCENTRATIONS COMPARED TO USEPA REGION 6 SCREENING LEVELS
AOC-D, CANNON AFB

Analytes	SB08-7	SB08-15	SB08-25	USEPA Region 6 Soil Screening Levels[1]	
	mg/kg	mg/kg	mg/kg	Residential mg/kg	Industrial mg/kg
Aluminum	2,960 J	1,920 J	7,710 J	77,000 N	SAT
Arsenic	0.509 J	1.42 J	0.679 J	22 N 0.32 C	610 N I 2.0 C
Barium	43.5 J	206 J	81.3 J	5,300 N	SAT
Calcium	84,200	277,000	7,610	-	-
Cobalt	2.63	4.48	3.17	4,700 N I	SAT
Chromium	3.92	< 2.0	5.97	210 N	1,600 N
Copper	3.14	2.52	5.86	2,800 N	63,000 N
Iron	2,120	1,590	7,060	23,000 N I	SAT
Lead	2.6 J	1.2 J	7.6 J	400 N	2,000 N
Magnesium	2,830 J	5,830 J	2,010 J	-	-
Manganese	70	78.5	45	380 N	8,300 N
Nickel	5.10	3.53	8.59	1,500 N	34,000 N
Potassium	1,010 J	404 J	2,460 J	-	-
Sodium	127	147	152	-	-
Vanadium	4.96	10.8	11.5	540 N	12,000 N
Zinc	5.51	4.05	28.4	23,000 N	SAT

C Carcinogenic effects
I Ingestion route only
J Estimated
N Non-carcinogenic effects
SAT Risk based value above expected saturation point
1 . USEPA Region 6, Human Health Media-Specific Screening Levels, October 30, 1996.

5.0
DISCUSSION

The investigation at the AOC-D was designed to provide data concerning the nature and extent of contamination of soil by disposal of demolition or other debris in the former pit. The debris was assumed to be mixed with asbestos containing materials. In addition, the investigation was aimed to determine if the soil was also contaminated with hazardous/toxic substances disposed of at the site directly or in containers (e.g. drums).

5.1 ASBESTOS IN THE SOIL AND HUMAN HEALTH RISK

Results of the SI did not indicate the presence of a debris pit under Hole #7. In most borings, the native soil was encountered 2-5 feet below the ground surface with a fill of mostly silty or sandy soil lying above the native soil. Prior to the SI, it was assumed that demolition debris mixed with PACM may be encountered up to a depth of 10 feet from the ground surface. Demolition debris was not observed in any of the borings, with the exception of a few chips of wall siding board discovered in SB-08, near the tee-box of Hole #7. Asbestos was found in a sample of chips collected from SB-08. More chips may be buried under the tee-box and possibly under other parts of the fairway and green of Hole #7. ACM chips were also observed lying on the ground surface in the rough to the south of the Hole #7 and in some other parts of the golf course (e.g. in the bare area south of the dumpster near the golf course parking entrance).

The greatest risk of human exposure to asbestos is via inhalation. The federal Permissible Exposure Limit (PEL) for asbestos is 0.1 fiber/cc as an 8-hour time-weighted average (OSHA, 1994). Friable asbestos, if disturbed, can release fibers in the air which can remain suspended in the air for significant periods of time. This can be a serious human health hazard, especially in buildings where resident population, office workers, or repair/maintenance staff may be exposed to asbestos in the air.

The ACM occurring at the AOC-D site is Category II nonfriable ACM (USEPA, 1990) with asbestos fibers bound into the cementitious siding board chips. Asbestos fibers are not likely to be released from the chips unless the chips are crushed into a powder. ACM chips buried under the tee-box or other parts of the fairway are protected by a several inches thick layer of soil and a cover of grass maintained throughout the year. ACM chips buried at the AOC-D thus meet USEPA standards (USEPA, 1990) regarding inactive asbestos disposal sites. However, USEPA regulations require that a notation be recorded on the deed to the facility property, or any other instrument that would normally be examined during title search, informing a potential purchaser that the land has been used for disposal of ACM.

ACM chips lying on the ground do not appear to pose a significant health hazard under their present condition, especially considering that there is no resident population at the site and the access to the site is mostly limited to golfers and the golf course maintenance staff. However, chips may disintegrate with time either by mechanical crushing, for example by a lawn mower or a golf cart, or by weathering due to high heat and humidity. Potential for human exposure may develop under such circumstances.

It is recommended that ACM chips lying on the ground in the golf course be removed to prevent any future potential human exposure to asbestos. The removal may be accomplished by picking up chips manually. The ACM chips may be disposed of at a landfill that meets the requirements of "Active Waste Disposal Sites" for asbestos, 40 CAR 61 (USEPA, 1984). It is also recommended that a notation be added to the facility property that meets USEPA requirements discussed previously.

5.2 SOIL CONTAMINATION BY HAZARDOUS/TOXIC SUBSTANCES

A geophysical study completed at AOC-D indicated that there were no potential point sources of contamination, such as drums or other metallic containers, buried at this site. Subsurface drilling at 9 locations at the site, varying in depths of 10-25 feet, indicated no visible contamination of the soil and results of headspace screening of the soil were all at or below background levels. Analysis

of three soil samples, collected at depths of 7, 15, and 25 feet from boring SB-08, for TCL VOCs, TCL SVOCs, TRPHs and metals indicated that all organic analytes were nondetects and metals were either at background levels or below USEPA Region 6 Screening Levels. Thus no removal or cleanup action for organic or inorganic (metals) chemicals is considered necessary at AOC-D.

5.3 SUMMARY

In summary, the only environmental concern at AOC-D are the ACM chips lying on the ground. It is recommended that the ACM chips, although of no immediate human health risk, be removed to eliminate any possibility of future human asbestos exposure.

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APPENDIX I

GEOPHYSICAL REPORT

SITE INSPECTION GEOPHYSICAL SURVEY REPORT AREA OF CONCERN - D

CANNON AIR FORCE BASE
CLOVIS, NEW MEXICO

Prepared for
IMS
Rochester, New York

May 1996

Woodward-Clyde

Woodward-Clyde Consultants
101 S. 108th Avenue
Omaha, NE 68154

Project No. M9429E

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1.0
INTRODUCTION

1.1 PURPOSE AND SCOPE

This report summarizes the field data collection activities, data processing and results from a geophysical investigation of Area of Concern - D (AOC-D) at Cannon Air Force Base near Clovis, New Mexico. The AOC-D site is located on the base golf course in the vicinity of the 7th hole. Waste materials primarily consisting of building tiles containing asbestos were reportedly uncovered in trenches excavated along the 7th fairway during construction of the golf course irrigation network. Available information indicates that that these materials may have been buried in a waste disposal area located in this vicinity. However, accounts by some base personnel suggest that the tiles may have simply fallen from barracks buildings that were temporarily stored in this area in the past. The purpose of the geophysical investigation was to investigate AOC-D and assess if other potential sources of contamination, such as drums or metal containers, were disposed of in the suspected disposal area. The electromagnetic (EM) method, using the Geonics EM-61 (EM-61), was selected to accomplish this objective. The following sections provide a brief description of the EM method using the EM-61 and a discussion of the field program and results.

2.0
GEOPHYSICAL METHOD

2.1 ELECTROMAGNETIC METHOD USING THE GEONICS EM-61

The geophysical investigation of AOC-D was conducted using the Geonics EM-61. The EM-61 is a time domain EM instrument that is specifically designed to detect buried metal objects. The instrument generates rapid EM pulses through a transmitter coil. These pulses induce secondary EM fields in the near-surface materials. The secondary EM fields induced from moderately conductive subsurface materials (i.e. soil and rock) are of relatively short duration. However, the secondary EM fields induced from good electrical conductors and metallic objects, such as metal drums, are of relatively long duration. The EM-61 measures this prolonged response from metallic objects after the EM response from natural earth materials dissipates. Design of the EM-61 provides high resolution of metallic targets. The depth of investigation of the EM-61 is relatively insensitive to site specific subsurface conditions, and is reportedly capable of detecting a single 55 gallon drum to a depth of 10 feet.

The EM-61 measures the EM response in milliVolts (mV). Observed EM response values can be plotted and contoured to evaluate the variations across the site. It should be noted that variations in the measured EM response values from some background level are more diagnostic than the absolute values. Variations in EM response resulting from buried metallic objects, such as buried drums, are generally manifested by relatively large (greater than about 50 to 75 mV) anomalies. However, EM-61 anomalies can be masked by the interfering effects from nearby metallic objects.

The response amplitude for a given anomaly is primarily a function of the anomaly depth, although anomaly size has some effect as well. It is thus useful to have some means of interpreting the depth of a given anomaly. The EM-61 has a two-receiver coil system that facilitates the recognition of near-surface objects from deeper targets. The EM-61 can output the response of either (or both) coil(s), and can output a differential between the two. By comparing the output from both coils, near-surface anomalies can sometimes be identified.

3.0
FIELD PROGRAM

3.1 SURVEY DESIGN

The geophysical investigation of AOC-D was designed to consider the specific site conditions encountered. The primary objective of the investigation was to identify possible buried metal objects including drums or containers that may have contained hazardous waste material. Results of previous geophysical investigations conducted in the vicinity of the golf course had indicated that the irrigation network can interfere significantly with some geophysical tools. Additionally, some empirical success had been achieved using the EM-61 in other investigations at the base golf course. Considering these previous findings, the EM-61 was chosen as the appropriate tool for this survey. The EM-61 survey was intended to provide focused mapping of buried metallic objects and help in discerning between the irrigation network and potential buried waste materials.

3.2 GRID LAYOUT

All geophysical field work was conducted on April 17 and April 18, 1996. The first step of the investigation involved establishing a geophysical survey grid at the site. The grid was laid using optical survey techniques and taped distance measurements. The initial survey grid encompassed an area 150 feet by 470 feet across the entire 7th hole area. Available information indicated that this was the most likely location of the suspected disposal area. However, after preliminary survey results did not appear to indicate the presence of buried drums, the survey grid was expanded 120 feet to the west onto the fairway of the golf course's 6th hole. The 150 feet width of the initial grid was also used for the expanded grid section.

The survey grid consisted of two base lines established along the northern and southern perimeters of the grid. These base lines were marked using pin flags and fluorescent paint marks placed at 5 foot centers. Upon completion of the geophysical investigation the corners of the EM grid were surveyed by Lydick Associates of Clovis, New Mexico using a total station surveying instrument. Figure 1 indicates the geophysical survey grid used for the investigation.

3.3 DATA COLLECTION AND PROCESSING

The EM-61 survey was conducted using a nominal station spacing of approximately 0.9 feet and a line separation spacing of 5 feet between each transect. The EM-61 was operated using the wheel trigger mode. Prior to conducting the survey, several test lines were conducted to calibrate the wheel trigger for the site terrain conditions. Processing of the EM-61 data included correcting the data station values using the survey line start and end point information. The wheel mode trigger provided accurate data stationing and the data processing resulted in only minor stationing adjustments.

Upon completion of the EM surveys the data were downloaded to a personal computer. The data were then formatted for input to a contouring program. Data plotting and contouring was accomplished using the computer software GEOSOFT. Inputs to the contouring program included the station coordinates and values, a selected spacing for gridding the raw data and a contour interval. Color-enhancing of the geophysical results was accomplished using the gridded output during contouring.

4.0
SURVEY RESULTS

Results of the EM-61 data contouring is shown in Figures 2 and 3. Figure 2 shows the results of the channel 2 data. Channel 3 data, which is the difference between channel 1 and channel 2, is shown in Figure 3. As discussed earlier, some of the anomalies due to surface or near-surface features are eliminated or subdued in the channel 3 results.

Most of the anomalies apparent on the contour maps appear to be the result of buried utility lines, or associated with the golf course irrigation system, including sprinkler heads, sprinkler boxes, or drain pipe outlets. The high-amplitude linear anomaly that runs west to east across the entire survey area is likely a water line. The high-amplitude linear anomaly that runs northwest to southeast across the western portion of the site, and across the No. 7 tee box, is due to a 16-inch diameter corrugated metal storm drain pipe. The other low amplitude anomalies apparent in the central portion of the site are likely due to buried irrigation lines for the golf course.

There are several anomalies that are small and circular in shape which may encompass a few stations. However, these anomalies do not propagate across more than one transect line, which are separated by only five feet. If there were buried drums in the survey area, we would expect to observe an irregularly-shaped anomaly that would likely be observed along more than one transect line. Therefore, no anomalies indicative of buried drums or other buried wastes are seen, based on the geophysical survey results.

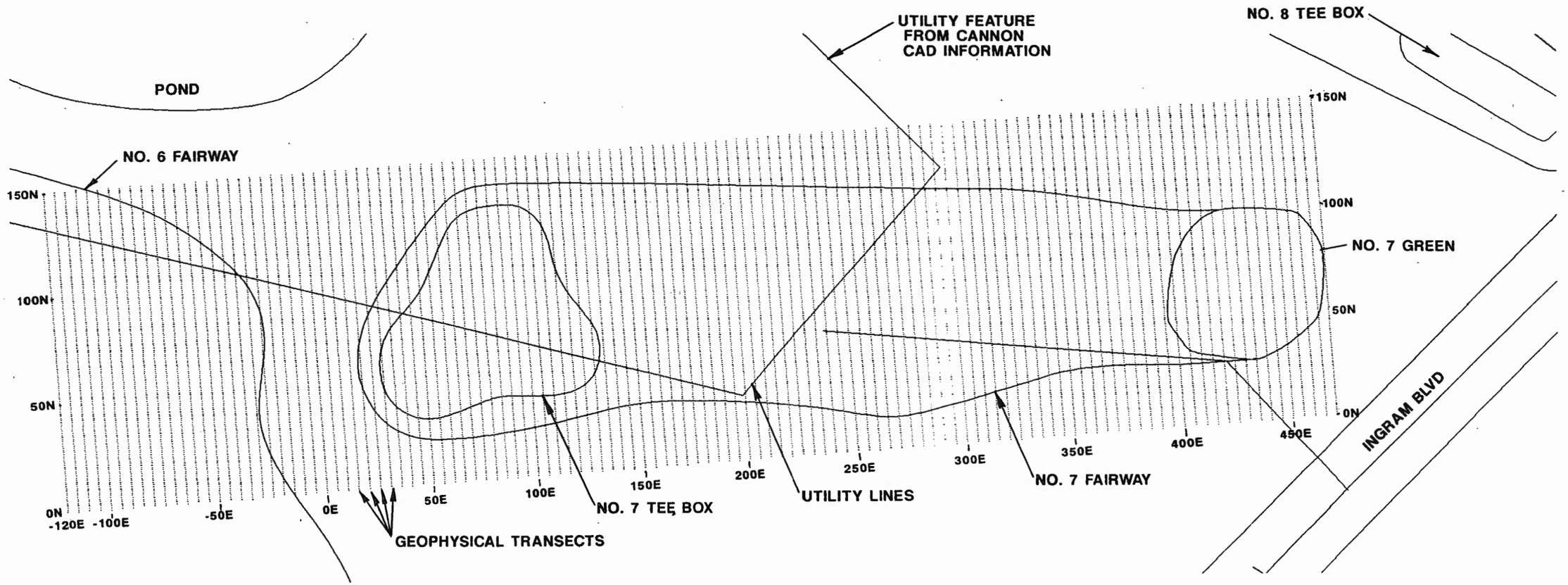
It is important to note that the EM-61 data has been contoured at a fine interval. The anomalies that are apparent on the plots, with the exception of those associated with the utility lines, represent subtle features that have been amplified to enhance interpretation. Based on experience from investigations at other sites, waste disposal areas with buried drums usually have anomaly amplitudes up to several times greater than those observed in this investigation.

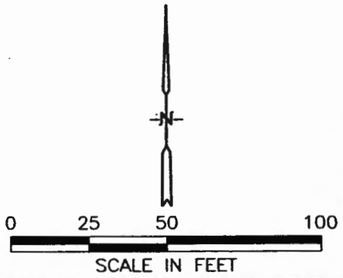
5.0 SUMMARY

A geophysical investigation was conducted at Area of Concern - D (AOC-D) at Cannon Air Force Base in New Mexico. An electromagnetic survey using the Geonics EM-61 was conducted in an attempt to identify potential sources of contamination including metallic objects such as drums that may have been buried in a suspected waste disposal area. The geophysical results do not indicate the presence of buried drums or metal containers within the AOC-D investigation area. The anomalies detected by the geophysical investigation appear to be due to known cultural features.

5.1 LIMITATIONS

This work was conducted in accordance with reasonable and accepted engineering geophysics practices, and the interpretations and conclusions are rendered in a manner consistent with other consultants in our profession. However, all geophysical techniques have some level of uncertainty and limitations. No other representations to the client is expressed or implied, and no warranty or guarantee is included or intended.





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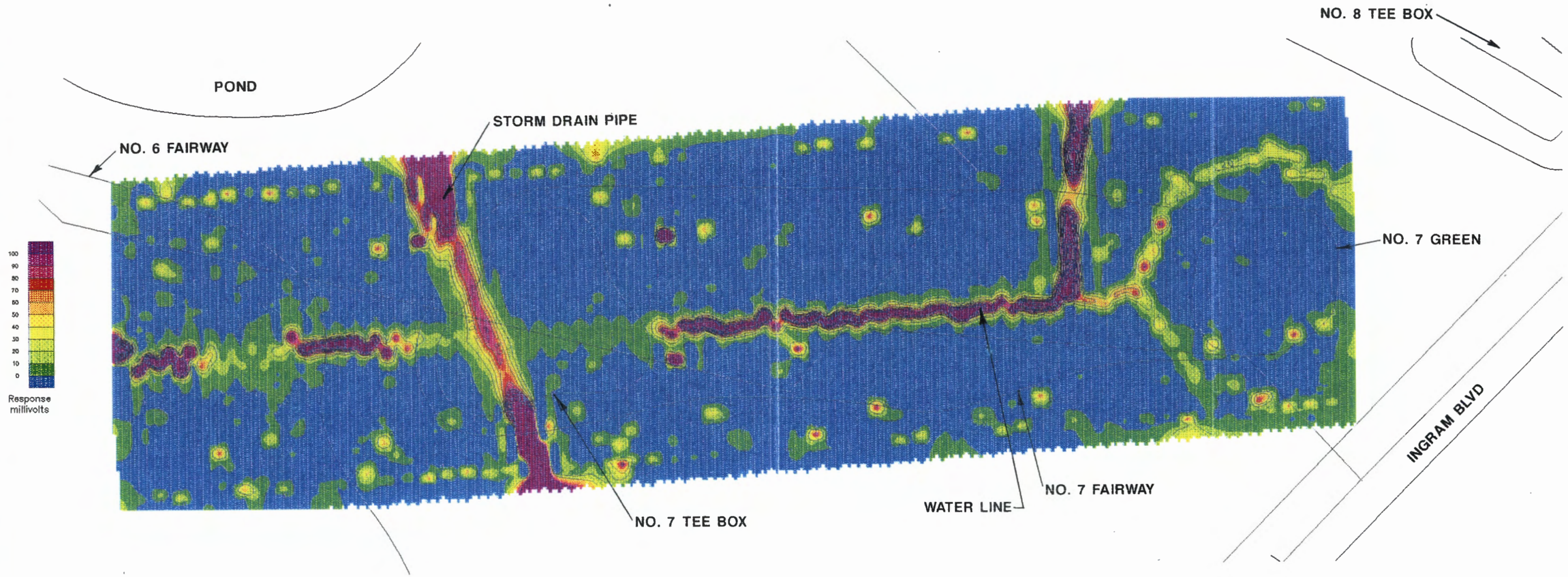
Prepared by :	J.J.N.
Date :	5/13/96

AREA OF CONCERN – D
GEOPHYSICAL GRID MAP

CANNON AFB, NEW MEXICO

FIG. 1

M9429001



N

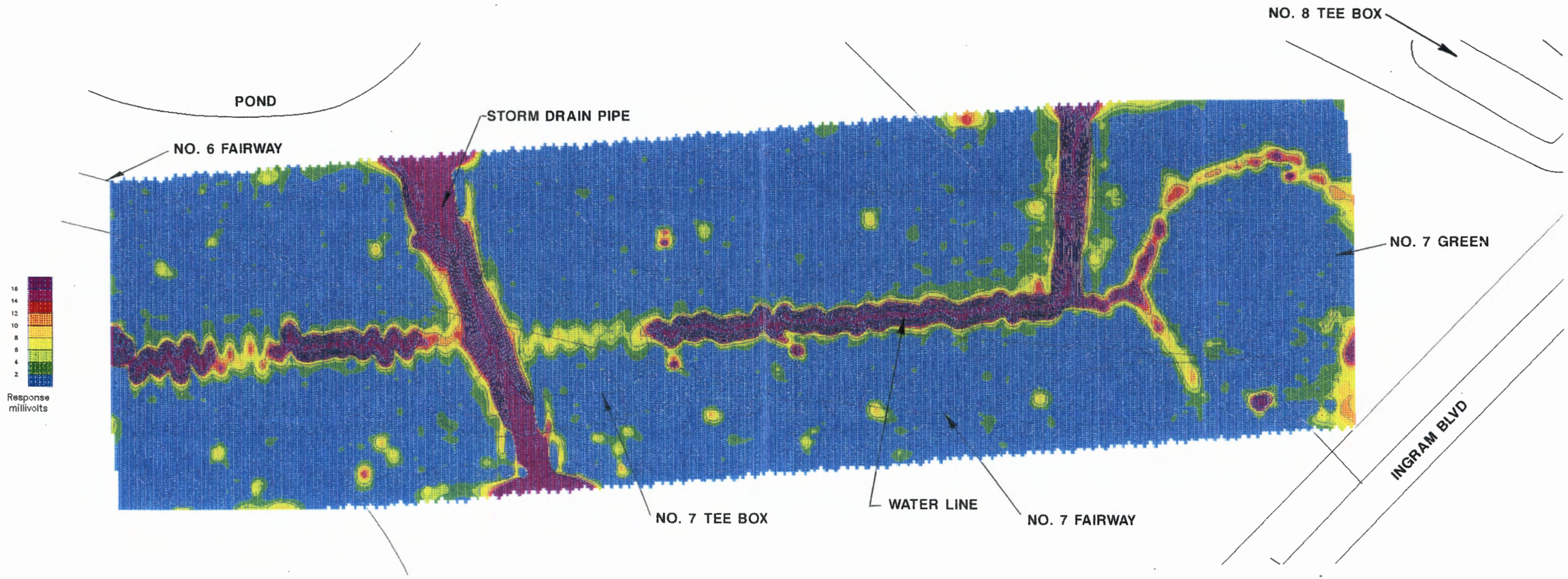
0 25 50 100
SCALE IN FEET

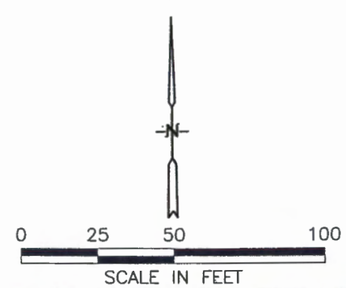
Job No. :	M9429E-2A
Prepared by :	J.J.N.
Date :	5/13/96

AREA OF CONCERN – D
EM-61 ELECTROMAGNETICS CONTOUR MAP
CHANNEL 2 DATA
CANNON AFB, NEW MEXICO

M9429002

FIG. 2





Job No. :	M9429E-2A
Prepared by :	J.J.N.
Date :	5/13/96

AREA OF CONCERN – D
EM-61 ELECTROMAGNETICS CONTOUR MAP
CHANNEL 3 DATA
CANNON AFB, NEW MEXICO

M9429003

FIG. 3

APPENDIX II

DRILLING LOGS

HTW DRILLING LOG

HOLE NO.	SB-01
SHEET	1 OF 2 SHEETS
1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
. PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,301.8 North 805,507.1 East
9. SURFACE ELEVATION	4297.8' MSL
10. DATE STARTED	11-19-96
11. DATE COMPLETED	11-19-96
12. OVERBURDEN THICKNESS	>10 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
14. TOTAL DEPTH OF HOLE	10.0 Feet
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman

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 h
4297.8	0	Clayey sand (SC), loose, dry, reddish-brown, poorly graded, grass roots	HS = 0	NA	NA	4 6 5 6	N = 11, Recovery = 1.8', HS Time = 11:07 No asbestos like material observed
4296.8	1	Silty sand (SM), loose, dry, reddish brown, poorly graded, grass roots, no reaction to HCl					
4295.8	2	Clayey sand (SC), loose, slightly moist, dark reddish-brown, poorly graded, roots, no reaction to HCl	HS = 0	NA	NA	4 5 4 6	N = 9, Recovery = 1.6', HS Time = 11:14, No asbestos like material observed
4294.8	3						
4293.8	4		HS = 0	NA	NA	3 4	N = 11, Recovery = 1.7', HSTime = 11:25, No asbestos like material observed
4292.8	5						

HTW DRILLING LOG

HOLE NO. SB-01

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman

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 h
		Silty sand (SM), medium dense, dry, light brown, caliche zone, tree roots, caliche on fracture surfaces				7 16	
4291.8	6		HS = 0	NA	NA	3 19 19 19	N = 38, Recovery = 1.7', HSTime = 11:30, No asbestos observed
4290.8	7						
4289.8	8		HS = 0	NA	NA	8 16 15 16	N = 31, Recovery = 1.4', HS Time = 11:35, No asbestos like material observed
4288.8	9						
4287.8	10						BOTTOM OF THE BORING
4286.8	11						
4285.8	12						
4284.8	13						
4283.8	14						

HTW DRILLING LOG

HOLE NO.	SB-02
SHEET	1 OF 2 SHEETS
1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,201.9 North 805,628.8 East
9. SURFACE ELEVATION	4298.4' MSL
10. DATE STARTED	11-19-96
11. DATE COMPLETED	11-19-96
12. OVERBURDEN THICKNESS	>10 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
14. TOTAL DEPTH OF HOLE	10.0 Feet
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman

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 h
4298.4	0	Silty sand (SC), very loose, moist, reddish-brown, poorly graded, fine grained, trace clay, numerous roots, no reaction to HCl, one piece of gravel	HS = 0	NA	NA	3 3 3 4	N = 6, Recovery = 2.0', HS Time = 15:47, No asbestos like material observed
4297.4	1						
4296.4	2		HS = 0	NA	NA	4 4 6 8	Native soil, N = 10, Rec = 1.6', HS Time = 15:51, No asbestos-like material observed
4295.4	3	Silty sand (SM), medium dense, moist, light reddish-tan, light red to red near the bottom, poorly graded, fine-grained, caliche nodules, roots.					
4294.4	4		HS = 0	NA	NA	3 5	N = 13, Rec = 1.5', HS Time = 15:57, No asbestos-like material observed
4293.4	5						

HTW DRILLING LOG

HOLE NO. SB-02

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman

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 h
						8 10	
4292.4	6		HS = 0	NA	NA	4 12	N = 27, Rec = 1.6', HS Time = 16:03, No asbestos-like material observed
4291.4	7					15 21	
4290.4	8		HS = 0	NA	NA	12 14	Native soil, N = 31, Rec = 2.0', HS Time = 16:10, No asbestos-like material observed
4289.4	9					17 20	
4288.4	10						BOTTOM OF THE BORING
4287.4	11						
4286.4	12						
4285.4	13						
4284.4	14						

HTW DRILLING LOG

HOLE NO.	SB-03
SHEET	1 OF 2 SHEETS

1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
. PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,180.9 North 805,521.4 East
9. SURFACE ELEVATION	4297.4' MSL
10. DATE STARTED	11-19-96
11. DATE COMPLETED	11-19-96
12. OVERBURDEN THICKNESS	>10 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
14. TOTAL DEPTH OF HOLE	10.0 Feet
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman

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 h
4297.4	0	Silty clay (SM), medium dense, dry, dark brown turning to reddish brown below, poorly graded, fine grained, numerous roots, no reaction to HCl, one small piece of vitrified clay	HS = 0	NA	NA	5 9 10 8	Fill near the top, N = 19, Rec = 1.9', HS Time 14:50, No asbestos like material observed
4296.4	1						
4295.4	2	Silty sand (SM), loose dry, brown to olive green, poorly graded, fine-grained, some caliche, trace roots	HS = 0	NA	NA	5 7 9 12	N = 16, Rec = 1.6', HS Time = 14:56, No asbestos-like material observed
4294.4	3						
4293.4	4		HS = 0	NA	NA	4 7	N = 20, Rec = 1.7', HS Time = 15:02, No asbestos like material observed
4292.4	5						

HTW DRILLING LOG

HOLE NO. SB-03

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman

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 h
						13 18	
4291.4	6		HS = 0	NA	NA	10 25	N = 66, Rec = 1.4', HS Time = 15:08, No asbestos like material observed
4290.4	7					41 43	
4289.4	8		HS = 0	NA	NA	7 17	N = 41, Rec = 1.6', HS Time = 15:14, No asbestos-like material observed
4288.4	9					24 28	
4287.4	10						BOTTOM OF THE BORING
4286.4	11						
4285.4	12						
4284.4	13						
4283.4	14						

HTW DRILLING LOG

HOLE NO.	SB-04
SHEET	1 OF 2 SHEETS
1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
3. PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,081.3 North 805,585.4 East
9. SURFACE ELEVATION	4298.4' MSL
10. DATE STARTED	11-19-96
11. DATE COMPLETED	11-19-96
12. OVERBURDEN THICKNESS	>10 Feet
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	10.0 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sondarwan

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 h
4298.4	0	Silty sand (SM), medium dense, dry, light reddish-brown, poorly graded, fine-grained, some asphaltic debris, numerous roots, reacts vigorously to HCl	HS = 0	NA	NA	6 8 13 20	Fill near the top, N = 21, Rec = 2.0', HS = Time 16:31, No asbestos like material observed
4297.4	1						
4296.4	2	Silty sand (SM), medium dense, dry, light red to red, poorly graded, fine grained, some calcium carbonate nodules	HS = 0	NA	NA	6 8 9 12	N = 17, Rec = 1.8', HS Time 16:36, No asbestos like material observed
4295.4	3						
4294.4	4		HS = 0	NA	NA	7 14	N = 32, Rec = 2.0', HS Time 16:40, No asbestos-like material observed.
4293.4	5						

HTW DRILLING LOG

HOLE NO.	SB-04
SHEET	2 OF 2 SHEETS

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman

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 h
						18	
						22	
4292.4	6		HS = 0	NA	NA	10	N = 28, Rec = 1.9, HS Time = 16:46, No asbestos-like material
						12	
4291.4	7					16	
						18	
4290.4	8		HS = 0	NA	NA	9	N = 46, Rec = 1.8', HS Time = 16:51, No asbestos-like material observed
						24	
4289.4	9					22	
						17	
4288.4	10						BOTTOM OF THE BORING
4287.4	11						
4286.4	12						
4285.4	13						
4284.4	14						

HTW DRILLING LOG

HOLE NO.	SB-05
SHEET	1 OF 2 SHEETS
1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,256.4 North 805,400.3 East
9. SURFACE ELEVATION	4296.9' MSL
10. DATE STARTED	11-19-96
11. DATE COMPLETED	11-19-96
12. OVERBURDEN THICKNESS	>10 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
14. TOTAL DEPTH OF HOLE	10.0 Feet
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman

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 h
4296.9	0	Silty clay (SM), loose, moist, dark brown to dark reddish-brown, mottled, numerous roots, poorly graded, caliche, some gravel	HS = 0	NA	NA	2 4 5 5	Fill near the top, N = 9, Rec = 1.9 ', HS Time = 12:03, No asbestos-like material observed
4295.9	1						
4294.9	2	Silty sand (SM), loose, moist, brown to olive, trace clay, tree roots, poorly graded, no reaction to HCl	HS = 0	NA	NA	2 4 6 11	N = 10, Rec = 1.7', HS Time = 12:09, No asbestos like material observed
4293.9	3						
4292.9	4		HS = 0	NA	NA	1 5	N = 14, Rec = 1.9', HS Time = 12:14, No asbestos-like material observed
4291.9	5						

HTW DRILLING LOG

HOLE NO. SB-05

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman

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 h
						9 14	
4290.9	6		HS = 0	NA	NA	5 10 10 9	N = 20, Rec = 1.8', HS Time = 12:19, No asbestos like material observed
4289.9	7						
4288.9	8	Silty sand (SM), medium dense, slightly moist, very light red, poorly graded, fine grained, caliche nodules, highly reactive to HCl.	HS = 0	NA	NA	4 14 19 18	N = 33, Rec = 1.8', HS Time = 12:27, No asbestos-like material observed
4287.9	9						
4286.9	10						BOTTOM OF THE BORING
4285.9	11						
4284.9	12						
4283.9	13						
4282.9	14						

HTW DRILLING LOG

HOLE NO.	SB-06
1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
SHEET	1 OF 2 SHEETS
3. PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,141.2 North 805,425.2 East
9. SURFACE ELEVATION	4296.3' MSL
10. DATE STARTED	11-19-96
11. DATE COMPLETED	11-19-96
12. OVERBURDEN THICKNESS	>10 Feet
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	10.0 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman

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 h
4296.3	0	Silty sand (SM), medium dense, dry, red, iron-stained, poorly graded, fine grained, numerous roots, reacts vigorously to HCl, some black organic matter, some caliche nodules	HS = 0	NA	NA	8 9 8 8	Fill near the top, N = 17, Rec = 1.7', HS Time = 13:52, No asbestos-like material observed
4295.3	1						
4294.3	2	Silty sand (SM), loose to medium dense, dry, brown to olive gray, some mottling, poorly graded, fine-grained, no reaction to HCl, some roots	HS = 0	NA	NA	6 9 10 14	N = 19, Rec = 2.0', HS Time = 14:00, No asbestos-like material observed
4293.3	3						
4292.3	4		HS = 0	NA	NA	4 7	N = 16, Rec = 1.6, HS Time = 14:04, No asbestos-like material
4291.3	5	Silty sand (SM), medium dense, light olive green, dry, poorly graded, few roots, fractured with caliche on fractured surfaces, reacts to HCl,					

HTW DRILLING LOG

HOLE NO. SB-06

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman

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 h
		some iron staining, trace clay				9 18	
4290.3	6		HS = 0	NA	NA	6 11 15 20	N = 26, Rec = 2.0', HS Time = 14:10, No asbestos-like material
4289.3	7						
4288.3	8		HS = 0	NA	NA	6 11 14 17	N = 25, Rec = 1.9', HS Time = 14:15, No asbestos-like material
4287.3	9						
4286.3	10						BOTTOM OF THE BORING
4285.3	11						
4284.3	12						
4283.3	13						
4282.3	14						

HTW DRILLING LOG

HOLE NO. SB-07		
1. COMPANY NAME: IMS Environmental & Engineering	2. DRILLING CONTRACTOR: Southwest Engineering, Las Cruces, NM	SHEET 1 OF 2 SHEETS
PROJECT: Site Inspection, Area of Concern - D	4. LOCATION: Cannon Air Force Base, New Mexico	
5. NAME OF DRILLER: Alex Sanchez	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 85	
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT: 4-1/4" ID HSA, 3" Stainless Steel Split Spoon	8. HOLE LOCATION: 1,238,294.7 North 805,731.1 East	
	9. SURFACE ELEVATION: 4302.2' MSL	
	10. DATE STARTED: 11-20-96	11. DATE COMPLETED: 11-20-96
12. OVERBURDEN THICKNESS: >10 Feet	15. DEPTH GROUNDWATER ENCOUNTERED: NA	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 10.0 Feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman

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 h
4302.2	0	Silty sand (SM), loose, moist, reddish brown, poorly graded, fine grained, some gravel, reacts to HCl, numerous roots, trace clay	HS = 0	NA	NA	4 5 6 7	Fill at the top, N = 11, Rec = 2.0', HS Time 08:57, No asbestos-like material observed
4301.2	1						
4300.2	2		HS = 0	NA	NA	5 6 7 6	N = 13, Rec = 2.0', HS Time = 09:02, No asbestos-like material observed
4299.2	3						
4298.2	4		HS = 0	NA	NA	6 6	N = 13, Rec = 1.9', HS Time = 09:10, Native soil
		Silty sand (SM), loose, slightly moist, light red, poorly graded, finely grained, reacts vigorously to HCl					
4297.2	5						

HTW DRILLING LOG

PROJECT	INSPECTOR	HOLE NO.
Site Inspection, Area of Concern - D Cannon Air Force Base, New Mexico	Michael Sonderman	SB-07 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 h
						7 6	
4296.2	6		HS = 0 SP	NA	NA	6 11 12 15	N = 23, Rec = 2.0', HS Time = 09:15, Native soil
4295.2	7						
4294.2	8		HS = 0	NA	NA	6 13 10 10	N = 23, Rec = 2.0', HS Time = 09:19, Native soil
4293.2	9						
4292.2	10						BOTTOM OF THE BORING
4291.2	11						
4290.2	12						
4289.2	13						
4288.2	14						

HTW DRILLING LOG

HOLE NO.	SB-08
1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
SHEET	1 OF 4 SHEETS
. PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,260.5 North 805,284.2 East
9. SURFACE ELEVATION	4297.5' MSL
10. DATE STARTED	11-20-96
11. DATE COMPLETED	11-20-96
12. OVERBURDEN THICKNESS	>10 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
14. TOTAL DEPTH OF HOLE	26.0 Feet
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
3 (soil)	3	3	SVOC - 3	TRPH - 3	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Mike Sonderman, Praveen Sivadas

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 h
4297.5	0	Silty sand (SM), very loose, dark brown, moist, some clay, poorly graded, fine grained, no reaction to HCl, roots	HS = 0	NA	NA	3 3 3 5	Fill, N = 6, Rec = 2.0', HS Time = 09:50, 3 pieces of non-fibrous asbestos (Transite siding) in upper 1'
4296.5	1						
4295.5	2		HS = 0	NA	NA	2 4 6 8	Fill, N = 10, Rec = 2.0', HS Time 10:00, No asbestos-like material observed
4294.5	3						
4293.5	4		HS = 0	NA	NA	5 6	N = 15, Rec = 2.0', HS Time = 10:08, No asbestos like material, native soil
4292.5	5						

HTW DRILLING LOG

PROJECT	INSPECTOR	HOLE NO.
Site Inspection, Area of Concern - D Cannon Air Force Base, New Mexico	Michael Sonderman, Praveen Srivastav	SB-08
		SHEET 2 OF 4 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 h
						9	
		Silty sand (SM), loose, slightly moist, light red to red, caliche rich, poorly graded, fine grained				16	
4291.5	6		HS = 0	NA	CAN-D-SB08-07	5	N = 27, Rec = 1.9', HS Time = 10:15, No asbestos like material observed
						10	
4290.5	7					17	
						17	
4289.5	8		HS = 0	NA	NA	5	N = 40, Rec = 1.7', HS Time = 10:21
						23	
4288.5	9					17	
						18	
4287.5	10		HS = 0	NA	NA	5	N = 30, Rec = 1.8', HS Time 10:27
						10	
4286.5	11					20	
						23	
4285.5	12		HS = 0	NA	NA	12	N = 84+, Rec = 0.9', HS Time = 10:35
						34	
4284.5	13					50+	
4283.5	14						

HTW DRILLING LOG

HOLE NO. SB-08

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman, Praveen Srivastav

SHEET 3 OF 4 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 h
		Silty sand (SM), light brown, friable	HS = 0	NA	CAN-D-SB08-15	6 43 50+	N = 93+, Rec = 1.2', HS Time = 10:50
4282.5	15						
4281.5	16		HS = 0	NA	NA	9 13 18 19	N = 31, Rec = 2.0', HS Time = 11:00
4280.5	17						
		Silty sand (SM), dark brown, dry					
4279.5	18		HS = 0	NA	NA	13 18 18 19	N = 36, Rec = 2.0', HS Time = 11:13
4278.5	19						
4277.5	20		HS = 0	NA	NA	9 20 25 38	N = 45, Rec = 1.5', HS Time = 11:17
4276.5	21						
4275.5	22		HS = 0	NA	NA	4 9	N = 26, Rec = 1.75', HS Time = 11:20
4274.5	23						

HTW DRILLING LOG

HOLE NO.	SB-08
SHEET	4 OF 4 SHEETS

PROJECT: Site Inspection, Area of Concern - D, Cannon Air Force Base, New Mexico

INSPECTOR: Michael Sonderman, Praveen Srivastav

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 h
						17	
						19	
4273.5	24		HS = 0	NA	CAN-D-SB08-25	8	N = 36, Rec = 1.8', HS Time = 11:27
						14	
4272.5	25					22	
						26	
4271.5	26						BOTTOM OF THE BORING
4270.5	27						
4269.5	28						
4268.5	29						
4267.5	30						
4266.5	31						
4265.5	32						

HTW DRILLING LOG

HOLE NO.	SB-09
SHEET	1 OF 2 SHEETS

1. COMPANY NAME	IMS Environmental & Engineering
2. DRILLING CONTRACTOR	Southwest Engineering, Las Cruces, NM
3. PROJECT	Site Inspection, Area of Concern - D
4. LOCATION	Cannon Air Force Base, New Mexico
5. NAME OF DRILLER	Alex Sanchez
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 85
7. SIZES & TYPES OF DRILLING & SAMPLING EQUIPMENT	4-1/4" ID HSA, 3" Stainless Steel Split Spoon
8. HOLE LOCATION	1,238,184.5 North 805,275.7 East
9. SURFACE ELEVATION	4296.6' MSL
10. DATE STARTED	11-20-96
11. DATE COMPLETED	11-20-96
12. OVERBURDEN THICKNESS	>10 Feet
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	10.0 Feet
15. DEPTH GROUNDWATER ENCOUNTERED	NA
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE REC %
NA	NA	NA	NA	NA	NA	NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	Grouted	NA	NA	Praveen Srivastava

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 h
4296.6	0	Silty clay (CL), dark brown, moist, tree roots	HS = 0	NA	NA	2 7 12 11	Fill, N = 19, Rec = 2.0', HS Time = 11:58, No asbestos-like material observed
4295.6	1						
4294.6	2	Silty clay (CL), brown, with grey rock fragments, moist, plant roots	HS = 0	NA	NA	7 9 9 12	Fill, N = 18, Rec = 2.0', HS Time = 12:05, No asbestos-like material observed
4293.6	3						
4292.6	4		HS = 0	NA	NA	3 9	N = 19, Rec = 1.5, HS Time = 12:11, No asbestos-like material observed
4291.6	5						

HTW DRILLING LOG

PROJECT	INSPECTOR	HOLE NO.
Site Inspection, Area of Concern - D Cannon Air Force Base, New Mexico	Praveen Srivastav	SB-09
		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 h
						10	
		Silty sand (SM), light brown to pink, moist, reacts with HCl near the bottom of sample				10	
4290.6	6		HS = 0	NA	NA	4	N = 28, Rec = 2.0', HS Time = 12:16, No asbestos-like material observed
						12	
4289.6	7					16	
						12	
4288.6	8		HS = 0	NA	NA	23	N = 50+, Rec = 0.5', HS Time = 12:18, No asbestos-like material observed
						50	
4287.6	9						
4286.6	10						
							BOTTOM OF THE BORING
4285.6	11						
4284.6	12						
4283.6	13						
4282.6	14						

APPENDIX III

SAMPLE COLLECTION FIELD SHEETS

SAMPLE COLLECTION FIELD SHEET

SITE NAME AOC-D, Cannon AFB, NM PROJECT NO. ICA-2159

SAMPLE NO. CAN-D-SB08-07 ~~WELL~~ Boring NO. SB-08

DATE/TIME COLLECTED 11/20/96 10:20 PERSONNEL Mike Sondawan

SAMPLE METHOD AND DEPTH HSA 4 1/4 inch, 3" Split spoon Praveen Srivastava

SAMPLE MEDIA (Circle 1): (Soil) Sediment Sludge MS/MSD

SAMPLE SPLIT (Circle 1): Yes (No) SPLIT SAMPLE NUMBER

FIELD DUPLICATE (Circle 1): Yes (No) DUPLICATE SAMPLE NUMBER

Sample Container	Preservative	Analysis Requested
Glass Jar, 250ml	None	VOCs (8260)
Glass Jar 250ml	None	SVOCs (8270), TRPH (9071)
Glass Jar 250ml	None	TAL metals (6010/7000)

DESCRIPTION:

DEPTH:	DESCRIPTION:
7 feet	Silty sand (SM), loose light red to red with caliche

Comments

SAMPLE COLLECTION FIELD SHEET

SITE NAME AOC-D, Cannon AFB, NM PROJECT NO. FCA-2159

SAMPLE NO. CAN-D-SB08-15 ~~WELL~~ Boring NO. SB-08

DATE/TIME COLLECTED 11/20/97 10:50 PERSONNEL Praveen Srivastava

SAMPLE METHOD AND DEPTH 4 1/4 inch HSA, 3" Split Spoon

SAMPLE MEDIA (Circle 1): (Soil) Sediment Sludge MS/MSD

SAMPLE SPLIT (Circle 1): Yes (No) SPLIT SAMPLE NUMBER

FIELD DUPLICATE (Circle 1): Yes (No) DUPLICATE SAMPLE NUMBER

Sample Container	Preservative	Analysis Requested
Glass Jar, 250 ml	None	VOCs 8260
Glass Jar 250 ml	None	SVOCs (8270), TRPH (9071)
Glass Jar 250 ml	None	TAL Metals

DESCRIPTION:

DEPTH:	DESCRIPTION:
15 feet	Light brown, friable silty sand

Comments

SAMPLE COLLECTION FIELD SHEET

SITE NAME AOC-D, Cannon AFB, NM PROJECT NO. ICA-2159

SAMPLE NO. CAN-D-SB08-25 ~~WELL~~ Boring NO. SB-08

DATE/TIME COLLECTED 11/20/97 11:30 PERSONNEL Praveen Srivastava

SAMPLE METHOD AND DEPTH 4 1/4 inch HSA, 3" Split Spoon

SAMPLE MEDIA (Circle 1): (Soil) Sediment Sludge MS/MSD

SAMPLE SPLIT (Circle 1): Yes (No) SPLIT SAMPLE NUMBER

FIELD DUPLICATE (Circle 1): Yes (No) DUPLICATE SAMPLE NUMBER

Sample Container	Preservative	Analysis Requested
Glass Jar, 250 ml	None	VOCs 8260
Glass Jar 250 ml	None	SVOCs 8270, TRPH 9071
Glass Jar 250 ml	None	TAL metals

DESCRIPTION:

DEPTH:	DESCRIPTION:
25 feet	Dark brown silty sand

Comments

APPENDIX IV

CHAIN OF CUSTODY FORMS

Inchcape Testing Services Environmental Laboratories 1089 East Collins Blvd., #100 Richardson, TX 75081 (972) 238-5591 CHAIN OF CUSTODY RECORD

Report to:		Invoice to	
Company:	IMS	Company:	Same
Address:	115 Metro Park Rochester, NY 14623	Address:	
Contact:	Praveen Srivastava	Contact:	
Phone:	716-427-0690	Phone:	
Fax:	716-427-0012	PO/SO #:	

Lab use only
Due Date:
Temp. of coolers when received (C°): 1 2 3 4 5
Custody Seal N Y
Intact N Y
Screened For Radioactivity ☒

Sampler's Name: Praveen Srivastava
Sampler's Signature: Praveen Srivastava

Proj. No.: KA-2159
Project Name: AOC-D, Cannon AFB, NM

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml P/O	VOCs 8260	SVOCs 8270	Metals TAL 6010/7000 Series	TRPH 9071/418.1	Lab Sample ID (Lab Use Only)
S	11/20/96	10:20		X	CAN-D-SB08-07	1		3	X	X	X	X	13386-1
S	11/20/96	10:50		X	CAN-D-SB08-15	1		3	X	X	X	X	2
S	11/20/96	11:30		X	CAN-D-SB08-25	1		3	X	X	X	X	3
					LB1								4
					BS1								5
				BD	~~BD1~~ SB08-07 MS1								6
					↓ BD1								7

Turn around time: ☐ Priority 1 or Standard ☐ Priority 2 or 50% ☐ Priority 3 or 100% ☐ Priority 4 ERS *

* BTEX (602/8020), TPH (418.1 or 8015), VOLATILES (624/8240), IGNITABILITY, TOTAL LEAD (6010)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Praveen Srivastava	11/20/96	17:00	B. Wilson	11/21/96	1045
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Remarks: Fed Exp. 232971331 5

Client's delivery of samples constitutes acceptance of Inchcape/ITS-Dallas terms and conditions contained in the Price Schedule.

[1] Matrix: WW - Wastewater, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - Sludge, O - Oil
[2] Container: VOA - 40 ml vial, A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other

Inchcape cannot accept verbal changes. Please Fax written changes to 972-238-5592

ORIGINAL

OFFICE USE ONLY

Environmental Laboratories 1069 East Collins Blvd. # [illegible] Richardson, TX [illegible] (972) 238-5591 CHAIN OF CUSTODY RECORD

Report to:
Company: IMS
Address: 115 metro Park
Rochester, NY 14623
Contact: P. Srivastava
Phone: 716-427-0690
Fax: 716-427-0012

Invoice to
Company: Same
Address:
Contact:
Phone:
PO/SO #:

Lab use only
Due Date:
Temp. of coolers when received (C°): 1 2 3 4 5
Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Sampler's Name: Praveen Srivastava
Sampler's Signature:

Proj. No.: ICA2159
Project Name: ADC-D, Cannon AFB, NM

ANALYSIS REQUESTED

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No./Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	Asbestos Identification PLM	PCM									Lab Sample ID (Lab Use Only)
	11/20/96	9:58		X	CAN-D-SB08-AB01 PS					X										
	11/20/96	9:45		X	CAN-D-AB01					X										
	11/19/96	12:45	X		CAN-D-AS-01 (#A614275)						X									
	11/19/96	15:45	X		CAN-D-AS-02 (#A703296)						X									
	11/19/96	17:00	X		CAN-D-AS-03 (#A02009479)						X									

Turn around time: ☐ Priority 1 or Standard ☐ Priority 2 or 50% ☐ Priority 3 or 100% ☐ Priority 4 ERS *

* BTEX (602/8020), TPH (418.1 or 8015), VOLATILES (624/8240), IGNITABILITY, TOTAL LEAD (6010)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Praveen Srivastava	11/20/96	17:00			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
			[illegible]	11/22/96	

Remarks

Client's delivery of samples constitutes acceptance of Inchcape/ITS-Dallas terms and conditions contained in the Price Schedule.

[1] Matrix: WW - Wastewater, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - Sludge, O - Oil
[2] Container: VOA - 40 ml vial, A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other

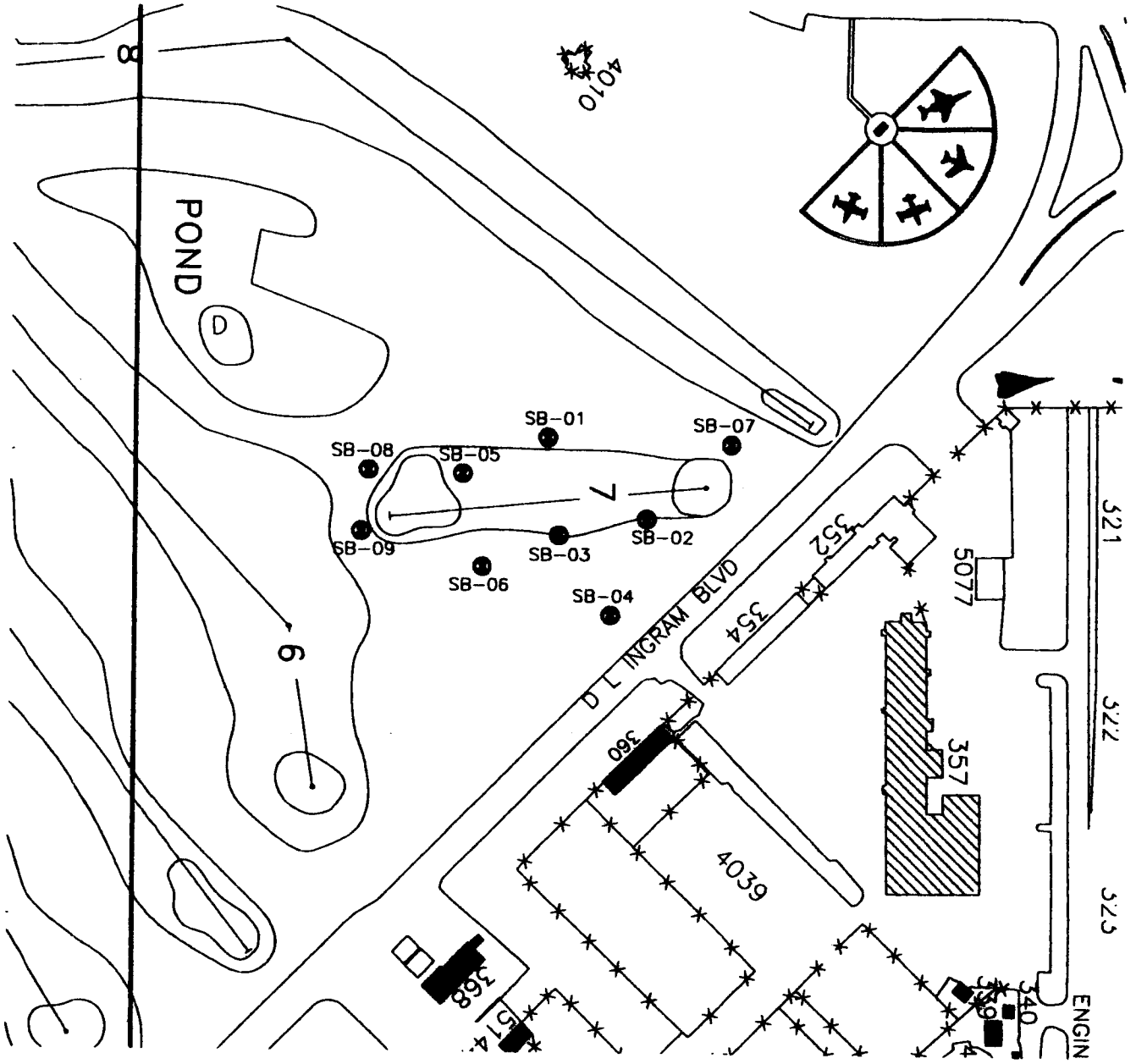
Inchcape cannot accept verbal changes. Please Fax written changes to 972-238-5592

OFFICE USE ONLY

7173

APPENDIX V

LOCATION SURVEY MAP



SOIL BORING LOCATIONS
AOC-D (HOLE #7)
CANNON AFB, NEW MEXICO

SB #	NORTHING	EASTING	ELEVATION
SB-01	1238301.810	805507.128	4297.798
SB-02	1238201.862	805628.831	4298.407
SB-03	1238180.923	805521.353	4297.408
SB-04	1238081.274	805585.380	4298.422
SB-05	1238256.434	805400.298	4296.895
SB-06	1238141.173	805425.158	4296.307
SB-07	1238294.657	805731.147	4302.233
SB-08	1238260.486	805284.151	4297.493
SB-09	1238184.537	805275.662	4296.588

SCALE: 1" = 200'
DATE: NOVEMBER, 1996

PREPARED BY

LYDICK

ENGINEERS & SURVEYORS
205 E. SECOND ST.
CLOVIS, N.M. 88101
(505)-762-3771

APPENDIX VI

ANALYTICAL RESULTS

- CHEMICAL RESULTS
- ASBESTOS RESULTS

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 972-238-5591
Fax 972-238-5592

CUSTOMER: IMS
PROJECT: ICA-2159 AOC-D, Cannon AFB, NM

REPORT NUMBER: D96-13386
SAMPLES RECEIVED: 21-November-1996

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 972-238-5591
Fax 972-238-5592

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(D96-13386)

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V. Volatile Organics Calibration Summary..... 142

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Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

CASE NARRATIVE

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 972-238-5591
Fax 972-238-5592

DATE RECEIVED: 21-NOV-1996

REPORT NUMBER: D96-13386
REPORT DATE: 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

CASE NARRATIVE SUMMARY

This is an ITS QC Level 3 report. Please find enclosed results and calibration summaries for the analysis of volatile organics and semivolatile organics. The calibration summaries for the metals analysis will follow under separate cover.

EPA Method 8260 Volatile Organics Analysis

Calibrations

For the continuing calibration, the following compounds were outside of the QC limits of ≤20%:

ITS2 11/25/96 08:50
- bromomethane (54.9%)
- chloroethane (36.7%)
- trichlorofluorethane (43.8%)
- acrylonitrile (79.5%)
- 2-butanone (27.8%)
- 2-hexanone (22.2%)
- 4-methyl-2-pentanone (24.5%)

Since all calibration check compounds were within QC limits, the calibration was accepted.

EPA Method 8270 Semivolatile Organics Analysis

Calibrations

For the continuing calibration, the following compounds were outside of the QC limits of ≤20%:

ITS4 11/25/96 11:52
- 2,4-dinitrophenol (21.2%)
- pyrene (39.6%)
- butyl benzyl phthalate (23.0%)
- benzo(g,h,i)perylene (26.4%)
- terphenyl-d14 (ss) (31.0%)
- 2-fluorophenol (ss) (26.3%)

ITS4 11/26/96 14:57
- N-nitrosodimethylamine (30.2%)

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 972-238-5591
Fax 972-238-5592

bis(2-chloroisopropyl)ether (24.3%)
hexachlorocyclopentadiene (28.3%)
2,4,5-trichlorophenol (21.7%)
2,4-dinitrophenol (27.4%)
4-nitrophenol (30.8%)
hexachlorobenzene (28.9%)
2,4,6-tribromophenol (ss) (31.5%)

Since all calibration check compounds were within QC limits, the calibration was accepted.

Matrix Spike Analysis

For the matrix spike of sample D96-13386-1, the matrix spike duplicate recovery for 4-nitrophenol was outside of QC limits. Also, the MS/MSD %RPD for 2,4-dinitrotoluene was outside of QC limits. Since the blank spike and blank spike duplicate analyses were within QC limits, the results were authorized.

Metals Analysis

Matrix Spike Analysis

For the matrix spike analysis of sample D96-13386-2, the matrix spike and matrix spike duplicate for barium, calcium, iron, potassium, magnesium, antimony, and thallium were outside of QC limits. Also, the matrix spike duplicate for arsenic was outside of QC limits. Since the laboratory control sample was within QC limits for all elements, the results were accepted.

No other issues were noted during the sample analysis for this task.

If you have any questions, please feel free to contact Mr. Keith Partin at (972) 238-5591.

Gregory K. Horton
Data Review

Inchcape Testing Services
Environmental Laboratories

JOB ID : D96-13386
CUSTOMER : IMS
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM

SAMPLE ID : D96-13386-1 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-07# N1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_TIC /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	26-NOV-1996	AB926-94
8270_TIC /1			TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F

SAMPLE ID : D96-13386-1 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-07# N1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
SOLID_TPER /1			SAB	27-NOV-1996	939066J
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

SAMPLE ID : D96-13386-2 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-15# N1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_S /1			RLR	25-NOV-1996	ITS2-936
8260_TIC /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	26-NOV-1996	AB926-94
8270_TIC /1			TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250

SAMPLE ID : D96-13386-2 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-15# N1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
SOLID_TPER /1			SAB	27-NOV-1996	939066J
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

SAMPLE ID : D96-13386-3 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-25# N1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_S /1			RLR	25-NOV-1996	ITS2-936
8260_TIC /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	26-NOV-1996	AB926-94
8270_TIC /1			TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250

SAMPLE ID : D96-13386-3 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-25# N1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
SOLID_TPER /1			SAB	27-NOV-1996	939066J
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

SAMPLE ID : D96-13386-4 DATE SAMPLED : 20-NOV-1996
ID MARKS : LABQC# LB1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_S /1			RLR	25-NOV-1996	ITS2-936
8260_TIC /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	25-NOV-1996	AB926-94

SAMPLE ID : D96-13386-4 DATE SAMPLED : 20-NOV-1996
ID MARKS : LABQC# LB1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8270_TIC /1			TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

JOB ID : D96-13386
CUSTOMER : IMS
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM

SAMPLE ID : D96-13386-5 DATE SAMPLED : 20-NOV-1996
ID MARKS : LABQC# BS1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_S /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F

SAMPLE ID : D96-13386-5 DATE SAMPLED : 20-NOV-1996
ID MARKS : LABQC# BS1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

SAMPLE ID : D96-13386-6 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-07# MS1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_S /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250

SAMPLE ID : D96-13386-6 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-07# MS1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

SAMPLE ID : D96-13386-7 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-07# SD1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
8260IRPS /1	RLR	25-NOV-1996	RLR	25-NOV-1996	ITS2-936
8260_S /1			RLR	25-NOV-1996	ITS2-936
8270_IRP_S /1	PSS	22-NOV-1996	TCR	25-NOV-1996	AB926-94
M_AG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AL_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_AS_T_S_F /1	CEL	25-NOV-1996	MPE	4-DEC-1996	15250F
M_BA_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_BE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CA_T_S_I /1	CEL	25-NOV-1996	JLW	24-DEC-1996	15250
M_CD_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CO_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CR_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_CU_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_FE_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_HG_T_S_V /1	SPF	25-NOV-1996	CGJ	26-NOV-1996	HG-3137
M_K__T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250

SAMPLE ID : D96-13386-7 DATE SAMPLED : 20-NOV-1996
ID MARKS : SB08-07# SD1#(0-0')

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
M_MG_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_MN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_NA_T_S_I /1	CEL	25-NOV-1996	GGD	28-NOV-1996	15250
M_NI_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_PB_T_S_F /1	CEL	25-NOV-1996	MPE	5-DEC-1996	15250F
M_SB_T_S_I /1	SPF	25-NOV-1996	JO	3-DEC-1996	15259
M_SE_T_S_F /1	CEL	25-NOV-1996	AH	3-DEC-1996	15250F
M_TL_T_S_F /1	CEL	25-NOV-1996	AH	29-NOV-1996	15250F
M_V__T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
M_ZN_T_S_I /1	CEL	25-NOV-1996	GGD	26-NOV-1996	15250
TPH_COR_S /1	PSS	25-NOV-1996	MTR	26-NOV-1996	AB948-10

JOB ID : D96-13386
CUSTOMER : IMS
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM

ANALYSIS	DESCRIPTION
8260IRPS	IRPIMS Volatiles, GCMS, 258 App 1, 5 ml Purge
8260_TIC	Tentatively Identified Compounds - VOA
8270_IRP_S	ABN, IRPIMS, Full List, Solid
8270_TIC	Tentatively Identified Compounds - ABN
M_AG_T_S_I	Silver, Total, Solid, by ICP
M_AL_T_S_I	Aluminum, Total, Solid, by ICP
M_AS_T_S_F	Arsenic, Total, Solid, By GFAA
M_BA_T_S_I	Barium, Total, Solid, by ICP
M_BE_T_S_I	Beryllium Total, Solid, by ICP
M_CA_T_S_I	Calcium, Total, Solid, by ICP
M_CD_T_S_I	Cadmium, Total, Solid, by ICP
M_CO_T_S_I	Cobalt, Total, Solid, by ICP
M_CR_T_S_I	Chromium, Total, Solid, by ICP
M_CU_T_S_I	Copper, Total, Solid, by ICP
M_FE_T_S_I	Iron, Total, Solid, by ICP
M_HG_T_S_V	Mercury, Total, Solid, by GVAA
M_K__T_S_I	Potassium, Total, Solid , by ICP
M_MG_T_S_I	Magnesium, Total, Solid, by ICP
M_MN_T_S_I	Manganese, Total, Solid, by ICP
M_NA_T_S_I	Sodium, Total, Solid, by ICP
M_NI_T_S_I	Nickel, Total, Solid, by ICP
M_PB_T_S_F	Lead, Total, Solid, by GFAA
M_SB_T_S_I	Antimony, Total, Solid, by ICP
M_SE_T_S_F	Selenium, Total, Solid, by GFAA
M_TL_T_S_F	Thallium, Total, Solid, by GFAA
M_V__T_S_I	Vanadium, Total, Solid, by ICP

JOB ID : D96-13386
CUSTOMER : IMS
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM

ANALYSIS	DESCRIPTION
M_ZN_T_S_I	Zinc, Total, Solid, by ICP
SOLID_TPER	Total Solids, Soil/Sludge, %
TPH_COR_S	TRPH for US Army Corps of Engineers
8260_S	Volatiles, GCMS, 258 App 1, 5 ml Purge

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

CHAIN OF CUSTODY

Inchcape Testing Services Environmental Laboratories 1089 East Collins Blvd., #100 Richardson, TX 75081 (972) 238-5591

CHAIN OF CUSTODY RECORD

Report to:
Company: IMS
Address: 115 Metro Park
Rochester, NY 14623
Contact: Praveen Srivastava
Phone: 716-427-0690
Fax: 716-427-0012

Invoice to
Company: Same
Address:
Contact:
Phone:
PO/SO #:

Sampler's Name: Praveen Srivastava
Sampler's Signature: Praveen Srivastava

Proj. No.: KA-2159
Project Name: AOC-D, Cannon AFB, NM

ANALYSIS REQUESTED

Lab use only
Due Date:
Temp. of coolers when received (C°): 1 2 3 4 5
Custody Seal N Y
Intact N Y
Screened For Radioactivity ☒

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 LL	250 ml	P/O	VOCs 8260	SVOCs 8270	Metals TAL 6010/7000 Series	TRPH 9071/418.1							Lab Sample ID (Lab Use Only)
S	11/20/96	10:20		X	CAN-D-SB08-07	1		3		X	X	X	X							13386-1
S	11/20/96	10:50		X	CAN-D-SB08-15	1		3		X	X	X	X							2
S	11/20/96	11:30		X	CAN-D-SB08-25	1		3		X	X	X	X							3
					LB1															4
					BS1															5
				BW	~~BD~~ SB08-07 MS1															6
					1 ↓ SD1															7

Turn around time: ☐ Priority 1 or (Standard) ☐ Priority 2 or 50% ☐ Priority 3 or 100% ☐ Priority 4 ERS *

* BTEX (602/8020), TPH (418.1 or 8015), VOLATILES (624/8240), IGNITABILITY, TOTAL LEAD (6010)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Praveen Srivastava	11/20/96	17:00	B. Williams	11/21/96	1045
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Remarks: Fed Exp. 232971331 5

Client's delivery of samples constitutes acceptance of Inchcape/ITS-Dallas terms and conditions contained in the Price Schedule.

[1] Matrix: WW - Wastewater, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - Sludge, O - Oil
[2] Container: VOA - 40 ml vial, A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other

Inchcape cannot accept verbal changes. Please Fax written changes to 972-238-5592

OFFICE USE ONLY

ORIGINAL

Inchcape Testing Services
NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

ANALYTICAL RESULTS

Inchcape Testing Services
Environmental Laboratories

ANALYTICAL REPORT

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM

Included in this data package are the analytical results for the sample group which you have submitted to Inchcape Testing Services for analysis. These results are representative of the samples as received by the laboratory.

The information contained herein has undergone extensive review and is deemed accurate and complete. Sample analysis and quality control were performed in accordance with all applicable protocols. Please refrain from reproducing this report except in its entirety.

If you have any questions regarding this report and its associated materials please call your Project Manager at (972) 238-5591.

We appreciate the opportunity to serve you and look forward to providing continued service in the future.

Martin Jeffus
General Manager

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-1
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	0.0200 mg/Kg	< 0.0200 mg/Kg
Acrylonitrile	0.0050 mg/Kg	< 0.0050 mg/Kg
Benzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromochloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromoform	0.0050 mg/Kg	< 0.0050 mg/Kg
Carbon disulfide	0.0050 mg/Kg	< 0.0050 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	< 0.0050 mg/Kg
Chlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloroform	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	< 0.0050 mg/Kg

REPORT NUMBER : D96-13386-1
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	
2-Chloroethylvinyl ether	0.0100 mg/Kg	<	0.0100 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	<	0.0050 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	<	0.0250 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	<	0.0050 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	<	0.0050 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	<	0.0050 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	<	0.0050 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	<	0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	<	0.0050 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	<	0.0050 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	<	0.0050 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	<	0.0050 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	<	0.0050 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	<	0.0050 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	<	0.0050 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	<	0.0050 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	<	0.0050 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	<	0.0050 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	<	0.0050 mg/Kg
Ethylbenzene	0.0050 mg/Kg	<	0.0050 mg/Kg
2-Hexanone	0.0500 mg/Kg	<	0.0500 mg/Kg
Bromomethane	0.0050 mg/Kg	<	0.0050 mg/Kg
Chloromethane	0.0050 mg/Kg	<	0.0050 mg/Kg
Dibromomethane	0.0050 mg/Kg	<	0.0050 mg/Kg
2-Butanone	0.100 mg/Kg	<	0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	<	0.0050 mg/Kg

REPORT NUMBER : D96-13386-1
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Toluene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	< 0.0020 mg/Kg
m,p-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
o-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromofluoromethane (SS)		0.047 mg/Kg
Toluene-d8 (SS)		0.054 mg/Kg
Bromofluorobenzene (SS)		0.051 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-1
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
QC BATCH NO : ITS2-936

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		VOA	10 ug/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-1
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	< 0.330 mg/Kg
Acenaphthylene	0.330 mg/Kg	< 0.330 mg/Kg
Anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Benzyl alcohol	0.650 mg/Kg	< 0.650 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	< 0.330 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-1
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Carbazole	0.330 mg/Kg	< 0.330 mg/Kg
4-Chloroaniline	0.330 mg/Kg	< 0.330 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg
Chrysene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenzofuran	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	< 0.330 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
Fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Fluorene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachloroethane	0.330 mg/Kg	< 0.330 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Isophorone	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-1
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
Naphthalene	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
3-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
4-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
Nitrobenzene	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	< 0.330 mg/Kg
Phenanthrene	0.330 mg/Kg	< 0.330 mg/Kg
Pyrene	0.330 mg/Kg	< 0.330 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Benzoic acid	0.800 mg/Kg	< 0.800 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	< 0.650 mg/Kg
2-Chlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	< 1.65 mg/Kg
2-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitrophenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Nitrophenol	0.800 mg/Kg	< 0.800 mg/Kg
Pentachlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
Phenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-1
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.36 mg/Kg
2-Fluorobiphenyl (SS)		1.17 mg/Kg
Terphenyl-d14 (SS)		1.12 mg/Kg
Phenol-d6 (SS)		2.34 mg/Kg
2-Fluorophenol (SS)		1.76 mg/Kg
2,4,6-Tribromophenol (SS)		3.10 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-1
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 625/8270B /1
QC BATCH NO : AB926-94

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
Phenol, 2-fluoro-	3.08	ABN	2.7 mg/Kg
Cyclodecane	10.23	ABN	0.61 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	10.0 mg/Kg	< 10.0 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

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REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	2960 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	0.509 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	43.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-1 PAGE 2

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Calcium	/1	50.0 mg/Kg	84200 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250			
Cadmium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Cobalt	/1	2.00 mg/Kg	2.63 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Chromium	/1	2.00 mg/Kg	3.92 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Copper	/1	1.00 mg/Kg	3.14 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Iron	/1	10.0 mg/Kg	2120 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Mercury	/1	0.120 mg/Kg	< 0.120 mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137			

REPORT NUMBER : D96-13386-1 PAGE 3

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Potassium	/1	100 mg/Kg	1010 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250			
Magnesium	/1	10.0 mg/Kg	2830 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Manganese	/1	1.00 mg/Kg	70.0 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Sodium	/1	100 mg/Kg	127 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250			
Nickel	/1	2.00 mg/Kg	5.10 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Lead	/1	1.0 mg/Kg	2.6 mg/Kg
Dilution Factor : 5 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F			
Antimony	/1	10.0 mg/Kg	< 10.0 mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259			

REPORT NUMBER : D96-13386-1

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	< 0.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	4.96 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	5.51 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-1
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	86.7 %
Analyzed using ASTM D2216 mod. on 27-NOV-1996 by SAB QC Batch No : 939066J		

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	0.0200 mg/Kg	< 0.0200 mg/Kg
Acrylonitrile	0.0050 mg/Kg	< 0.0050 mg/Kg
Benzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromochloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromoform	0.0050 mg/Kg	< 0.0050 mg/Kg
Carbon disulfide	0.0050 mg/Kg	< 0.0050 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	< 0.0050 mg/Kg
Chlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloroform	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	< 0.0050 mg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Chloroethylvinyl ether	0.0100 mg/Kg	< 0.0100 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	< 0.0250 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	< 0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
Ethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Hexanone	0.0500 mg/Kg	< 0.0500 mg/Kg
Bromomethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromomethane	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Butanone	0.100 mg/Kg	< 0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	< 0.0050 mg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Toluene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	< 0.0020 mg/Kg
m,p-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
o-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromofluoromethane (SS)		0.051 mg/Kg
Toluene-d8 (SS)		0.053 mg/Kg
Bromofluorobenzene (SS)		0.053 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
Acetone	20.0	µg/Kg	<	20.0	µg/Kg
Acrylonitrile	5.00	µg/Kg	<	5.00	µg/Kg
Benzene	5.00	µg/Kg	<	5.00	µg/Kg
Bromobenzene	5.00	µg/Kg	<	5.00	µg/Kg
Bromochloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Bromodichloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Bromoform	5.00	µg/Kg	<	5.00	µg/Kg
Carbon disulfide	5.00	µg/Kg	<	5.00	µg/Kg
Carbon tetrachloride	5.00	µg/Kg	<	5.00	µg/Kg
Chlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
Chloroethane	5.00	µg/Kg	<	5.00	µg/Kg
Chloroform	5.00	µg/Kg	<	5.00	µg/Kg
2-Chlorotoluene	5.00	µg/Kg	<	5.00	µg/Kg
4-Chlorotoluene	5.00	µg/Kg	<	5.00	µg/Kg
2-Chloroethylvinyl ether	10.0	µg/Kg	<	10.0	µg/Kg
Dibromochloromethane	5.00	µg/Kg	<	5.00	µg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
1,2-Dibromo-3-chloropropane	25.0	µg/Kg	<	25.0	µg/Kg
1,2-Dibromoethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,3-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,4-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,4-Dichloro-2-butene	100	µg/Kg	<	100	µg/Kg
1,1-Dichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,1-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
cis-1,2-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,2-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
2,2-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
1,1-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
1,3-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
cis-1,3-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,3-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
Ethylbenzene	5.00	µg/Kg	<	5.00	µg/Kg
2-Hexanone	50.0	µg/Kg	<	50.0	µg/Kg
Bromomethane	5.00	µg/Kg	<	5.00	µg/Kg
Chloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Dibromomethane	5.00	µg/Kg	<	5.00	µg/Kg
2-Butanone	100	µg/Kg	<	100	µg/Kg
Iodomethane	5.00	µg/Kg	<	5.00	µg/Kg
Methylene chloride	5.00	µg/Kg	<	5.00	µg/Kg
4-Methyl-2-pentanone	100	µg/Kg	<	100	µg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	5.00 µg/Kg	< 5.00 µg/Kg
1,1,1,2-Tetrachloroethane	5.00 µg/Kg	< 5.00 µg/Kg
1,1,2,2-Tetrachloroethane	5.00 µg/Kg	< 5.00 µg/Kg
Tetrachloroethene	5.00 µg/Kg	< 5.00 µg/Kg
Toluene	5.00 µg/Kg	< 5.00 µg/Kg
1,2,3-Trichlorobenzene	5.00 µg/Kg	< 5.00 µg/Kg
1,2,4-Trichlorobenzene	5.00 µg/Kg	< 5.00 µg/Kg
1,1,1-Trichloroethane	5.00 µg/Kg	< 5.00 µg/Kg
1,1,2-Trichloroethane	5.00 µg/Kg	< 5.00 µg/Kg
Trichloroethene	5.00 µg/Kg	< 5.00 µg/Kg
Trichlorofluoromethane	5.00 µg/Kg	< 5.00 µg/Kg
1,2,3-Trichloropropane	5.00 µg/Kg	< 5.00 µg/Kg
1,3,5-Trimethylbenzene	5.00 µg/Kg	< 5.00 µg/Kg
1,2,4-Trimethylbenzene	5.00 µg/Kg	< 5.00 µg/Kg
Vinyl acetate	50.0 µg/Kg	< 50.0 µg/Kg
Vinyl chloride	2.00 µg/Kg	< 2.00 µg/Kg
m,p-Xylene	5.00 µg/Kg	< 5.00 µg/Kg
o-Xylene	5.00 µg/Kg	< 5.00 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Dibromofluoromethane (SS)		101 %
Toluene-d8 (SS)		107 %
Bromofluorobenzene (SS)		105 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
QC BATCH NO : ITS2-936

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		VOA	10 ug/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	< 0.330 mg/Kg
Acenaphthylene	0.330 mg/Kg	< 0.330 mg/Kg
Anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Benzyl alcohol	0.650 mg/Kg	< 0.650 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	< 0.330 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Carbazole	0.330 mg/Kg	< 0.330 mg/Kg
4-Chloroaniline	0.330 mg/Kg	< 0.330 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg
Chrysene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenzofuran	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	< 0.330 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
Fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Fluorene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachloroethane	0.330 mg/Kg	< 0.330 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Isophorone	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
Naphthalene	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
3-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
4-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
Nitrobenzene	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	< 0.330 mg/Kg
Phenanthrene	0.330 mg/Kg	< 0.330 mg/Kg
Pyrene	0.330 mg/Kg	< 0.330 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Benzoic acid	0.800 mg/Kg	< 0.800 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	< 0.650 mg/Kg
2-Chlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	< 1.65 mg/Kg
2-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitrophenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Nitrophenol	0.800 mg/Kg	< 0.800 mg/Kg
Pentachlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
Phenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-2
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.20 mg/Kg
2-Fluorobiphenyl (SS)		1.15 mg/Kg
Terphenyl-d14 (SS)		1.07 mg/Kg
Phenol-d6 (SS)		2.34 mg/Kg
2-Fluorophenol (SS)		1.64 mg/Kg
2,4,6-Tribromophenol (SS)		3.11 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 625/8270B /1
QC BATCH NO : AB926-94

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
Phenol, 2-fluoro-	3.08	ABN	3.0 mg/Kg
Cyclodecane	10.23	ABN	0.67 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	10.0 mg/Kg	< 10.0 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	1920 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	1.42 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	206 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-2 PAGE 2

TOTAL METALS						
TEST REQUESTED		DETECTION LIMIT		RESULTS		
Calcium	/1	500	mg/Kg		277000	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250						
Cadmium	/1	2.00	mg/Kg	<	2.00	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Cobalt	/1	2.00	mg/Kg		4.48	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Chromium	/1	2.00	mg/Kg	<	2.00	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Copper	/1	1.00	mg/Kg		2.52	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Iron	/1	10.0	mg/Kg		1590	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Mercury	/1	0.120	mg/Kg	<	0.120	mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137						

REPORT NUMBER : D96-13386-2

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Potassium	/1	100 mg/Kg	404 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250			
Magnesium	/1	10.0 mg/Kg	5830 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Manganese	/1	1.00 mg/Kg	78.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Sodium	/1	100 mg/Kg	147 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250			
Nickel	/1	2.00 mg/Kg	3.53 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Lead	/1	0.2 mg/Kg	1.2 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F			
Antimony	/1	10.0 mg/Kg	< 10.0 mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259			

REPORT NUMBER : D96-13386-2 PAGE 4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	< 0.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	10.8 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	4.05 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-2
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-15#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	95.2 %
Analyzed using ASTM D2216 mod. on 27-NOV-1996 by SAB QC Batch No : 939066J		

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-3
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	
Acetone	0.0200 mg/Kg	<	0.0200 mg/Kg
Acrylonitrile	0.0050 mg/Kg	<	0.0050 mg/Kg
Benzene	0.0050 mg/Kg	<	0.0050 mg/Kg
Bromobenzene	0.0050 mg/Kg	<	0.0050 mg/Kg
Bromochloromethane	0.0050 mg/Kg	<	0.0050 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	<	0.0050 mg/Kg
Bromoform	0.0050 mg/Kg	<	0.0050 mg/Kg
Carbon disulfide	0.0050 mg/Kg	<	0.0050 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	<	0.0050 mg/Kg
Chlorobenzene	0.0050 mg/Kg	<	0.0050 mg/Kg
Chloroethane	0.0050 mg/Kg	<	0.0050 mg/Kg
Chloroform	0.0050 mg/Kg	<	0.0050 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	<	0.0050 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	<	0.0050 mg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Chloroethylvinyl ether	0.0100 mg/Kg	< 0.0100 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	< 0.0250 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	< 0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
Ethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Hexanone	0.0500 mg/Kg	< 0.0500 mg/Kg
Bromomethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromomethane	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Butanone	0.100 mg/Kg	< 0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	< 0.0050 mg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Toluene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	< 0.0020 mg/Kg
m,p-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
o-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromofluoromethane (SS)		0.049 mg/Kg
Toluene-d8 (SS)		0.053 mg/Kg
Bromofluorobenzene (SS)		0.053 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-3
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
Acetone	20.0	µg/Kg	<	20.0	µg/Kg
Acrylonitrile	5.00	µg/Kg	<	5.00	µg/Kg
Benzene	5.00	µg/Kg	<	5.00	µg/Kg
Bromobenzene	5.00	µg/Kg	<	5.00	µg/Kg
Bromochloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Bromodichloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Bromoform	5.00	µg/Kg	<	5.00	µg/Kg
Carbon disulfide	5.00	µg/Kg	<	5.00	µg/Kg
Carbon tetrachloride	5.00	µg/Kg	<	5.00	µg/Kg
Chlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
Chloroethane	5.00	µg/Kg	<	5.00	µg/Kg
Chloroform	5.00	µg/Kg	<	5.00	µg/Kg
2-Chlorotoluene	5.00	µg/Kg	<	5.00	µg/Kg
4-Chlorotoluene	5.00	µg/Kg	<	5.00	µg/Kg
2-Chloroethylvinyl ether	10.0	µg/Kg	<	10.0	µg/Kg
Dibromochloromethane	5.00	µg/Kg	<	5.00	µg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
1,2-Dibromo-3-chloropropane	25.0	µg/Kg	<	25.0	µg/Kg
1,2-Dibromoethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,3-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,4-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,4-Dichloro-2-butene	100	µg/Kg	<	100	µg/Kg
1,1-Dichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,1-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
cis-1,2-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,2-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
2,2-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
1,1-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
1,3-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
cis-1,3-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,3-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
Ethylbenzene	5.00	µg/Kg	<	5.00	µg/Kg
2-Hexanone	50.0	µg/Kg	<	50.0	µg/Kg
Bromomethane	5.00	µg/Kg	<	5.00	µg/Kg
Chloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Dibromomethane	5.00	µg/Kg	<	5.00	µg/Kg
2-Butanone	100	µg/Kg	<	100	µg/Kg
Iodomethane	5.00	µg/Kg	<	5.00	µg/Kg
Methylene chloride	5.00	µg/Kg	<	5.00	µg/Kg
4-Methyl-2-pentanone	100	µg/Kg	<	100	µg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
Styrene	5.00	µg/Kg	<	5.00	µg/Kg
1,1,1,2-Tetrachloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,1,2,2-Tetrachloroethane	5.00	µg/Kg	<	5.00	µg/Kg
Tetrachloroethene	5.00	µg/Kg	<	5.00	µg/Kg
Toluene	5.00	µg/Kg	<	5.00	µg/Kg
1,2,3-Trichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,2,4-Trichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,1,1-Trichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,1,2-Trichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
Trichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
Trichlorofluoromethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2,3-Trichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
1,3,5-Trimethylbenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,2,4-Trimethylbenzene	5.00	µg/Kg	<	5.00	µg/Kg
Vinyl acetate	50.0	µg/Kg	<	50.0	µg/Kg
Vinyl chloride	2.00	µg/Kg	<	2.00	µg/Kg
m,p-Xylene	5.00	µg/Kg	<	5.00	µg/Kg
o-Xylene	5.00	µg/Kg	<	5.00	µg/Kg

QUALITY CONTROL DATA			
SURROGATE COMPOUND		SPIKE RECOVERED	
Dibromofluoromethane (SS)		98.9	%
Toluene-d8 (SS)		106	%
Bromofluorobenzene (SS)		105	%

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-3
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
QC BATCH NO : ITS2-936

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		VOA	10 ug/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT NUMBER : D96-13386-3
REPORT DATE : 31-DEC-1996

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ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	< 0.330 mg/Kg
Acenaphthylene	0.330 mg/Kg	< 0.330 mg/Kg
Anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Benzyl alcohol	0.650 mg/Kg	< 0.650 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	< 0.330 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Carbazole	0.330 mg/Kg	< 0.330 mg/Kg
4-Chloroaniline	0.330 mg/Kg	< 0.330 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg
Chrysene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenzofuran	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	< 0.330 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
Fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Fluorene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachloroethane	0.330 mg/Kg	< 0.330 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Isophorone	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
Naphthalene	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
3-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
4-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
Nitrobenzene	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	< 0.330 mg/Kg
Phenanthrene	0.330 mg/Kg	< 0.330 mg/Kg
Pyrene	0.330 mg/Kg	< 0.330 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Benzoic acid	0.800 mg/Kg	< 0.800 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	< 0.650 mg/Kg
2-Chlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	< 1.65 mg/Kg
2-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitrophenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Nitrophenol	0.800 mg/Kg	< 0.800 mg/Kg
Pentachlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
Phenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-3
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.20 mg/Kg
2-Fluorobiphenyl (SS)		1.17 mg/Kg
Terphenyl-d14 (SS)		1.11 mg/Kg
Phenol-d6 (SS)		2.28 mg/Kg
2-Fluorophenol (SS)		1.49 mg/Kg
2,4,6-Tribromophenol (SS)		3.21 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-3
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 625/8270B /1
QC BATCH NO : AB926-94

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
Phenol, 2-fluoro-	3.08	ABN	3.3 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT DATE : 31-DEC-1996

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ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	10.0 mg/Kg	< 10.0 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	7710 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	0.679 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	81.3 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-3 PAGE 2

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Calcium	/1	50.0 mg/Kg	7610 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250			
Cadmium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Cobalt	/1	2.00 mg/Kg	3.17 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Chromium	/1	2.00 mg/Kg	5.97 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Copper	/1	1.00 mg/Kg	5.86 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Iron	/1	10.0 mg/Kg	7060 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Mercury	/1	0.120 mg/Kg	< 0.120 mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137			

REPORT NUMBER : D96-13386-3 PAGE 3

TOTAL METALS					
TEST REQUESTED		DETECTION LIMIT		RESULTS	
Potassium	/1	100	mg/Kg	2460	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250					
Magnesium	/1	10.0	mg/Kg	2010	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Manganese	/1	1.00	mg/Kg	45.0	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Sodium	/1	100	mg/Kg	152	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250					
Nickel	/1	2.00	mg/Kg	8.59	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Lead	/1	1.0	mg/Kg	7.6	mg/Kg
Dilution Factor : 5 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F					
Antimony	/1	10.0	mg/Kg	< 10.0	mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259					

REPORT NUMBER : D96-13386-3 PAGE 4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	< 0.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	11.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	28.4 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-3
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-25#
: N1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	93.2 %
Analyzed using ASTM D2216 mod. on 27-NOV-1996 by SAB QC Batch No : 939066J		

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	0.0200 mg/Kg	< 0.0200 mg/Kg
Acrylonitrile	0.0050 mg/Kg	< 0.0050 mg/Kg
Benzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromochloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Bromoform	0.0050 mg/Kg	< 0.0050 mg/Kg
Carbon disulfide	0.0050 mg/Kg	< 0.0050 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	< 0.0050 mg/Kg
Chlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloroform	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	< 0.0050 mg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Chloroethylvinyl ether	0.0100 mg/Kg	< 0.0100 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	< 0.0250 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	< 0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	< 0.0050 mg/Kg
Ethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Hexanone	0.0500 mg/Kg	< 0.0500 mg/Kg
Bromomethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Chloromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromomethane	0.0050 mg/Kg	< 0.0050 mg/Kg
2-Butanone	0.100 mg/Kg	< 0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	< 0.0050 mg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	< 0.0050 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Toluene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichloroethene	0.0050 mg/Kg	< 0.0050 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	< 0.0050 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	< 0.0050 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	< 0.0020 mg/Kg
m,p-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
o-Xylene	0.0050 mg/Kg	< 0.0050 mg/Kg
Dibromofluoromethane (SS)		0.051 mg/Kg
Toluene-d8 (SS)		0.051 mg/Kg
Bromofluorobenzene (SS)		0.051 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
Acetone	20.0	µg/Kg	<	20.0	µg/Kg
Acrylonitrile	5.00	µg/Kg	<	5.00	µg/Kg
Benzene	5.00	µg/Kg	<	5.00	µg/Kg
Bromobenzene	5.00	µg/Kg	<	5.00	µg/Kg
Bromochloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Bromodichloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Bromoform	5.00	µg/Kg	<	5.00	µg/Kg
Carbon disulfide	5.00	µg/Kg	<	5.00	µg/Kg
Carbon tetrachloride	5.00	µg/Kg	<	5.00	µg/Kg
Chlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
Chloroethane	5.00	µg/Kg	<	5.00	µg/Kg
Chloroform	5.00	µg/Kg	<	5.00	µg/Kg
2-Chlorotoluene	5.00	µg/Kg	<	5.00	µg/Kg
4-Chlorotoluene	5.00	µg/Kg	<	5.00	µg/Kg
2-Chloroethylvinyl ether	10.0	µg/Kg	<	10.0	µg/Kg
Dibromochloromethane	5.00	µg/Kg	<	5.00	µg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
1,2-Dibromo-3-chloropropane	25.0	µg/Kg	<	25.0	µg/Kg
1,2-Dibromoethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,3-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
1,4-Dichlorobenzene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,4-Dichloro-2-butene	100	µg/Kg	<	100	µg/Kg
1,1-Dichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichloroethane	5.00	µg/Kg	<	5.00	µg/Kg
1,1-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
cis-1,2-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,2-Dichloroethene	5.00	µg/Kg	<	5.00	µg/Kg
1,2-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
2,2-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
1,1-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
1,3-Dichloropropane	5.00	µg/Kg	<	5.00	µg/Kg
cis-1,3-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
trans-1,3-Dichloropropene	5.00	µg/Kg	<	5.00	µg/Kg
Ethylbenzene	5.00	µg/Kg	<	5.00	µg/Kg
2-Hexanone	50.0	µg/Kg	<	50.0	µg/Kg
Bromomethane	5.00	µg/Kg	<	5.00	µg/Kg
Chloromethane	5.00	µg/Kg	<	5.00	µg/Kg
Dibromomethane	5.00	µg/Kg	<	5.00	µg/Kg
2-Butanone	100	µg/Kg	<	100	µg/Kg
Iodomethane	5.00	µg/Kg	<	5.00	µg/Kg
Methylene chloride	5.00	µg/Kg	<	5.00	µg/Kg
4-Methyl-2-pentanone	100	µg/Kg	<	100	µg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	5.00 µg/Kg	< 5.00 µg/Kg
1,1,1,2-Tetrachloroethane	5.00 µg/Kg	< 5.00 µg/Kg
1,1,2,2-Tetrachloroethane	5.00 µg/Kg	< 5.00 µg/Kg
Tetrachloroethene	5.00 µg/Kg	< 5.00 µg/Kg
Toluene	5.00 µg/Kg	< 5.00 µg/Kg
1,2,3-Trichlorobenzene	5.00 µg/Kg	< 5.00 µg/Kg
1,2,4-Trichlorobenzene	5.00 µg/Kg	< 5.00 µg/Kg
1,1,1-Trichloroethane	5.00 µg/Kg	< 5.00 µg/Kg
1,1,2-Trichloroethane	5.00 µg/Kg	< 5.00 µg/Kg
Trichloroethene	5.00 µg/Kg	< 5.00 µg/Kg
Trichlorofluoromethane	5.00 µg/Kg	< 5.00 µg/Kg
1,2,3-Trichloropropane	5.00 µg/Kg	< 5.00 µg/Kg
1,3,5-Trimethylbenzene	5.00 µg/Kg	< 5.00 µg/Kg
1,2,4-Trimethylbenzene	5.00 µg/Kg	< 5.00 µg/Kg
Vinyl acetate	50.0 µg/Kg	< 50.0 µg/Kg
Vinyl chloride	2.00 µg/Kg	< 2.00 µg/Kg
m,p-Xylene	5.00 µg/Kg	< 5.00 µg/Kg
o-Xylene	5.00 µg/Kg	< 5.00 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Dibromofluoromethane (SS)		101 %
Toluene-d8 (SS)		103 %
Bromofluorobenzene (SS)		103 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
QC BATCH NO : ITS2-936

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		VOA	10 ug/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	< 0.330 mg/Kg
Acenaphthylene	0.330 mg/Kg	< 0.330 mg/Kg
Anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	< 0.330 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Benzyl alcohol	0.650 mg/Kg	< 0.650 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	< 0.330 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	< 0.330 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Carbazole	0.330 mg/Kg	< 0.330 mg/Kg
4-Chloroaniline	0.330 mg/Kg	< 0.330 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	< 0.330 mg/Kg
Chrysene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	< 0.330 mg/Kg
Dibenzofuran	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	< 0.330 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	< 0.330 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	< 0.330 mg/Kg
Fluoranthene	0.330 mg/Kg	< 0.330 mg/Kg
Fluorene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	< 0.330 mg/Kg
Hexachloroethane	0.330 mg/Kg	< 0.330 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	< 0.330 mg/Kg
Isophorone	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	< 0.330 mg/Kg
Naphthalene	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
3-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
4-Nitroaniline	1.65 mg/Kg	< 1.65 mg/Kg
Nitrobenzene	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	< 0.330 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	< 0.330 mg/Kg
Phenanthrene	0.330 mg/Kg	< 0.330 mg/Kg
Pyrene	0.330 mg/Kg	< 0.330 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	< 0.330 mg/Kg
Benzoic acid	0.800 mg/Kg	< 0.800 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	< 0.650 mg/Kg
2-Chlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	< 1.65 mg/Kg
2-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Methylphenol	0.330 mg/Kg	< 0.330 mg/Kg
2-Nitrophenol	0.330 mg/Kg	< 0.330 mg/Kg
4-Nitrophenol	0.800 mg/Kg	< 0.800 mg/Kg
Pentachlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
Phenol	0.330 mg/Kg	< 0.330 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	< 0.330 mg/Kg

REPORT NUMBER : D96-13386-4
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.03 mg/Kg
2-Fluorobiphenyl (SS)		1.14 mg/Kg
Terphenyl-d14 (SS)		0.935 mg/Kg
Phenol-d6 (SS)		2.35 mg/Kg
2-Fluorophenol (SS)		3.27 mg/Kg
2,4,6-Tribromophenol (SS)		1.68 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 625/8270B /1
QC BATCH NO : AB926-94

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		ABN	0.33 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 10
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	100 mg/Kg	< 100 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-4
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: LB1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	< 20.0 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	< 0.500 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Calcium	/1	50.0 mg/Kg	< 50.0 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250			
Cadmium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Cobalt	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Chromium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Copper	/1	1.00 mg/Kg	< 1.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Iron	/1	10.0 mg/Kg	< 10.0 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Mercury	/1	0.120 mg/Kg	< 0.120 mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137			

REPORT NUMBER : D96-13386-4 PAGE 3

TOTAL METALS						
TEST REQUESTED		DETECTION LIMIT		RESULTS		
Potassium	/1	100	mg/Kg	<	100	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250						
Magnesium	/1	10.0	mg/Kg	<	10.0	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Manganese	/1	1.00	mg/Kg	<	1.00	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Sodium	/1	100	mg/Kg	<	100	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250						
Nickel	/1	2.00	mg/Kg	<	2.00	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250						
Lead	/1	0.2	mg/Kg	<	0.2	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F						
Antimony	/1	10.0	mg/Kg	<	10.0	mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259						

REPORT NUMBER : D96-13386-4 PAGE 4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	< 0.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	< 3.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-5
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: BS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	0.0200 mg/Kg	0.0566 mg/Kg
Acrylonitrile	0.0050 mg/Kg	0.0290 mg/Kg
Benzene	0.0050 mg/Kg	0.0388 mg/Kg
Bromobenzene	0.0050 mg/Kg	0.0440 mg/Kg
Bromochloromethane	0.0050 mg/Kg	0.0386 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	0.0620 mg/Kg
Bromoform	0.0050 mg/Kg	0.0481 mg/Kg
Carbon disulfide	0.0050 mg/Kg	0.0160 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	0.0530 mg/Kg
Chlorobenzene	0.0050 mg/Kg	0.0433 mg/Kg
Chloroethane	0.0050 mg/Kg	0.0239 mg/Kg
Chloroform	0.0050 mg/Kg	0.0422 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	0.0456 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	0.0456 mg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Chloroethylvinyl ether	0.0100 mg/Kg	0.0296 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	0.0506 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	0.0421 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	0.0428 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	0.0469 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	0.0481 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	0.0443 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	< 0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	0.0370 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	0.0509 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	0.0360 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	0.0359 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	0.0301 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	0.0411 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	0.0414 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	0.0359 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	0.0421 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	0.0474 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	0.0425 mg/Kg
Ethylbenzene	0.0050 mg/Kg	0.0231 mg/Kg
2-Hexanone	0.0500 mg/Kg	< 0.0500 mg/Kg
Bromomethane	0.0050 mg/Kg	0.0328 mg/Kg
Chloromethane	0.0050 mg/Kg	0.0178 mg/Kg
Dibromomethane	0.0050 mg/Kg	0.0441 mg/Kg
2-Butanone	0.100 mg/Kg	< 0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	0.0364 mg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	0.0470 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	0.0434 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	0.0496 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	0.0374 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	0.0424 mg/Kg
Toluene	0.0050 mg/Kg	0.0400 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	0.0485 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	0.0466 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	0.0439 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	0.0438 mg/Kg
Trichloroethene	0.0050 mg/Kg	0.0430 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	0.0388 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	0.0192 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	0.0424 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	0.0432 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	0.0390 mg/Kg
m,p-Xylene	0.0050 mg/Kg	0.0775 mg/Kg
o-Xylene	0.0050 mg/Kg	0.0444 mg/Kg
Dibromofluoromethane (SS)		0.052 mg/Kg
Toluene-d8 (SS)		0.050 mg/Kg
Bromofluorobenzene (SS)		0.047 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-5
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: BS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
Acetone	20.0	µg/Kg		56.6	µg/Kg
Acrylonitrile	5.00	µg/Kg	<	5.00	µg/Kg
Benzene	5.00	µg/Kg		38.8	µg/Kg
Bromobenzene	5.00	µg/Kg		44.0	µg/Kg
Bromochloromethane	5.00	µg/Kg		38.6	µg/Kg
Bromodichloromethane	5.00	µg/Kg		62.0	µg/Kg
Bromoform	5.00	µg/Kg		48.1	µg/Kg
Carbon disulfide	5.00	µg/Kg		16.0	µg/Kg
Carbon tetrachloride	5.00	µg/Kg	<	5.00	µg/Kg
Chlorobenzene	5.00	µg/Kg		43.3	µg/Kg
Chloroethane	5.00	µg/Kg		23.9	µg/Kg
Chloroform	5.00	µg/Kg		42.2	µg/Kg
2-Chlorotoluene	5.00	µg/Kg		45.6	µg/Kg
4-Chlorotoluene	5.00	µg/Kg		45.6	µg/Kg
2-Chloroethylvinyl ether	10.0	µg/Kg		29.6	µg/Kg
Dibromochloromethane	5.00	µg/Kg		50.6	µg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
1,2-Dibromo-3-chloropropane	25.0	µg/Kg		42.1	µg/Kg
1,2-Dibromoethane	5.00	µg/Kg		42.8	µg/Kg
1,2-Dichlorobenzene	5.00	µg/Kg		46.9	µg/Kg
1,3-Dichlorobenzene	5.00	µg/Kg		48.1	µg/Kg
1,4-Dichlorobenzene	5.00	µg/Kg		44.3	µg/Kg
trans-1,4-Dichloro-2-butene	100	µg/Kg	<	100	µg/Kg
1,1-Dichloroethane	5.00	µg/Kg		37.0	µg/Kg
1,2-Dichloroethane	5.00	µg/Kg		50.9	µg/Kg
1,1-Dichloroethene	5.00	µg/Kg		31.5	µg/Kg
cis-1,2-Dichloroethene	5.00	µg/Kg		35.9	µg/Kg
trans-1,2-Dichloroethene	5.00	µg/Kg		30.1	µg/Kg
1,2-Dichloropropane	5.00	µg/Kg		41.1	µg/Kg
2,2-Dichloropropane	5.00	µg/Kg		41.4	µg/Kg
1,1-Dichloropropene	5.00	µg/Kg		35.9	µg/Kg
1,3-Dichloropropane	5.00	µg/Kg		42.1	µg/Kg
cis-1,3-Dichloropropene	5.00	µg/Kg		47.4	µg/Kg
trans-1,3-Dichloropropene	5.00	µg/Kg		42.5	µg/Kg
Ethylbenzene	5.00	µg/Kg		23.1	µg/Kg
2-Hexanone	50.0	µg/Kg	<	50.0	µg/Kg
Bromomethane	5.00	µg/Kg		32.8	µg/Kg
Chloromethane	5.00	µg/Kg		17.8	µg/Kg
Dibromomethane	5.00	µg/Kg		44.1	µg/Kg
2-Butanone	100	µg/Kg	<	100	µg/Kg
Iodomethane	5.00	µg/Kg		36.4	µg/Kg
Methylene chloride	5.00	µg/Kg	<	5.00	µg/Kg
4-Methyl-2-pentanone	100	µg/Kg	<	100	µg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	5.00 µg/Kg	43.4 µg/Kg
1,1,1,2-Tetrachloroethane	5.00 µg/Kg	49.6 µg/Kg
1,1,2,2-Tetrachloroethane	5.00 µg/Kg	37.4 µg/Kg
Tetrachloroethene	5.00 µg/Kg	42.4 µg/Kg
Toluene	5.00 µg/Kg	40.0 µg/Kg
1,2,3-Trichlorobenzene	5.00 µg/Kg	48.5 µg/Kg
1,2,4-Trichlorobenzene	5.00 µg/Kg	46.6 µg/Kg
1,1,1-Trichloroethane	5.00 µg/Kg	43.9 µg/Kg
1,1,2-Trichloroethane	5.00 µg/Kg	43.8 µg/Kg
Trichloroethene	5.00 µg/Kg	43.0 µg/Kg
Trichlorofluoromethane	5.00 µg/Kg	38.8 µg/Kg
1,2,3-Trichloropropane	5.00 µg/Kg	19.2 µg/Kg
1,3,5-Trimethylbenzene	5.00 µg/Kg	42.4 µg/Kg
1,2,4-Trimethylbenzene	5.00 µg/Kg	43.2 µg/Kg
Vinyl acetate	50.0 µg/Kg	< 50.0 µg/Kg
Vinyl chloride	2.00 µg/Kg	< 2.00 µg/Kg
m,p-Xylene	5.00 µg/Kg	77.5 µg/Kg
o-Xylene	5.00 µg/Kg	44.4 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Dibromofluoromethane (SS)		104 %
Toluene-d8 (SS)		100 %
Bromofluorobenzene (SS)		94.4 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-5
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: BS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	2.40 mg/Kg
Acenaphthylene	0.330 mg/Kg	3.56 mg/Kg
Anthracene	0.330 mg/Kg	3.00 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	2.92 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	2.75 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	3.36 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	3.09 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	2.97 mg/Kg
Benzyl alcohol	0.650 mg/Kg	2.66 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	2.78 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	2.91 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	2.06 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	3.61 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	2.44 mg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	3.22 mg/Kg
Carbazole	0.330 mg/Kg	2.46 mg/Kg
4-Chloroaniline	0.330 mg/Kg	1.87 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	3.43 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	2.91 mg/Kg
Chrysene	0.330 mg/Kg	2.88 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	2.80 mg/Kg
Dibenzofuran	0.330 mg/Kg	2.56 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	3.27 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	2.66 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	2.77 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	3.38 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	1.76 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	3.04 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	3.50 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	3.58 mg/Kg
Fluoranthene	0.330 mg/Kg	2.88 mg/Kg
Fluorene	0.330 mg/Kg	3.44 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	2.22 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	2.60 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	2.73 mg/Kg
Hexachloroethane	0.330 mg/Kg	3.02 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	3.01 mg/Kg
Isophorone	0.330 mg/Kg	3.02 mg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	2.42 mg/Kg
Naphthalene	0.330 mg/Kg	2.35 mg/Kg
2-Nitroaniline	1.65 mg/Kg	3.24 mg/Kg
3-Nitroaniline	1.65 mg/Kg	1.89 mg/Kg
4-Nitroaniline	1.65 mg/Kg	2.39 mg/Kg
Nitrobenzene	0.330 mg/Kg	3.77 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	3.54 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	2.30 mg/Kg
Phenanthrene	0.330 mg/Kg	3.18 mg/Kg
Pyrene	0.330 mg/Kg	2.49 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	2.75 mg/Kg
Benzoic acid	0.800 mg/Kg	2.17 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	2.74 mg/Kg
2-Chlorophenol	0.330 mg/Kg	2.78 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	2.20 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	2.63 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	2.98 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	2.38 mg/Kg
2-Methylphenol	0.330 mg/Kg	2.73 mg/Kg
4-Methylphenol	0.330 mg/Kg	2.73 mg/Kg
2-Nitrophenol	0.330 mg/Kg	2.42 mg/Kg
4-Nitrophenol	0.800 mg/Kg	3.69 mg/Kg
Pentachlorophenol	1.65 mg/Kg	2.24 mg/Kg
Phenol	0.330 mg/Kg	2.90 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	2.36 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	2.76 mg/Kg

REPORT NUMBER : D96-13386-5
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.42 mg/Kg
2-Fluorobiphenyl (SS)		1.34 mg/Kg
Terphenyl-d14 (SS)		1.09 mg/Kg
Phenol-d6 (SS)		3.22 mg/Kg
2-Fluorophenol (SS)		3.26 mg/Kg
2,4,6-Tribromophenol (SS)		1.95 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-5
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: BS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	10.0 mg/Kg	110 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT NUMBER : D96-13386-5
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : LABQC#
: BS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	10.1 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	75.4 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	3.52 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	105 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	103 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-5

TOTAL METALS					
TEST REQUESTED		DETECTION LIMIT		RESULTS	
Calcium	/1	50.0	mg/Kg	1050	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250					
Cadmium	/1	2.00	mg/Kg	103	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Cobalt	/1	2.00	mg/Kg	106	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Chromium	/1	2.00	mg/Kg	107	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Copper	/1	1.00	mg/Kg	106	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Iron	/1	10.0	mg/Kg	91.0	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Mercury	/1	0.120	mg/Kg	< 0.120	mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137					

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TOTAL METALS					
TEST REQUESTED		DETECTION LIMIT		RESULTS	
Potassium	/1	100	mg/Kg	986	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250					
Magnesium	/1	10.0	mg/Kg	73.6	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Manganese	/1	1.00	mg/Kg	104	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Sodium	/1	100	mg/Kg	1060	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250					
Nickel	/1	2.00	mg/Kg	107	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Lead	/1	0.2	mg/Kg	2.0	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F					
Antimony	/1	10.0	mg/Kg	995	mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259					

REPORT NUMBER : D96-13386-5 PAGE 4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	1.95 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	3.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	106 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	111 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-6
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: MS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	0.0200 mg/Kg	< 0.0200 mg/Kg
Acrylonitrile	0.0050 mg/Kg	0.0369 mg/Kg
Benzene	0.0050 mg/Kg	0.0465 mg/Kg
Bromobenzene	0.0050 mg/Kg	0.0481 mg/Kg
Bromochloromethane	0.0050 mg/Kg	0.0435 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	0.0512 mg/Kg
Bromoform	0.0050 mg/Kg	0.0584 mg/Kg
Carbon disulfide	0.0050 mg/Kg	0.0433 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	0.0580 mg/Kg
Chlorobenzene	0.0050 mg/Kg	0.0514 mg/Kg
Chloroethane	0.0050 mg/Kg	0.0416 mg/Kg
Chloroform	0.0050 mg/Kg	0.0476 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	0.0472 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	0.0472 mg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Chloroethylvinyl ether	0.0100 mg/Kg	0.0347 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	0.0522 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	0.0526 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	0.0546 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	0.0497 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	0.0512 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	0.0486 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	< 0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	0.0460 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	0.0566 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	0.0480 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	0.0429 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	0.0468 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	0.0471 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	0.0483 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	0.0497 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	0.0483 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	0.0469 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	0.0460 mg/Kg
Ethylbenzene	0.0050 mg/Kg	0.0531 mg/Kg
2-Hexanone	0.0500 mg/Kg	0.0540 mg/Kg
Bromomethane	0.0050 mg/Kg	0.0668 mg/Kg
Chloromethane	0.0050 mg/Kg	0.0562 mg/Kg
Dibromomethane	0.0050 mg/Kg	0.0530 mg/Kg
2-Butanone	0.100 mg/Kg	< 0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	0.0525 mg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	0.0540 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	0.0492 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	0.0522 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	0.0482 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	0.0552 mg/Kg
Toluene	0.0050 mg/Kg	0.0471 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	0.0521 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	0.0514 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	0.0530 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	0.0501 mg/Kg
Trichloroethene	0.0050 mg/Kg	0.0511 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	0.0620 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	0.0479 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	0.0442 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	0.0480 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	0.0410 mg/Kg
m,p-Xylene	0.0050 mg/Kg	0.103 mg/Kg
o-Xylene	0.0050 mg/Kg	0.0510 mg/Kg
Dibromofluoromethane (SS)		0.051 mg/Kg
Toluene-d8 (SS)		0.049 mg/Kg
Bromofluorobenzene (SS)		0.048 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-6
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: MS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
Acetone	20.0	µg/Kg	<	20.0	µg/Kg
Acrylonitrile	5.00	µg/Kg		36.9	µg/Kg
Benzene	5.00	µg/Kg		46.5	µg/Kg
Bromobenzene	5.00	µg/Kg		48.1	µg/Kg
Bromochloromethane	5.00	µg/Kg		43.5	µg/Kg
Bromodichloromethane	5.00	µg/Kg		51.2	µg/Kg
Bromoform	5.00	µg/Kg		58.4	µg/Kg
Carbon disulfide	5.00	µg/Kg		43.3	µg/Kg
Carbon tetrachloride	5.00	µg/Kg	<	5.00	µg/Kg
Chlorobenzene	5.00	µg/Kg		51.4	µg/Kg
Chloroethane	5.00	µg/Kg		41.6	µg/Kg
Chloroform	5.00	µg/Kg		47.6	µg/Kg
2-Chlorotoluene	5.00	µg/Kg		47.2	µg/Kg
4-Chlorotoluene	5.00	µg/Kg		47.2	µg/Kg
2-Chloroethylvinyl ether	10.0	µg/Kg		34.7	µg/Kg
Dibromochloromethane	5.00	µg/Kg		52.2	µg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS				
TEST REQUESTED	DETECTION LIMIT		RESULTS	
1,2-Dibromo-3-chloropropane	25.0	µg/Kg	52.6	µg/Kg
1,2-Dibromoethane	5.00	µg/Kg	54.6	µg/Kg
1,2-Dichlorobenzene	5.00	µg/Kg	49.7	µg/Kg
1,3-Dichlorobenzene	5.00	µg/Kg	51.2	µg/Kg
1,4-Dichlorobenzene	5.00	µg/Kg	48.6	µg/Kg
trans-1,4-Dichloro-2-butene	100	µg/Kg	< 100	µg/Kg
1,1-Dichloroethane	5.00	µg/Kg	46.0	µg/Kg
1,2-Dichloroethane	5.00	µg/Kg	56.6	µg/Kg
1,1-Dichloroethene	5.00	µg/Kg	48.0	µg/Kg
cis-1,2-Dichloroethene	5.00	µg/Kg	42.9	µg/Kg
trans-1,2-Dichloroethene	5.00	µg/Kg	46.8	µg/Kg
1,2-Dichloropropane	5.00	µg/Kg	47.1	µg/Kg
2,2-Dichloropropane	5.00	µg/Kg	48.3	µg/Kg
1,1-Dichloropropene	5.00	µg/Kg	49.7	µg/Kg
1,3-Dichloropropane	5.00	µg/Kg	48.3	µg/Kg
cis-1,3-Dichloropropene	5.00	µg/Kg	46.9	µg/Kg
trans-1,3-Dichloropropene	5.00	µg/Kg	46.0	µg/Kg
Ethylbenzene	5.00	µg/Kg	53.1	µg/Kg
2-Hexanone	50.0	µg/Kg	54.0	µg/Kg
Bromomethane	5.00	µg/Kg	66.8	µg/Kg
Chloromethane	5.00	µg/Kg	56.2	µg/Kg
Dibromomethane	5.00	µg/Kg	53.0	µg/Kg
2-Butanone	100	µg/Kg	< 100	µg/Kg
Iodomethane	5.00	µg/Kg	52.5	µg/Kg
Methylene chloride	5.00	µg/Kg	< 5.00	µg/Kg
4-Methyl-2-pentanone	100	µg/Kg	< 100	µg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	5.00 µg/Kg	49.2 µg/Kg
1,1,1,2-Tetrachloroethane	5.00 µg/Kg	52.2 µg/Kg
1,1,2,2-Tetrachloroethane	5.00 µg/Kg	48.2 µg/Kg
Tetrachloroethene	5.00 µg/Kg	55.2 µg/Kg
Toluene	5.00 µg/Kg	47.1 µg/Kg
1,2,3-Trichlorobenzene	5.00 µg/Kg	52.1 µg/Kg
1,2,4-Trichlorobenzene	5.00 µg/Kg	51.4 µg/Kg
1,1,1-Trichloroethane	5.00 µg/Kg	53.0 µg/Kg
1,1,2-Trichloroethane	5.00 µg/Kg	50.1 µg/Kg
Trichloroethene	5.00 µg/Kg	51.1 µg/Kg
Trichlorofluoromethane	5.00 µg/Kg	62.0 µg/Kg
1,2,3-Trichloropropane	5.00 µg/Kg	47.9 µg/Kg
1,3,5-Trimethylbenzene	5.00 µg/Kg	44.2 µg/Kg
1,2,4-Trimethylbenzene	5.00 µg/Kg	48.0 µg/Kg
Vinyl acetate	50.0 µg/Kg	< 50.0 µg/Kg
Vinyl chloride	2.00 µg/Kg	< 2.00 µg/Kg
m,p-Xylene	5.00 µg/Kg	103 µg/Kg
o-Xylene	5.00 µg/Kg	51.0 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Dibromofluoromethane (SS)		101 %
Toluene-d8 (SS)		98.2 %
Bromofluorobenzene (SS)		96.7 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-6
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: MS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	2.33 mg/Kg
Acenaphthylene	0.330 mg/Kg	2.58 mg/Kg
Anthracene	0.330 mg/Kg	2.57 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	2.32 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	2.42 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	2.54 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	2.57 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	2.40 mg/Kg
Benzyl alcohol	0.650 mg/Kg	2.05 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	2.23 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	2.82 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	1.85 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	3.41 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	1.98 mg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	2.74 mg/Kg
Carbazole	0.330 mg/Kg	2.17 mg/Kg
4-Chloroaniline	0.330 mg/Kg	1.54 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	2.32 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	2.31 mg/Kg
Chrysene	0.330 mg/Kg	2.33 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	2.36 mg/Kg
Dibenzofuran	0.330 mg/Kg	2.59 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	2.85 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	2.42 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	2.50 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	3.17 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	1.74 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	2.11 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	2.74 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	3.12 mg/Kg
Fluoranthene	0.330 mg/Kg	2.51 mg/Kg
Fluorene	0.330 mg/Kg	2.60 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	1.79 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	2.11 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	1.99 mg/Kg
Hexachloroethane	0.330 mg/Kg	3.01 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	2.50 mg/Kg
Isophorone	0.330 mg/Kg	2.70 mg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	2.22 mg/Kg
Naphthalene	0.330 mg/Kg	2.40 mg/Kg
2-Nitroaniline	1.65 mg/Kg	2.82 mg/Kg
3-Nitroaniline	1.65 mg/Kg	1.75 mg/Kg
4-Nitroaniline	1.65 mg/Kg	2.00 mg/Kg
Nitrobenzene	0.330 mg/Kg	2.56 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	2.75 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	2.22 mg/Kg
Phenanthrene	0.330 mg/Kg	2.56 mg/Kg
Pyrene	0.330 mg/Kg	2.22 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	2.12 mg/Kg
Benzoic acid	0.800 mg/Kg	1.01 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	2.58 mg/Kg
2-Chlorophenol	0.330 mg/Kg	2.63 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	2.07 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	2.11 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	2.10 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	2.21 mg/Kg
2-Methylphenol	0.330 mg/Kg	2.39 mg/Kg
4-Methylphenol	0.330 mg/Kg	2.32 mg/Kg
2-Nitrophenol	0.330 mg/Kg	2.19 mg/Kg
4-Nitrophenol	0.800 mg/Kg	3.47 mg/Kg
Pentachlorophenol	1.65 mg/Kg	< 1.65 mg/Kg
Phenol	0.330 mg/Kg	3.31 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	1.99 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	2.25 mg/Kg

REPORT NUMBER : D96-13386-6
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.26 mg/Kg
2-Fluorobiphenyl (SS)		1.16 mg/Kg
Terphenyl-d14 (SS)		0.928 mg/Kg
Phenol-d6 (SS)		3.00 mg/Kg
2-Fluorophenol (SS)		3.52 mg/Kg
2,4,6-Tribromophenol (SS)		1.85 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT NUMBER : D96-13386-6
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: MS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	10.0 mg/Kg	105 mg/Kg

Inchcape Testing Services
Environmental Laboratories

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REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: MS1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	7110 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	< 0.500 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	53.2 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-6 PAGE 2

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Calcium	/1	500 mg/Kg	292000 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250			
Cadmium	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Cobalt	/1	2.00 mg/Kg	2.74 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Chromium	/1	2.00 mg/Kg	5.74 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Copper	/1	1.00 mg/Kg	5.65 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Iron	/1	10.0 mg/Kg	6500 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Mercury	/1	0.120 mg/Kg	< 0.120 mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137			

REPORT NUMBER : D96-13386-6 PAGE 3

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Potassium	/1	100 mg/Kg	2260 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250			
Magnesium	/1	10.0 mg/Kg	1880 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Manganese	/1	1.00 mg/Kg	38.1 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Sodium	/1	100 mg/Kg	136 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250			
Nickel	/1	2.00 mg/Kg	7.11 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Lead	/1	1.0 mg/Kg	6.8 mg/Kg
Dilution Factor : 5 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F			
Antimony	/1	10.0 mg/Kg	589 mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259			

REPORT NUMBER : D96-13386-6 PAGE 4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	1.70 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	< 0.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	9.94 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	20.6 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-7
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: SD1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 5030
PREPARED BY : RLR
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	0.0200 mg/Kg	0.0734 mg/Kg
Acrylonitrile	0.0050 mg/Kg	0.0297 mg/Kg
Benzene	0.0050 mg/Kg	0.0510 mg/Kg
Bromobenzene	0.0050 mg/Kg	0.0564 mg/Kg
Bromochloromethane	0.0050 mg/Kg	0.0548 mg/Kg
Bromodichloromethane	0.0050 mg/Kg	0.0624 mg/Kg
Bromoform	0.0050 mg/Kg	0.0679 mg/Kg
Carbon disulfide	0.0050 mg/Kg	0.0504 mg/Kg
Carbon tetrachloride	0.0050 mg/Kg	0.0610 mg/Kg
Chlorobenzene	0.0050 mg/Kg	0.0567 mg/Kg
Chloroethane	0.0050 mg/Kg	0.0788 mg/Kg
Chloroform	0.0050 mg/Kg	0.0535 mg/Kg
2-Chlorotoluene	0.0050 mg/Kg	0.0547 mg/Kg
4-Chlorotoluene	0.0050 mg/Kg	0.0547 mg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Chloroethylvinyl ether	0.0100 mg/Kg	0.0690 mg/Kg
Dibromochloromethane	0.0050 mg/Kg	0.0635 mg/Kg
1,2-Dibromo-3-chloropropane	0.0250 mg/Kg	0.0650 mg/Kg
1,2-Dibromoethane	0.0050 mg/Kg	0.0604 mg/Kg
1,2-Dichlorobenzene	0.0050 mg/Kg	0.0575 mg/Kg
1,3-Dichlorobenzene	0.0050 mg/Kg	0.0582 mg/Kg
1,4-Dichlorobenzene	0.0050 mg/Kg	0.0553 mg/Kg
trans-1,4-Dichloro-2-butene	0.100 mg/Kg	< 0.100 mg/Kg
1,1-Dichloroethane	0.0050 mg/Kg	0.0526 mg/Kg
1,2-Dichloroethane	0.0050 mg/Kg	0.0693 mg/Kg
1,1-Dichloroethene	0.0050 mg/Kg	0.0540 mg/Kg
cis-1,2-Dichloroethene	0.0050 mg/Kg	0.0523 mg/Kg
trans-1,2-Dichloroethene	0.0050 mg/Kg	0.0516 mg/Kg
1,2-Dichloropropane	0.0050 mg/Kg	0.0575 mg/Kg
2,2-Dichloropropane	0.0050 mg/Kg	0.0570 mg/Kg
1,1-Dichloropropene	0.0050 mg/Kg	0.0611 mg/Kg
1,3-Dichloropropane	0.0050 mg/Kg	0.0582 mg/Kg
cis-1,3-Dichloropropene	0.0050 mg/Kg	0.0602 mg/Kg
trans-1,3-Dichloropropene	0.0050 mg/Kg	0.0566 mg/Kg
Ethylbenzene	0.0050 mg/Kg	0.0590 mg/Kg
2-Hexanone	0.0500 mg/Kg	< 0.0500 mg/Kg
Bromomethane	0.0050 mg/Kg	0.0752 mg/Kg
Chloromethane	0.0050 mg/Kg	0.0661 mg/Kg
Dibromomethane	0.0050 mg/Kg	0.0641 mg/Kg
2-Butanone	0.100 mg/Kg	< 0.100 mg/Kg
Iodomethane	0.0050 mg/Kg	0.0582 mg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Methylene chloride	0.0050 mg/Kg	0.0560 mg/Kg
4-Methyl-2-pentanone	0.100 mg/Kg	< 0.100 mg/Kg
Styrene	0.0050 mg/Kg	0.0563 mg/Kg
1,1,1,2-Tetrachloroethane	0.0050 mg/Kg	0.0590 mg/Kg
1,1,2,2-Tetrachloroethane	0.0050 mg/Kg	0.0580 mg/Kg
Tetrachloroethene	0.0050 mg/Kg	0.0622 mg/Kg
Toluene	0.0050 mg/Kg	0.0570 mg/Kg
1,2,3-Trichlorobenzene	0.0050 mg/Kg	0.0599 mg/Kg
1,2,4-Trichlorobenzene	0.0050 mg/Kg	0.0604 mg/Kg
1,1,1-Trichloroethane	0.0050 mg/Kg	0.0608 mg/Kg
1,1,2-Trichloroethane	0.0050 mg/Kg	0.0592 mg/Kg
Trichloroethene	0.0050 mg/Kg	0.0582 mg/Kg
Trichlorofluoromethane	0.0050 mg/Kg	0.0701 mg/Kg
1,2,3-Trichloropropane	0.0050 mg/Kg	0.0645 mg/Kg
1,3,5-Trimethylbenzene	0.0050 mg/Kg	0.0540 mg/Kg
1,2,4-Trimethylbenzene	0.0050 mg/Kg	0.0564 mg/Kg
Vinyl acetate	0.0500 mg/Kg	< 0.0500 mg/Kg
Vinyl chloride	0.0020 mg/Kg	0.0410 mg/Kg
m,p-Xylene	0.0050 mg/Kg	0.115 mg/Kg
o-Xylene	0.0050 mg/Kg	0.0588 mg/Kg
Dibromofluoromethane (SS)		0.051 mg/Kg
Toluene-d8 (SS)		0.053 mg/Kg
Bromofluorobenzene (SS)		0.049 mg/Kg

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DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-7
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: SD1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
ANALYSIS METHOD : EPA 8260 /1
ANALYZED BY : RLR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : ITS2-936

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acetone	20.0 µg/Kg	73.4 µg/Kg
Acrylonitrile	5.00 µg/Kg	29.7 µg/Kg
Benzene	5.00 µg/Kg	51.0 µg/Kg
Bromobenzene	5.00 µg/Kg	56.4 µg/Kg
Bromochloromethane	5.00 µg/Kg	54.8 µg/Kg
Bromodichloromethane	5.00 µg/Kg	62.4 µg/Kg
Bromoform	5.00 µg/Kg	67.9 µg/Kg
Carbon disulfide	5.00 µg/Kg	50.4 µg/Kg
Carbon tetrachloride	5.00 µg/Kg	< 5.00 µg/Kg
Chlorobenzene	5.00 µg/Kg	56.7 µg/Kg
Chloroethane	5.00 µg/Kg	78.8 µg/Kg
Chloroform	5.00 µg/Kg	53.5 µg/Kg
2-Chlorotoluene	5.00 µg/Kg	54.7 µg/Kg
4-Chlorotoluene	5.00 µg/Kg	54.7 µg/Kg
2-Chloroethylvinyl ether	10.0 µg/Kg	69.0 µg/Kg
Dibromochloromethane	5.00 µg/Kg	63.5 µg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
1,2-Dibromo-3-chloropropane	25.0	µg/Kg		65.0	µg/Kg
1,2-Dibromoethane	5.00	µg/Kg		60.4	µg/Kg
1,2-Dichlorobenzene	5.00	µg/Kg		57.5	µg/Kg
1,3-Dichlorobenzene	5.00	µg/Kg		58.2	µg/Kg
1,4-Dichlorobenzene	5.00	µg/Kg		55.3	µg/Kg
trans-1,4-Dichloro-2-butene	100	µg/Kg	<	100	µg/Kg
1,1-Dichloroethane	5.00	µg/Kg		52.6	µg/Kg
1,2-Dichloroethane	5.00	µg/Kg		69.3	µg/Kg
1,1-Dichloroethene	5.00	µg/Kg		54.0	µg/Kg
cis-1,2-Dichloroethene	5.00	µg/Kg		52.3	µg/Kg
trans-1,2-Dichloroethene	5.00	µg/Kg		51.6	µg/Kg
1,2-Dichloropropane	5.00	µg/Kg		57.5	µg/Kg
2,2-Dichloropropane	5.00	µg/Kg		57.0	µg/Kg
1,1-Dichloropropene	5.00	µg/Kg		61.1	µg/Kg
1,3-Dichloropropane	5.00	µg/Kg		58.2	µg/Kg
cis-1,3-Dichloropropene	5.00	µg/Kg		60.2	µg/Kg
trans-1,3-Dichloropropene	5.00	µg/Kg		56.6	µg/Kg
Ethylbenzene	5.00	µg/Kg		59.0	µg/Kg
2-Hexanone	50.0	µg/Kg	<	50.0	µg/Kg
Bromomethane	5.00	µg/Kg		75.2	µg/Kg
Chloromethane	5.00	µg/Kg		66.1	µg/Kg
Dibromomethane	5.00	µg/Kg		64.1	µg/Kg
2-Butanone	100	µg/Kg	<	100	µg/Kg
Iodomethane	5.00	µg/Kg		58.2	µg/Kg
Methylene chloride	5.00	µg/Kg	<	5.00	µg/Kg
4-Methyl-2-pentanone	100	µg/Kg	<	100	µg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8260 /1

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	5.00 µg/Kg	56.3 µg/Kg
1,1,1,2-Tetrachloroethane	5.00 µg/Kg	59.0 µg/Kg
1,1,2,2-Tetrachloroethane	5.00 µg/Kg	58.0 µg/Kg
Tetrachloroethene	5.00 µg/Kg	62.2 µg/Kg
Toluene	5.00 µg/Kg	57.0 µg/Kg
1,2,3-Trichlorobenzene	5.00 µg/Kg	59.9 µg/Kg
1,2,4-Trichlorobenzene	5.00 µg/Kg	60.4 µg/Kg
1,1,1-Trichloroethane	5.00 µg/Kg	60.8 µg/Kg
1,1,2-Trichloroethane	5.00 µg/Kg	59.2 µg/Kg
Trichloroethene	5.00 µg/Kg	58.2 µg/Kg
Trichlorofluoromethane	5.00 µg/Kg	70.1 µg/Kg
1,2,3-Trichloropropane	5.00 µg/Kg	64.5 µg/Kg
1,3,5-Trimethylbenzene	5.00 µg/Kg	54.0 µg/Kg
1,2,4-Trimethylbenzene	5.00 µg/Kg	56.4 µg/Kg
Vinyl acetate	50.0 µg/Kg	< 50.0 µg/Kg
Vinyl chloride	2.00 µg/Kg	< 2.00 µg/Kg
m,p-Xylene	5.00 µg/Kg	115 µg/Kg
o-Xylene	5.00 µg/Kg	58.8 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Dibromofluoromethane (SS)		102 %
Toluene-d8 (SS)		107 %
Bromofluorobenzene (SS)		98.8 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-7
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: SD1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 22-NOV-1996
ANALYSIS METHOD : EPA 8270B /1
ANALYZED BY : TCR
ANALYZED ON : 25-NOV-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB926-94

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	0.330 mg/Kg	2.65 mg/Kg
Acenaphthylene	0.330 mg/Kg	3.88 mg/Kg
Anthracene	0.330 mg/Kg	3.28 mg/Kg
Benzo(a)anthracene	0.330 mg/Kg	2.94 mg/Kg
Benzo(b)fluoranthene	0.330 mg/Kg	3.02 mg/Kg
Benzo(k)fluoranthene	0.330 mg/Kg	3.24 mg/Kg
Benzo(g,h,i)perylene	0.330 mg/Kg	3.15 mg/Kg
Benzo(a)pyrene	0.330 mg/Kg	2.98 mg/Kg
Benzyl alcohol	0.650 mg/Kg	3.09 mg/Kg
Bis(2-chloroethoxy)methane	0.330 mg/Kg	2.98 mg/Kg
Bis(2-chloroethyl)ether	0.330 mg/Kg	3.61 mg/Kg
Bis(2-chloroisopropyl)ether	0.330 mg/Kg	2.20 mg/Kg
Bis(2-ethylhexyl)phthalate	0.330 mg/Kg	4.47 mg/Kg
4-Bromophenyl phenyl ether	0.330 mg/Kg	2.30 mg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Butyl benzyl phthalate	0.330 mg/Kg	3.50 mg/Kg
Carbazole	0.330 mg/Kg	2.58 mg/Kg
4-Chloroaniline	0.330 mg/Kg	2.06 mg/Kg
2-Chloronaphthalene	0.330 mg/Kg	3.59 mg/Kg
4-Chlorophenyl phenyl ether	0.330 mg/Kg	3.23 mg/Kg
Chrysene	0.330 mg/Kg	3.00 mg/Kg
Dibenz(a,h)anthracene	0.330 mg/Kg	2.96 mg/Kg
Dibenzofuran	0.330 mg/Kg	2.81 mg/Kg
Di-n-butylphthalate	0.330 mg/Kg	3.72 mg/Kg
1,2-Dichlorobenzene	0.330 mg/Kg	2.78 mg/Kg
1,3-Dichlorobenzene	0.330 mg/Kg	2.93 mg/Kg
1,4-Dichlorobenzene	0.330 mg/Kg	3.77 mg/Kg
3,3'-Dichlorobenzidine	0.330 mg/Kg	2.16 mg/Kg
Diethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
Dimethyl phthalate	0.330 mg/Kg	< 0.330 mg/Kg
2,4-Dinitrotoluene	0.330 mg/Kg	3.24 mg/Kg
2,6-Dinitrotoluene	0.330 mg/Kg	3.46 mg/Kg
Di-n-octylphthalate	0.330 mg/Kg	3.89 mg/Kg
Fluoranthene	0.330 mg/Kg	3.03 mg/Kg
Fluorene	0.330 mg/Kg	3.68 mg/Kg
Hexachlorobenzene	0.330 mg/Kg	2.09 mg/Kg
Hexachlorobutadiene	0.330 mg/Kg	2.67 mg/Kg
Hexachlorocyclopentadiene	0.330 mg/Kg	2.47 mg/Kg
Hexachloroethane	0.330 mg/Kg	3.56 mg/Kg
Indeno(1,2,3-cd)pyrene	0.330 mg/Kg	3.07 mg/Kg
Isophorone	0.330 mg/Kg	3.54 mg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2-Methylnaphthalene	0.330 mg/Kg	2.66 mg/Kg
Naphthalene	0.330 mg/Kg	2.62 mg/Kg
2-Nitroaniline	1.65 mg/Kg	3.53 mg/Kg
3-Nitroaniline	1.65 mg/Kg	1.88 mg/Kg
4-Nitroaniline	1.65 mg/Kg	2.68 mg/Kg
Nitrobenzene	0.330 mg/Kg	4.24 mg/Kg
N-Nitrosodiphenylamine	0.330 mg/Kg	3.30 mg/Kg
N-Nitrosodi-n-propylamine	0.330 mg/Kg	2.78 mg/Kg
Phenanthrene	0.330 mg/Kg	3.42 mg/Kg
Pyrene	0.330 mg/Kg	2.83 mg/Kg
1,2,4-Trichlorobenzene	0.330 mg/Kg	2.68 mg/Kg
Benzoic acid	0.800 mg/Kg	1.22 mg/Kg
4-Chloro-3-methylphenol	0.650 mg/Kg	3.16 mg/Kg
2-Chlorophenol	0.330 mg/Kg	3.04 mg/Kg
2,4-Dichlorophenol	0.330 mg/Kg	2.26 mg/Kg
2,4-Dimethylphenol	0.330 mg/Kg	3.04 mg/Kg
4,6-Dinitro-2-methylphenol	1.65 mg/Kg	4.18 mg/Kg
2,4-Dinitrophenol	1.65 mg/Kg	2.34 mg/Kg
2-Methylphenol	0.330 mg/Kg	3.07 mg/Kg
4-Methylphenol	0.330 mg/Kg	3.45 mg/Kg
2-Nitrophenol	0.330 mg/Kg	2.58 mg/Kg
4-Nitrophenol	0.800 mg/Kg	4.76 mg/Kg
Pentachlorophenol	1.65 mg/Kg	1.99 mg/Kg
Phenol	0.330 mg/Kg	3.27 mg/Kg
2,4,5-Trichlorophenol	1.65 mg/Kg	2.43 mg/Kg
2,4,6-Trichlorophenol	0.330 mg/Kg	2.86 mg/Kg

REPORT NUMBER : D96-13386-7
ANALYSIS METHOD : EPA 8270B /1

ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Nitrobenzene-d5 (SS)		1.53 mg/Kg
2-Fluorobiphenyl (SS)		1.30 mg/Kg
Terphenyl-d14 (SS)		1.18 mg/Kg
Phenol-d6 (SS)		4.01 mg/Kg
2-Fluorophenol (SS)		3.86 mg/Kg
2,4,6-Tribromophenol (SS)		1.98 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-7
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: SD1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 25-NOV-1996
ANALYSIS METHOD : EPA 9071mod. /1
ANALYZED BY : MTR
ANALYZED ON : 26-NOV-1996
DILUTION FACTOR : 1
QC BATCH NO : AB948-10

TOTAL RECOVERABLE PETROLEUM HYDROCARBON		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	10.0 mg/Kg	110 mg/Kg

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 21-NOV-1996

REPORT NUMBER : D96-13386-7
REPORT DATE : 31-DEC-1996

SAMPLE SUBMITTED BY : IMS
ADDRESS : 115 Metro Park
: Rochester, NY 14623
ATTENTION : Mr. Prareen Srivastara

SAMPLE MATRIX : Soil
ID MARKS : SB08-07#
: SD1#(0-0')
PROJECT : ICA-2159 AOC-D, Cannon AFB, NM
DATE SAMPLED : 20-NOV-1996

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Silver	/1	2.00 mg/Kg	< 2.00 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Aluminum	/1	20.0 mg/Kg	16800 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Arsenic	/1	0.500 mg/Kg	0.582 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7060 on 4-DEC-1996 by MPE QC Batch No : 15250F			
Barium	/1	2.00 mg/Kg	87.8 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Beryllium	/1	0.50 mg/Kg	< 0.50 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

REPORT NUMBER : D96-13386-7 PAGE 2

TOTAL METALS					
TEST REQUESTED		DETECTION LIMIT		RESULTS	
Calcium	/1	500	mg/Kg	289000	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 24-DEC-1996 by JLW QC Batch No : 15250					
Cadmium	/1	2.00	mg/Kg	3.71	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Cobalt	/1	2.00	mg/Kg	4.51	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Chromium	/1	2.00	mg/Kg	14.3	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Copper	/1	1.00	mg/Kg	6.36	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Iron	/1	10.0	mg/Kg	11900	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Mercury	/1	0.120	mg/Kg	< 0.120	mg/Kg
Dilution Factor : 1 Prepared using EPA 7471A on 25-NOV-1996 by SPF Analyzed using EPA 7471A on 26-NOV-1996 by CGJ QC Batch No : HG-3137					

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TOTAL METALS					
TEST REQUESTED		DETECTION LIMIT		RESULTS	
Potassium	/1	100	mg/Kg	4140	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250					
Magnesium	/1	10.0	mg/Kg	2880	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Manganese	/1	1.00	mg/Kg	69.5	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Sodium	/1	100	mg/Kg	153	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 28-NOV-1996 by GGD QC Batch No : 15250					
Nickel	/1	2.00	mg/Kg	9.77	mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250					
Lead	/1	1.0	mg/Kg	7.4	mg/Kg
Dilution Factor : 5 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7421 on 5-DEC-1996 by MPE QC Batch No : 15250F					
Antimony	/1	10.0	mg/Kg	659	mg/Kg
Dilution Factor : 1 Prepared using EPA 3050 on 25-NOV-1996 by SPF Analyzed using EPA 6010A on 3-DEC-1996 by JO QC Batch No : 15259					

REPORT NUMBER : D96-13386-7 PAGE 4

TOTAL METALS			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Selenium	/1	0.50 mg/Kg	1.58 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7740 on 3-DEC-1996 by AH QC Batch No : 15250F			
Thallium	/1	0.5 mg/Kg	< 0.5 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 7841 on 29-NOV-1996 by AH QC Batch No : 15250F			
Vanadium	/1	2.00 mg/Kg	21.9 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			
Zinc	/1	3.00 mg/Kg	33.1 mg/Kg
Dilution Factor : 1 Prepared using EPA 3051 on 25-NOV-1996 by CEL Analyzed using EPA 6010A on 26-NOV-1996 by GGD QC Batch No : 15250			

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-3591
Fax. 214-238-3592

QC SUMMARY

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chlorobenzene
BATCH NO.	ITS2-936	ITS2-936	ITS2-936	ITS2-936	ITS2-936
LCS LOT NO.	AB598-38-2	AB598-38-2	AB598-38-2	AB598-38-2	AB598-38-2
PREP METHOD	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
PREPARED BY	RLR	RLR	RLR	RLR	RLR
ANALYSIS METHOD	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
ANALYZED BY	RLR	RLR	RLR	RLR	RLR
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
SPIKE LEVEL	0.0500	0.0500	0.0500	0.0500	0.0500
SPK REC LIMITS	70.0 - 130	70.0 - 130	70.0 - 130	70.0 - 130	70.0 - 130
SPK RPD LIMITS	20.0	20.0	20.0	20.0	20.0
MS RESULT	0.0480	0.0511	0.0465	0.0471	0.0514
MS RECOVERY %	96.0	102	93.0	94.2	103
MSD RESULT	0.0540	0.0582	0.0510	0.0570	0.0567
MSD RECOVERY %	108	116	102	114	113
MS/MSD RPD %	11.8	13.0	9.23	19.0	9.81
BS RESULT	0.0360	0.0430	0.0388	0.0400	0.0433
BS RECOVERY %	72.0	86.0	77.6	80.0	86.6
BSD RESULT	0.0362	0.0470	0.0428	0.0439	0.0470
BSD RECOVERY %	72.4	94.0	85.6	87.8	94.0
BS/BSD RPD %	0.55	8.89	9.80	9.30	8.19
DUP RPD LIMITS	---	---	---	---	---
DUPLICATE RPD %	NA	NA	NA	NA	NA
LCS LEVEL	0.0500	0.0500	0.0500	0.0500	0.0500
LCS REC LIMITS	70.0 - 130	70.0 - 130	70.0 - 130	70.0 - 130	70.0 - 130
LCS RESULT	SEE_BS	SEE_BS	SEE_BS	SEE_BS	SEE_BS
LCS RECOVERY %	SEE_BS	SEE_BS	SEE_BS	SEE_BS	SEE_BS
SPIKE SAMPLE ID	13386-6	13386-6	13386-6	13386-6	13386-6
SAMPLE VALUE	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
DUP SAMPLE ID	---	---	---	---	---
DUP SAMPLE VAL/1	---	---	---	---	---
DUP SAMPLE VAL/2	---	---	---	---	---

SEE_BS LCS and LCS Duplicate reported as BS and BSD.
NA Not applicable

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichlorobenzene	1,2,4-Trichlorobenzene
BATCH NO.	AB926-94	AB926-94	AB926-94	AB926-94
LCS LOT NO.	AB868-49-58	AB868-49-58	AB868-49-58	AB868-49-58
PREP METHOD	EPA 3550A	EPA 3550A	EPA 3550A	EPA 3550A
PREPARED BY	PSS	PSS	PSS	PSS
ANALYSIS METHOD	EPA 8270B	EPA 8270B	EPA 8270B	EPA 8270B
ANALYZED BY	TCR	TCR	TCR	TCR
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 0.33	< 0.33	< 0.33	< 0.33
SPIKE LEVEL	3.33	3.33	3.33	3.33
SPK REC LIMITS	5.00 - 112	23.0 - 134	20.0 - 124	44.0 - 142
SPK RPD LIMITS	23.0	29.0	32.0	28.0
MS RESULT	3.31	2.63	3.17	2.12
MS RECOVERY %	99.4	79.0	95.2	63.7
MSD RESULT	3.27	3.04	3.77	2.68
MSD RECOVERY %	98.2	91.3	113	80.5
MS/MSD RPD %	1.22	14.5	17.3	23.3
BS RESULT	2.90	2.78	3.38	2.75
BS RECOVERY %	87.1	83.5	102	82.6
BSD RESULT	3.03	2.74	3.32	2.62
BSD RECOVERY %	91.0	82.3	99.7	78.7
BS/BSD RPD %	4.38	1.45	1.79	4.84
DUP RPD LIMITS	---	---	---	---
DUPLICATE RPD %	NA	NA	NA	NA
LCS LEVEL	3.33	3.33	3.33	3.33
LCS REC LIMITS	5.00 - 112	23.0 - 134	20.0 - 124	44.0 - 142
LCS RESULT	SEE_BS	SEE_BS	SEE_BS	SEE_BS
LCS RECOVERY %	SEE_BS	SEE_BS	SEE_BS	SEE_BS
SPIKE SAMPLE ID	13386-1	13386-1	13386-1	13386-1
SAMPLE VALUE	< 0.330	< 0.330	< 0.330	< 0.330
DUP SAMPLE ID	---	---	---	---
DUP SAMPLE VAL/1	---	---	---	---
DUP SAMPLE VAL/2	---	---	---	---

SEE_BS LCS and LCS Duplicate reported as BS and BSD.
NA Not applicable

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	4-Chloro-3-methylphenol	Acenaphthene	4-Nitrophenol	2,4-Dinitrotoluene
BATCH NO.	AB926-94	AB926-94	AB926-94	AB926-94
LCS LOT NO.	AB868-49-58	AB868-49-58	AB868-49-58	AB868-49-58
PREP METHOD	EPA 3550A	EPA 3550A	EPA 3550A	EPA 3550A
PREPARED BY	PSS	PSS	PSS	PSS
ANALYSIS METHOD	EPA 8270B	EPA 8270B	EPA 8270B	EPA 8270B
ANALYZED BY	TCR	TCR	TCR	TCR
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 0.65	< 0.33	< 0.80	< 0.33
SPIKE LEVEL	3.33	3.33	3.33	3.33
SPK REC LIMITS	22.0 - 147	47.0 - 145	10.0 - 132	39.0 - 139
SPK RPD LIMITS	37.0	28.0	47.0	22.0
MS RESULT	2.58	2.33	3.47	2.11
MS RECOVERY %	77.5	70.0	104	63.4
MSD RESULT	3.16	2.65	4.76	3.24
MSD RECOVERY %	94.9	79.6	143	97.3
MS/MSD RPD %	20.2	12.9	31.3	42.2
BS RESULT	2.74	2.40	3.69	3.04
BS RECOVERY %	82.3	72.1	111	91.3
BSD RESULT	3.02	2.84	4.28	3.29
BSD RECOVERY %	90.7	85.3	129	98.8
BS/BSD RPD %	9.72	16.8	14.8	7.90
DUP RPD LIMITS	---	---	---	---
DUPLICATE RPD %	NA	NA	NA	NA
LCS LEVEL	3.33	3.33	3.33	3.33
LCS REC LIMITS	22.0 - 147	47.0 - 145	10.0 - 132	39.0 - 139
LCS RESULT	SEE_BS	SEE_BS	SEE_BS	SEE_BS
LCS RECOVERY %	SEE_BS	SEE_BS	SEE_BS	SEE_BS
SPIKE SAMPLE ID	13386-1	13386-1	13386-1	13386-1
SAMPLE VALUE	< 0.650	< 0.330	< 0.800	< 0.330
DUP SAMPLE ID	---	---	---	---
DUP SAMPLE VAL/1	---	---	---	---
DUP SAMPLE VAL/2	---	---	---	---

SEE_BS LCS and LCS Duplicate reported as BS and BSD.
NA Not applicable

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Pentachlorophenol	Pyrene	Total Petroleum Hydrocarbon	Silver
BATCH NO.	AB926-94	AB926-94	AB948-10	15250
LCS LOT NO.	AB868-49-58	AB868-49-58	AA601-20C	691113
PREP METHOD	EPA 3550A	EPA 3550A	EPA 3550A	EPA 3051
PREPARED BY	PSS	PSS	PSS	CEL
ANALYSIS METHOD	EPA 8270B	EPA 8270B	EPA 9071mod.	EPA 6010A
ANALYZED BY	TCR	TCR	MTR	GGD
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 1.65	< 0.33	<10.0	< 2.0
SPIKE LEVEL	3.33	3.33	100	10.0
SPK REC LIMITS	14.0 - 176	52.0 - 115	75.0 - 125	60.0 - 140
SPK RPD LIMITS	49.0	25.0	25.0	30.0
MS RESULT	1.64	2.22	105	9.70
MS RECOVERY %	49.2	66.7	105	97.0
MSD RESULT	1.99	2.83	110	9.90
MSD RECOVERY %	59.8	85.0	110	99.0
MS/MSD RPD %	19.3	24.2	4.94	2.04
BS RESULT	2.24	2.49	110	NA
BS RECOVERY %	67.3	74.8	110	NA
BSD RESULT	2.15	2.85	106	NA
BSD RECOVERY %	64.6	85.6	106	NA
BS/BSD RPD %	4.10	13.5	3.70	NA
DUP RPD LIMITS	---	---	---	---
DUPLICATE RPD %	NA	NA	NA	NC
LCS LEVEL	3.33	3.33	100	10.0
LCS REC LIMITS	14.0 - 176	52.0 - 115	75.0 - 125	60.0 - 140
LCS RESULT	SEE_BS	SEE_BS	SEE_BS	10.0
LCS RECOVERY %	SEE_BS	SEE_BS	SEE_BS	100
SPIKE SAMPLE ID	13386-1	13386-1	13386-1	13386-2
SAMPLE VALUE	< 1.65	< 0.330	< 10.0	< 2.00
DUP SAMPLE ID	---	---	---	13386-2
DUP SAMPLE VAL/1	---	---	---	---
DUP SAMPLE VAL/2	---	---	---	---

SEE_BS LCS and LCS Duplicate reported as BS and BSD.
NA Not applicable
NC Not calculable

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Aluminum	Arsenic	Barium	Beryllium	Calcium
BATCH NO.	15250	15250F	15250	15250	15250
LCS LOT NO.	691113	691113	691113	691113	691113
PREP METHOD	EPA 3051	EPA 3051	EPA 3051	EPA 3051	EPA 3051
PREPARED BY	CEL	CEL	CEL	CEL	CEL
ANALYSIS METHOD	EPA 6010A	EPA 7060	EPA 6010A	EPA 6010A	EPA 6010A
ANALYZED BY	GGD	MPE	GGD	GGD	JLW
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 20.0	< 0.50	< 2.0	< 0.5	5.42
SPIKE LEVEL	100	4.00	100	100	1000
SPK REC LIMITS	60.0 - 140	75.0 - 125	60.0 - 140	75.0 - 125	75.0 - 125
SPK RPD LIMITS	30.0	25.0	30.0	25.0	25.0
MS RESULT	F	4.51	F	96.5	F
MS RECOVERY %	F	77.3 B	F	96.5	F
MSD RESULT	F	4.17	F	98.4	F
MSD RECOVERY %	F	68.8 B	F	98.4	F
MS/MSD RPD %	F	11.6 B	F	1.95	F
BS RESULT	NA	NA	NA	NA	NA
BS RECOVERY %	NA	NA	NA	NA	NA
BSD RESULT	NA	NA	NA	NA	NA
BSD RECOVERY %	NA	NA	NA	NA	NA
BS/BSD RPD %	NA	NA	NA	NA	NA
DUP RPD LIMITS	30.0	25.0	30.0	---	25.0
DUPLICATE RPD %	19.6	23.6	30.2 O	NC	7.39
LCS LEVEL	100	4.00	100	100	1000
LCS REC LIMITS	60.0 - 140	75.0 - 125	60.0 - 140	75.0 - 125	75.0 - 125
LCS RESULT	75.4	3.52	105	103	1050
LCS RECOVERY %	75.4	88.0	105	103	105
SPIKE SAMPLE ID	13386-2	13386-2	13386-2	13386-2	13386-2
SAMPLE VALUE	---	1.42	---	< 0.500	---
DUP SAMPLE ID	13386-2	13386-2	13386-2	13386-2	13386-2
DUP SAMPLE VAL/1	2340	1.80	152.0	---	298000
DUP SAMPLE VAL/2	1920	1.42	206	---	277000

F Not applicable due to high analyte concentration in the QC sample.
NA Not applicable
_B Not applicable due to matrix interference in the QC Sample.
_O Not applicable due to non-homogeneous QC sample.
NC Not calculable

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Cadmium	Cobalt	Chromium	Copper	Iron
BATCH NO.	15250	15250	15250	15250	15250
LCS LOT NO.	691113	691113	691113	691113	691113
PREP METHOD	EPA 3051	EPA 3051	EPA 3051	EPA 3051	EPA 3051
PREPARED BY	CEL	CEL	CEL	CEL	CEL
ANALYSIS METHOD	EPA 6010A	EPA 6010A	EPA 6010A	EPA 6010A	EPA 6010A
ANALYZED BY	GGD	GGD	GGD	GGD	GGD
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 2.0	< 2.0	< 2.00	< 1.0	< 10.0
SPIKE LEVEL	100	100	100	100	100
SPK REC LIMITS	75.0 - 125	75.0 - 125	75.0 - 125	75.0 - 125	60.0 - 140
SPK RPD LIMITS	25.0	25.0	25.0	25.0	30.0
MS RESULT	94.5	101	99.4	105	F
MS RECOVERY %	94.5	96.9	99.4	103	F
MSD RESULT	97.0	103	101	106	F
MSD RECOVERY %	97.0	98.6	101	104	F
MS/MSD RPD %	2.61	1.74	1.60	0.97	F
BS RESULT	NA	NA	NA	NA	NA
BS RECOVERY %	NA	NA	NA	NA	NA
BSD RESULT	NA	NA	NA	NA	NA
BSD RECOVERY %	NA	NA	NA	NA	NA
BS/BSD RPD %	NA	NA	NA	NA	NA
DUP RPD LIMITS	---	25.0	---	25.0	30.0
DUPLICATE RPD %	NC	12.9	NC	52.9	16.4
LCS LEVEL	100	100	100	100	100
LCS REC LIMITS	75.0 - 125	75.0 - 125	75.0 - 125	75.0 - 125	60.0 - 140
LCS RESULT	103	106	107	105	91.0
LCS RECOVERY %	103	106	107	105	91.0
SPIKE SAMPLE ID	13386-2	13386-2	13386-2	13386-2	13386-2
SAMPLE VALUE	< 2.00	4.48	< 2.00	2.50	---
DUP SAMPLE ID	13386-2	13386-2	13386-2	13386-2	13386-2
DUP SAMPLE VAL/1	---	5.10	---	4.30	1880
DUP SAMPLE VAL/2	---	4.48	---	2.50	1590

NA Not applicable
NC Not calculable
F Not applicable due to high analyte concentration in the QC sample.

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Mercury	Potassium	Magnesium	Manganese	Sodium
BATCH NO.	HG-3137	15250	15250	15250	15250
LCS LOT NO.	AB300-54	691113	691113	691113	691113
PREP METHOD	EPA 7471A	EPA 3051	EPA 3051	EPA 3051	EPA 3051
PREPARED BY	SPF	CEL	CEL	CEL	CEL
ANALYSIS METHOD	EPA 7471A	EPA 6010A	EPA 6010A	EPA 6010A	EPA 6010A
ANALYZED BY	CGJ	GGD	GGD	GGD	GGD
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	<0.1200	< 100	< 10.0	< 1.0	< 100
SPIKE LEVEL	1.00	1000	100	100	1000
SPK REC LIMITS	75.0 - 125	75.0 - 125	75.0 - 125	75.0 - 125	75.0 - 125
SPK RPD LIMITS	25.0	25.0	25.0	25.0	25.0
MS RESULT	0.959	B	F	182	1220
MS RECOVERY %	95.9	B	F	104	107
MSD RESULT	0.965	B	F	184	1230
MSD RECOVERY %	96.5	B	F	106	108
MS/MSD RPD %	0.62	B	F	1.62	0.56
BS RESULT	NA	NA	NA	NA	NA
BS RECOVERY %	NA	NA	NA	NA	NA
BSD RESULT	NA	NA	NA	NA	NA
BSD RECOVERY %	NA	NA	NA	NA	NA
BS/BSD RPD %	NA	NA	NA	NA	NA
DUP RPD LIMITS	---	25.0	25.0	25.0	25.0
DUPLICATE RPD %	NC	21.2	4.87	10.8	0.68
LCS LEVEL	1.00	1000	100	100	1000
LCS REC LIMITS	75.0 - 125	75.0 - 125	75.0 - 125	75.0 - 125	75.0 - 125
LCS RESULT	0.991	986	74.0	104	1060
LCS RECOVERY %	99.1	98.6	74.0	104	106
SPIKE SAMPLE ID	13386-1	13386-2	13386-2	13386-2	13386-2
SAMPLE VALUE	< 0.120	---	---	78.5	147
DUP SAMPLE ID	13386-1	13386-2	13386-2	13386-2	13386-2
DUP SAMPLE VAL/1	---	500	6120	87.5	148
DUP SAMPLE VAL/2	---	404	5820	78.5	147

NA Not applicable
NC Not calculable
B Not applicable due to matrix interference in the QC sample.
F Not applicable due to high analyte concentration in the QC sample.

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Nickel	Lead	Antimony	Selenium	Thallium
BATCH NO.	15250	15250F	15259	15250F	15250F
LCS LOT NO.	691113	691113	690913A,B	691113	691113
PREP METHOD	EPA 3051	EPA 3051	EPA 3050	EPA 3051	EPA 3051
PREPARED BY	CEL	CEL	SPF	CEL	CEL
ANALYSIS METHOD	EPA 6010A	EPA 7421	EPA 6010A	EPA 7740	EPA 7841
ANALYZED BY	GGD	MPE	JO	MPE	AH
UNITS	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
METHOD BLANK	< 2.0	< 0.20	< 10.0	< 0.50	< 0.50
SPIKE LEVEL	100	2.00	100	2.00	4.00
SPK REC LIMITS	75.0 - 125	75.0 - 125	60.0 - 140	75.0 - 125	75.0 - 125
SPK RPD LIMITS	25.0	25.0	30.0	25.0	25.0
MS RESULT	100	3.16	589	1.70	2.87
MS RECOVERY %	96.5	97.0	589 B	85.0	71.8 B
MSD RESULT	101	3.23	659	1.58	2.97
MSD RECOVERY %	97.5	101	659 B	79.0	74.3 B
MS/MSD RPD %	1.03	3.54	11.2 B	7.32	3.42 B
BS RESULT	NA	NA	NA	NA	NA
BS RECOVERY %	NA	NA	NA	NA	NA
BSD RESULT	NA	NA	NA	NA	NA
BSD RECOVERY %	NA	NA	NA	NA	NA
BS/BSD RPD %	NA	NA	NA	NA	NA
DUP RPD LIMITS	25.0	---	30.0	---	---
DUPLICATE RPD %	2.82	NC	0.00	NC	NC
LCS LEVEL	100	2.00	1000	2.00	4.00
LCS REC LIMITS	75.0 - 125	75.0 - 125	60.0 - 140	75.0 - 125	75.0 - 125
LCS RESULT	107	2.00	995	1.95	3.52
LCS RECOVERY %	107	100	99.5	97.5	88.0
SPIKE SAMPLE ID	13386-2	13386-2	13386-1	13386-2	13386-2
SAMPLE VALUE	3.50	1.22	< 10.0	< 0.500	< 0.500
DUP SAMPLE ID	13386-2	13386-2	13386-1	13386-2	13386-2
DUP SAMPLE VAL/1	3.60	---	0.00	---	---
DUP SAMPLE VAL/2	3.50	---	< 10.0	---	---

NA Not applicable
NC Not calculable
_B Not applicable due to matrix interference in the QC Sample.

Inchcape Testing Services
Environmental Laboratories

REPORT DATE : 31-DEC-1996 REPORT NUMBER : D96-13386

SAMPLE SUBMITTED BY : IMS
ATTENTION : Mr. Prareen Srivastara

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Vanadium	Zinc
BATCH NO.	15250	15250
LCS LOT NO.	691113	691113
PREP METHOD	EPA 3051	EPA 3051
PREPARED BY	CEL	CEL
ANALYSIS METHOD	EPA 6010A	EPA 6010A
ANALYZED BY	GGD	GGD
UNITS	mg/Kg	mg/Kg
METHOD BLANK	< 2.0	< 3.0
SPIKE LEVEL	100	100
SPK REC LIMITS	75.0 - 125	75.0 - 125
SPK RPD LIMITS	25.0	25.0
MS RESULT	111	105
MS RECOVERY %	100	101
MSD RESULT	113	107
MSD RECOVERY %	102	103
MS/MSD RPD %	1.98	1.96
BS RESULT	NA	NA
BS RECOVERY %	NA	NA
BSD RESULT	NA	NA
BSD RECOVERY %	NA	NA
BS/BSD RPD %	NA	NA
DUP RPD LIMITS	25.0	25.0
DUPLICATE RPD %	6.28	3.88
LCS LEVEL	100	100
LCS REC LIMITS	75.0 - 125	75.0 - 125
LCS RESULT	106	111
LCS RECOVERY %	106	111
SPIKE SAMPLE ID	13386-2	13386-2
SAMPLE VALUE	10.8	4.04
DUP SAMPLE ID	13386-2	13386-2
DUP SAMPLE VAL/1	11.5	4.20
DUP SAMPLE VAL/2	10.8	4.04

NA Not applicable

VOLATILES CALIBRATION SUMMARY

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Calibration Time(s): 1145 1333

GC Column: ID: 0.53 (mm)

LAB FILE ID: RRF10 =DD7510701007 RRF20 =DD7510601006
RRF50 =DD7510501005 RRF100=DD7510401004 RRF200=DD7510301003

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
Dichlorodifluoromethane			0.501	0.454	0.429	0.380			
Chloromethane	*		0.246	0.210	0.205	0.172			*
Vinyl Chloride			0.271	0.243	0.230	0.197			
Bromomethane			0.310	0.284	0.290	0.259			
Chloroethane			0.067	0.059	0.046	0.034			
Trichlorofluoromethane			1.077	0.957	0.999	0.880			
Acrolein			0.032	0.036	0.036	0.035			
1,1-Dichloroethene			0.345	0.303	0.326	0.283			
Trichlorotrifluoroethane									
Acetone			0.096	0.073	0.114	0.093			
Iodomethane			0.892	0.775	0.890	0.763			
Carbon disulfide			0.814	0.810	0.842	0.800			
Methylene Chloride			0.249	0.375	0.352	0.314			
Acrylonitrile			0.011	0.048	0.050	0.040			
trans-1,2-Dichloroethene			0.336	0.321	0.337	0.327			
Methyl-t-butyl ether									
1,1-Dichloroethane	*		0.895	0.758	0.781	0.732			*
Vinyl acetate									
2,2-Dichloropropane			0.937	0.873	0.886	0.833			
cis-1,2-Dichloroethene			0.413	0.377	0.379	0.367			
2-Butanone			0.004	0.013	0.020	0.027			
Bromochloromethane			0.274	0.253	0.263	0.232			
Chloroform			1.130	1.024	1.021	0.908			
1,1,1-Trichloroethane			1.045	0.962	0.972	0.838			
1,1-Dichloropropene			0.708	0.647	0.643	0.540			
Carbon Tetrachloride			0.959	0.816	0.807	0.720			
Benzene			1.016	0.877	0.874	0.723			
1,2-Dichloroethane			0.774	0.709	0.696	0.584			
Trichloroethene			0.478	0.444	0.438	0.370			
1,2-Dichloropropane			0.470	0.406	0.418	0.347			
Dibromomethane			0.538	0.469	0.484	0.404			
Bromodichloromethane			1.092	0.971	0.965	0.833			
2-Chloroethylvinyl ether			0.142	0.158	0.173	0.161			
trans-1,3-Dichloropropene			0.612	0.606	0.620	0.533			
1,2,3-Trichloropropane			1.272	1.117	1.161	0.927			
2-Hexanone			0.330	0.319	0.321	0.246			
Toluene			0.713	0.612	0.599	0.493			

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Calibration Time(s): 1145 1333

GC Column: ID: 0.53 (mm)

LAB FILE ID: RRF10 =DD7510701007 RRF20 =DD7510601006
RRF50 =DD7510501005 RRF100=DD7510401004 RRF200=DD7510301003

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
cis-1,3-Dichloropropene		0.591	0.561	0.576	0.497		
1,1,2-Trichloroethane		0.418	0.434	0.437	0.368		
1,3-Dichloropropane		0.715	0.741	0.728	0.615		
Tetrachloroethene		0.598	0.608	0.592	0.514		
4-Methyl-2-pentanone		0.124	0.329	0.325	0.253		
Dibromochloromethane		0.809	0.863	0.858	0.759		
1,2-Dibromoethane		0.680	0.719	0.724	0.589		
Chlorobenzene *		1.065	1.010	0.986	0.855		*
1,1,1,2-Tetrachloroethane		0.559	0.576	0.580	0.513		
Ethylbenzene		3.133	3.015	3.052	2.606		
m,p-Xylene		0.629	0.599	0.606	0.508		
o-Xylene		0.622	0.618	0.578	0.496		
Styrene		0.973	0.999	0.964	0.828		
Bromoform *		0.594	0.627	0.634	0.547		*
1,3,5-Trimethylbenzene		3.503	2.859	2.981	2.491		
1,1,2,2-Tetrachloroethane *		1.454	1.273	1.216	0.993		*
trans-1,4-Dichloro-2-butene		0.091	0.113	0.128	0.116		
n-Propylbenzene		3.019	2.849	2.912	2.543		
4-Chlorotoluene		3.545	3.054	3.040	2.648		
1,2,4-Trimethylbenzene		2.679	2.422	2.410	1.980		
2-Chlorotoluene		3.545	3.054	3.040	2.648		
sec-Butylbenzene		2.690	2.435	2.371	1.979		
n-Butylbenzene		2.680	2.377	2.439	2.046		
Isopropylbenzene		3.573	2.928	3.104	2.667		
1,3-Dichlorobenzene		1.430	1.237	1.278	1.117		
tert-Butylbenzene		2.840	2.520	2.658	2.224		
1,4-Dichlorobenzene		1.920	1.661	1.667	1.385		
1,2-Dichlorobenzene		1.493	1.355	1.332	1.093		
1,2-Dibromo-3-chloropropane		0.448	0.423	0.409	0.415		
1,2,4-Trichlorobenzene		1.044	0.992	0.965	0.791		
Hexachlorobutadiene		0.811	0.787	0.808	0.675		
Naphthalene		1.807	1.654	1.545	1.422		
1,2,3-Trichlorobenzene		0.956	0.882	0.814	0.653		
Bromobenzene		1.049	0.898	0.933	0.769		
Dibromofluoromethane (SS)		0.934	0.809	0.839	0.700		
Toluene-d8 (SS)		1.044	0.991	0.970	0.880		

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Calibration Time(s): 1145 1333

GC Column: ID: 0.53 (mm)

LAB FILE ID: RRF10 =DD7510701007 RRF20 =DD7510601006
RRF50 =DD7510501005 RRF100=DD7510401004 RRF200=DD7510301003

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Bromofluorobenzene (SS)		1.903	1.665	1.683	1.496		

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Calibration Time(s): 1145 1333

GC Column: ID: 0.53 (mm)

LAB FILE ID: RRF300=DD7510201002

COMPOUND	RRF300					$\overline{RRF}$	% RSD	
Dichlorodifluoromethane	0.458					0.444	10.0	
Chloromethane	* 0.183					0.203	14.1*	
Vinyl Chloride	0.220					0.232	11.9	
Bromomethane	0.275					0.284	6.6	
Chloroethane	0.038					0.049	1.0	
Trichlorofluoromethane	0.956					0.974	1.0	
Acrolein	0.034					0.035	4.9	
1,1-Dichloroethene	0.315					0.314	7.4	
Trichlorotrifluoroethane								<-
Acetone	0.096					0.094	1.0	
Iodomethane	0.941					0.852	9.3	
Carbon disulfide	0.874					0.828	3.6	
Methylene Chloride	0.343					0.327	14.9	
Acrylonitrile	0.045					0.039	1.0	
trans-1,2-Dichloroethene	0.374					0.339	6.1	
Methyl-t-butyl ether								<-
1,1-Dichloroethane	* 0.755					0.784	8.2*	
Vinyl acetate								<-
2,2-Dichloropropane	0.898					0.885	4.3	
cis-1,2-Dichloroethene	0.392					0.386	4.5	
2-Butanone	0.026					0.018	1.0	
Bromochloromethane	0.259					0.256	6.2	
Chloroform	0.990					1.015	7.8	
1,1,1-Trichloroethane	0.928					0.949	8.0	
1,1-Dichloropropene	0.570					0.622	10.7	
Carbon Tetrachloride	0.794					0.819	10.6	
Benzene	0.769					0.852	13.3	
1,2-Dichloroethane	0.620					0.677	11.1	
Trichloroethene	0.389					0.424	10.3	
1,2-Dichloropropane	0.351					0.398	12.8	
Dibromomethane	0.422					0.463	11.4	
Bromodichloromethane	0.882					0.949	10.4	
2-Chloroethylvinyl ether	0.179					0.163	1.0	
trans-1,3-Dichloropropene	0.572					0.589	6.2	
1,2,3-Trichloropropane	1.076					1.111	11.4	
2-Hexanone	0.271					0.297	1.0	
Toluene	0.534					0.590	14.2	

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Calibration Time(s): 1145 1333

GC Column: ID: 0.53 (mm)

LAB FILE ID: RRF300=DD7510201002

COMPOUND	RRF300					$\overline{RRF}$	% RSD
cis-1,3-Dichloropropene	0.543					0.554	6.5
1,1,2-Trichloroethane	0.434					0.418	7.0
1,3-Dichloropropane	0.696					0.699	7.1
Tetrachloroethene	0.609					0.584	6.8
4-Methyl-2-pentanone	0.275					0.261	1.0
Dibromochloromethane	0.901					0.838	6.5
1,2-Dibromoethane	0.690					0.680	8.0
Chlorobenzene *	0.988					0.981	7.9*
1,1,1,2-Tetrachloroethane	0.595					0.565	5.6
Ethylbenzene	2.989					2.959	6.9
m,p-Xylene	0.585					0.585	7.9
o-Xylene	0.563					0.575	8.9
Styrene	0.960					0.945	7.1
Bromoform *	0.628					0.606	6.0*
1,3,5-Trimethylbenzene	3.196					3.006	12.6
1,1,2,2-Tetrachloroethane *	1.109					1.209	1.0*
trans-1,4-Dichloro-2-butene	0.133					0.116	1.0
n-Propylbenzene	2.879					2.840	6.3
4-Chlorotoluene	3.196					3.097	10.4
1,2,4-Trimethylbenzene	2.404					2.379	10.6
2-Chlorotoluene	3.196					3.097	10.4
sec-Butylbenzene	2.382					2.371	10.7
n-Butylbenzene	2.462					2.401	9.5
Isopropylbenzene	3.700					3.194	13.6
1,3-Dichlorobenzene	1.269					1.266	8.8
tert-Butylbenzene	2.622					2.573	8.8
1,4-Dichlorobenzene	1.646					1.656	11.4
1,2-Dichlorobenzene	1.211					1.297	11.7
1,2-Dibromo-3-chloropropane	0.429					0.425	3.5
1,2,4-Trichlorobenzene	0.930					0.944	10.1
Hexachlorobutadiene	0.737					0.764	7.6
Naphthalene	1.483					1.582	9.6
1,2,3-Trichlorobenzene	0.763					0.814	14.2
Bromobenzene	0.970					0.924	11.2
Dibromofluoromethane (SS)	0.714					0.799	12.0
Toluene-d8 (SS)	0.880					0.953	7.5

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Calibration Time(s): 1145 1333

GC Column: ID: 0.53 (mm)

LAB FILE ID: RRF300=DD7510201002

COMPOUND	RRF300					$\overline{RRF}$	% RSD
Bromofluorobenzene (SS)	1.581					1.666	9.1

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM VI VOA

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date: 11/25/96 Time: 0850

Lab File ID: DD7590201002 Init. Calib. Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1145 1333

GC Column: ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	0.444	1.070		141.0		<-
Chloromethane	0.203	0.238	0.100	17.2	20.0	
Vinyl Chloride	0.232	0.266		14.6		
Bromomethane	0.284	0.440		54.9		<-
Chloroethane	0.049	0.067		36.7		<-
Trichlorofluoromethane	0.974	1.401		43.8		<-
Acrolein	0.035	0.013		62.8		<-
1,1-Dichloroethene	0.314	0.340		8.3		
Trichlorotrifluoroethane						<-
Acetone	0.094	0.098		4.2		
Iodomethane	0.852	1.163		36.5		<-
Carbon disulfide	0.828	0.814		1.7		
Methylene Chloride	0.327	0.336		2.8		
Acrylonitrile	0.039	0.008		79.5		<-
trans-1,2-Dichloroethene	0.339	0.356		5.0		
Methyl-t-butyl ether						<-
1,1-Dichloroethane	0.784	0.787	0.100	0.4	20.0	
Vinyl acetate						<-
2,2-Dichloropropane	0.885	1.055		19.2		
cis-1,2-Dichloroethene	0.386	0.386		0.0		
2-Butanone	0.018	0.013		27.8		<-
Bromochloromethane	0.256	0.232		9.4		
Chloroform	1.015	1.103		8.7		
1,1,1-Trichloroethane	0.949	1.103		16.2		
1,1-Dichloropropene	0.622	0.685		10.1		
Carbon Tetrachloride	0.819	0.981		19.8		
Benzene	0.852	0.894		4.9		
1,2-Dichloroethane	0.677	0.777		14.8		
Trichloroethene	0.424	0.502		18.4		
1,2-Dichloropropane	0.398	0.406		2.0		
Dibromomethane	0.463	0.514		11.0		
Bromodichloromethane	0.949	1.098		15.7		
2-Chloroethylvinyl ether	0.163	0.177		8.6		
trans-1,3-Dichloropropene	0.589	0.655		11.2		
1,2,3-Trichloropropane	1.111	1.064		4.2		
2-Hexanone	0.297	0.231		22.2		<-
Toluene	0.590	0.662		12.2		

All other compounds must meet a minimum RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date: 11/25/96 Time: 0850

Lab File ID: DD7590201002 Init. Calib. Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1145 1333

GC Column: ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
cis-1,3-Dichloropropene	0.554	0.625		12.8		
1,1,2-Trichloroethane	0.418	0.401		4.1		
1,3-Dichloropropane	0.699	0.682		2.4		
Tetrachloroethene	0.584	0.682		16.8		
4-Methyl-2-pentanone	0.261	0.197		24.5		<-
Dibromochloromethane	0.838	0.970		15.8		
1,2-Dibromoethane	0.680	0.681		0.1		
Chlorobenzene	0.981	1.063	0.300	8.4	20.0	
1,1,1,2-Tetrachloroethane	0.565	0.647		14.5		
Ethylbenzene	2.959	2.444		17.4		
m,p-Xylene	0.585	0.617		5.5		
o-Xylene	0.575	0.557		3.1		
Styrene	0.945	0.941		0.4		
Bromoform	0.606	0.674	0.100	11.2	20.0	
1,3,5-Trimethylbenzene	3.006	3.082		2.5		
1,1,2,2-Tetrachloroethane	1.209	1.041	0.300	13.9	20.0	
trans-1,4-Dichloro-2-butene	0.116	0.132		13.8		
n-Propylbenzene	2.840	2.594		8.7		
4-Chlorotoluene	3.097	3.563		15.0		
1,2,4-Trimethylbenzene	2.379	2.633		10.7		
2-Chlorotoluene	3.097	3.563		15.0		
sec-Butylbenzene	2.371	2.659		12.1		
n-Butylbenzene	2.401	2.812		17.1		
Isopropylbenzene	3.194	3.434		7.5		
1,3-Dichlorobenzene	1.266	1.417		11.9		
tert-Butylbenzene	2.573	2.833		10.1		
1,4-Dichlorobenzene	1.656	1.799		8.6		
1,2-Dichlorobenzene	1.297	1.518		17.0		
1,2-Dibromo-3-chloropropane	0.425	0.376		11.5		
1,2,4-Trichlorobenzene	0.944	1.124		19.1		
Hexachlorobutadiene	0.764	0.994		30.1		<-
Naphthalene	1.582	1.423		10.0		
1,2,3-Trichlorobenzene	0.814	0.931		14.4		
Bromobenzene	0.924	1.067		15.5		
Dibromofluoromethane (SS)	0.799	0.766		4.1		
Toluene-d8 (SS)	0.953	0.920		3.5		

All other compounds must meet a minimum RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8260 SDG No.: V13386

Instrument ID: ITS2 Calibration Date: 11/25/96 Time: 0850

Lab File ID: DD7590201002 Init. Calib. Date(s): 11/18/96 11/18/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1145 1333

GC Column: ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Bromofluorobenzene (SS)	1.666	1.531		8.1	

All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILES CALIBRATION SUMMARY

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date(s): 11/14/96 11/14/96

Calibration Time(s): 1927 2154

LAB FILE ID: RRF20 =CQ452 RRF50 =CQ451
RRF80 =CQ450 RRF120=CQ449 RRF160=CQ448

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
N-Nitrosodimethylamine *	0.664	0.871	0.874	0.915	0.928	0.850	12.6*
Aniline *	2.401	1.989	1.771	1.506	1.574	1.848	19.6*
Phenol *	1.974	1.690	1.618	1.810	1.714	1.761	7.8*
Bis(2-chloroethyl)ether *	1.424	1.288	1.465	1.480	1.434	1.418	5.4*
2-Chlorophenol *	1.622	1.383	1.288	1.428	1.363	1.417	8.8*
1,3-Dichlorobenzene *	1.647	1.528	1.551	1.574	1.579	1.576	2.8*
1,4-Dichlorobenzene *	1.833	1.666	1.525	1.585	1.564	1.635	7.5*
Benzyl alcohol *	0.850	0.929	0.832	0.834	0.854	0.860	4.7*
1,2-Dichlorobenzene *	1.556	1.546	1.495	1.478	1.462	1.507	2.8*
2-Methylphenol *	1.082	1.272	1.211	1.227	1.262	1.211	6.3*
Bis(2-chloroisopropyl)ether *	2.066	2.043	1.946	2.062	1.974	2.018	2.7*
4-Methylphenol *	1.318	1.370	1.202	1.308	1.326	1.305	4.8*
N-Nitrosodi-n-propylamine *	1.223	1.286	1.244	1.359	1.168	1.256	5.7*
Hexachloroethane *	0.782	0.674	0.640	0.715	0.680	0.698	7.7*
Nitrobenzene *	0.427	0.442	0.415	0.406	0.444	0.427	3.9*
Isophorone *	0.865	0.761	0.830	0.789	0.797	0.808	5.0*
2-Nitrophenol *	0.210	0.230	0.198	0.197	0.217	0.210	6.6*
2,4-Dimethylphenol *	0.442	0.324	0.321	0.349	0.336	0.354	14.1*
Bis(2-chloroethoxy)methane *	0.439	0.476	0.470	0.416	0.473	0.455	5.8*
Benzoic acid *	0.168	0.208	0.196	0.200	0.217	0.198	9.4*
2,4-Dichlorophenol *	0.320	0.355	0.310	0.287	0.289	0.312	8.9*
1,2,4-Trichlorobenzene *	0.364	0.348	0.339	0.316	0.334	0.340	5.2*
Naphthalene *	1.116	1.061	0.944	1.039	0.978	1.028	6.6*
4-Chloroaniline *	0.435	0.500	0.447	0.487	0.382	0.450	10.4*
Hexachlorobutadiene *	0.268	0.248	0.235	0.230	0.234	0.243	6.5*
4-Chloro-3-methylphenol *	0.373	0.390	0.364	0.372	0.385	0.377	2.7*
2-Methylnaphthalene *	0.963	0.955	0.916	0.847	0.844	0.905	6.3*
Hexachlorocyclopentadiene *	0.280	0.309	0.265	0.266	0.293	0.283	6.7*
2,4,6-Trichlorophenol *	0.425	0.415	0.400	0.388	0.362	0.398	6.1*
2,4,5-Trichlorophenol *	0.421	0.418	0.382	0.379	0.385	0.397	5.2*
2-Chloronaphthalene *	1.166	1.169	1.048	1.189	1.082	1.131	5.5*
2-Nitroaniline *	0.506	0.504	0.451	0.610	0.528	0.520	11.1*
Dimethylphthalate *	1.454	1.553	1.359	1.590	1.432	1.478	6.3*
Acenaphthylene *	1.711	1.848	1.706	1.902	1.646	1.763	6.1*
2,6-Dinitrotoluene *	0.325	0.310	0.318	0.314	0.297	0.313	3.4*
3-Nitroaniline *	0.363	0.344	0.404	0.410	0.435	0.391	9.4*
Acenaphthene *	1.300	1.298	1.243	1.076	1.142	1.212	8.2*

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date(s): 11/14/96 11/14/96

Calibration Time(s): 1927 2154

LAB FILE ID: RRF20 =CQ452 RRF50 =CQ451
RRF80 =CQ450 RRF120=CQ449 RRF160=CQ448

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
2,4-Dinitrophenol *	0.135	0.149	0.138	0.145	0.162	0.146	7.4*
Dibenzofuran *	1.710	1.715	1.715	1.511	1.519	1.634	6.6*
4-Nitrophenol *	0.253	0.266	0.249	0.258	0.252	0.256	2.6*
2,4-Dinitrotoluene *	0.455	0.454	0.434	0.486	0.423	0.450	5.3*
Diethylphthalate *	1.641	1.613	1.566	1.566	1.280	1.533	9.5*
Fluorene *	1.295	1.274	1.200	1.291	1.152	1.242	5.1*
4-Chlorophenyl phenyl ether *	0.600	0.607	0.579	0.582	0.520	0.578	6.0*
4-Nitroaniline *	0.330	0.391	0.341	0.373	0.413	0.370	9.3*
4,6-Dinitro-2-methylphenol *	0.132	0.142	0.136	0.139	0.155	0.141	6.3*
N-Nitrosodiphenylamine (1) *	0.513	0.490	0.459	0.398	0.504	0.473	9.8*
1,2-Diphenylhydrazine *	1.132	1.027	0.928	0.762	0.636	0.897	22.2*
4-Bromophenyl phenyl ether *	0.191	0.197	0.184	0.191	0.195	0.192	2.5*
Hexachlorobenzene *	0.249	0.263	0.241	0.238	0.255	0.249	4.1*
Pentachlorophenol *	0.118	0.131	0.115	0.126	0.135	0.125	6.8*
Benzidine *	0.739	0.768	0.679	0.674	0.657	0.703	6.8*
Phenanthrene *	1.032	1.021	0.986	0.972	0.982	0.999	2.6*
Anthracene *	0.999	1.029	1.004	0.993	1.019	1.009	1.5*
Carbazole *	1.197	1.143	1.170	0.959	0.994	1.093	9.9*
Di-n-butylphthalate *	1.542	1.394	1.511	1.488	1.264	1.440	7.8*
Fluoranthene *	1.089	1.054	1.057	1.034	1.032	1.053	2.2*
Pyrene *	1.583	1.471	1.386	1.369	1.402	1.442	6.1*
Butyl benzyl phthalate *	0.867	0.814	0.865	0.801	0.778	0.825	4.8*
Benzo(a)anthracene *	1.153	1.243	1.271	1.214	1.256	1.227	3.8*
3,3'-Dichlorobenzidine *	0.463	0.444	0.426	0.431	0.400	0.433	5.4*
Chrysene *	1.156	1.145	1.149	1.144	1.114	1.142	1.4*
Bis(2-ethylhexyl)phthalate *	1.076	1.162	1.286	1.108	1.043	1.135	8.4*
Di-n-octylphthalate *	2.349	2.066	1.986	1.988	1.637	2.005	12.7*
Benzo(b)fluoranthene *	1.356	1.326	1.655	1.247	1.223	1.361	12.7*
Benzo(k)fluoranthene *	1.502	1.639	1.293	1.499	1.561	1.499	8.6*
Benzo(a)pyrene *	1.023	1.119	1.090	1.037	1.012	1.056	4.3*
Indeno(1,2,3-cd)pyrene *	1.001	0.985	1.026	0.911	0.960	0.977	4.5*
Dibenz(a,h)anthracene *	0.781	0.754	0.799	0.693	0.734	0.752	5.5*
Benzo(g,h,i)perylene *	0.793	0.812	0.863	0.720	0.778	0.793	6.6*
Nitrobenzene-d5 (SS) *	0.496	0.497	0.445	0.439	0.467	0.469	5.8*

(1) Cannot be seperated from Diphenylamine
* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date(s): 11/14/96 11/14/96

Calibration Time(s): 1927 2154

LAB FILE ID: RRF20 =CQ452 RRF50 =CQ451
RRF80 =CQ450 RRF120=CQ449 RRF160=CQ448

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
2-Fluorobiphenyl (SS) *	1.466	1.525	1.388	1.232	1.343	1.391	8.2*
Terphenyl-d14 (SS) *	1.109	1.117	1.096	1.069	1.101	1.098	1.7*
Phenol-d6 (SS) *	2.057	1.612	1.797	1.949	1.822	1.847	9.1*
2-Fluorophenol (SS) *	1.672	1.440	1.235	1.298	1.289	1.387	12.7*
2,4,6-Tribromophenol (SS) *	0.200	0.212	0.200	0.194	0.208	0.203	3.5*

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date: 11/25/96 Time: 1152

Lab File ID: CQ592 Init. Calib. Date(s): 11/14/96 11/15/96

Init. Calib. Times: 1927 0058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-Nitrosodimethylamine	0.850	0.920	0.050	8.2	20.0
Aniline	1.848	1.928	0.050	4.3	20.0
Phenol	1.761	1.514	0.050	14.0	20.0
Bis(2-chloroethyl)ether	1.418	1.324	0.050	6.6	20.0
2-Chlorophenol	1.417	1.398	0.050	1.3	20.0
1,3-Dichlorobenzene	1.576	1.490	0.050	5.4	20.0
1,4-Dichlorobenzene	1.635	1.372	0.050	16.1	20.0
Benzyl alcohol	0.860	0.936	0.050	8.8	20.0
1,2-Dichlorobenzene	1.507	1.490	0.050	1.1	20.0
2-Methylphenol	1.211	1.234	0.050	1.9	20.0
Bis(2-chloroisopropyl)ether	2.018	2.133	0.050	5.7	20.0
4-Methylphenol	1.305	1.309	0.050	0.3	20.0
N-Nitrosodi-n-propylamine	1.256	1.331	0.050	6.0	20.0
Hexachloroethane	0.698	0.676	0.050	3.2	20.0
Nitrobenzene	0.427	0.396	0.050	7.2	20.0
Isophorone	0.808	0.767	0.050	5.1	20.0
2-Nitrophenol	0.210	0.226	0.050	7.6	20.0
2,4-Dimethylphenol	0.354	0.348	0.050	1.7	20.0
Bis(2-chloroethoxy)methane	0.455	0.469	0.050	3.1	20.0
Benzoic acid	0.198	0.220	0.050	11.1	20.0
2,4-Dichlorophenol	0.312	0.329	0.050	5.4	20.0
1,2,4-Trichlorobenzene	0.340	0.336	0.050	1.2	20.0
Naphthalene	1.028	1.074	0.050	4.5	20.0
4-Chloroaniline	0.450	0.400	0.050	11.1	20.0
Hexachlorobutadiene	0.243	0.238	0.050	2.0	20.0
4-Chloro-3-methylphenol	0.377	0.357	0.050	5.3	20.0
2-Methylnaphthalene	0.905	0.922	0.050	1.9	20.0
Hexachlorocyclopentadiene	0.283	0.337	0.050	19.1	20.0
2,4,6-Trichlorophenol	0.398	0.400	0.050	0.5	20.0
2,4,5-Trichlorophenol	0.397	0.473	0.050	19.1	20.0
2-Chloronaphthalene	1.131	1.026	0.050	9.3	20.0
2-Nitroaniline	0.520	0.464	0.050	10.6	20.0
Dimethylphthalate	1.478	1.525	0.050	3.2	20.0
Acenaphthylene	1.763	1.646	0.050	6.6	20.0
2,6-Dinitrotoluene	0.313	0.300	0.050	4.2	20.0
3-Nitroaniline	0.391	0.367	0.050	6.2	20.0
Acenaphthene	1.212	1.233	0.050	1.7	20.0

All other compounds must meet a minimum RRF of 0.010.

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date: 11/25/96 Time: 1152

Lab File ID: CQ592 Init. Calib. Date(s): 11/14/96 11/15/96

Init. Calib. Times: 1927 0058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
2,4-Dinitrophenol	0.146	0.177	0.050	21.2	20.0	<-
Dibenzofuran	1.634	1.631	0.050	0.2	20.0	
4-Nitrophenol	0.256	0.220	0.050	14.1	20.0	
2,4-Dinitrotoluene	0.450	0.483	0.050	7.3	20.0	
Diethylphthalate	1.533	1.369	0.050	10.7	20.0	
Fluorene	1.242	1.154	0.050	7.1	20.0	
4-Chlorophenyl phenyl ether	0.578	0.581	0.050	0.5	20.0	
4-Nitroaniline	0.370	0.311	0.050	15.8	20.0	
4,6-Dinitro-2-methylphenol	0.141	0.149	0.050	5.7	20.0	
N-Nitrosodiphenylamine	0.473	0.509	0.050	7.6	20.0	
1,2-Diphenylhydrazine	0.897	1.069	0.050	19.2	20.0	
4-Bromophenyl phenyl ether	0.192	0.206	0.050	7.3	20.0	
Hexachlorobenzene	0.249	0.272	0.050	9.2	20.0	
Pentachlorophenol	0.125	0.135	0.050	8.0	20.0	
Benzidine	0.703	0.803	0.050	100.0	20.0	
Phenanthrene	0.999	0.995	0.050	0.4	20.0	
Anthracene	1.009	0.965	0.050	4.4	20.0	
Carbazole	1.093	1.112	0.050	1.8	20.0	
Di-n-butylphthalate	1.440	1.351	0.050	6.2	20.0	
Fluoranthene	1.053	1.032	0.050	2.0	20.0	
Pyrene	1.442	2.013	0.050	39.6	20.0	<-
Butyl benzyl phthalate	0.825	1.015	0.050	23.0	20.0	<-
Benzo(a)anthracene	1.227	1.295	0.050	5.5	20.0	
3,3'-Dichlorobenzidine	0.433	0.432	0.050	0.3	20.0	
Chrysene	1.142	1.183	0.050	3.6	20.0	
Bis(2-ethylhexyl)phthalate	1.135	1.275	0.050	12.3	20.0	
Di-n-octylphthalate	2.005	2.523	0.050	25.8	20.0	<-
Benzo(b)fluoranthene	1.361	1.276	0.050	6.2	20.0	
Benzo(k)fluoranthene	1.499	1.444	0.050	3.7	20.0	
Benzo(a)pyrene	1.056	1.039	0.050	1.6	20.0	
Indeno(1,2,3-cd)pyrene	0.977	1.035	0.050	5.9	20.0	
Dibenz(a,h)anthracene	0.752	0.860	0.050	14.4	20.0	
Benzo(g,h,i)perylene	0.793	1.002	0.050	26.4	20.0	<-

All other compounds must meet a minimum RRF of 0.010.

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date: 11/25/96 Time: 1152

Lab File ID: CQ592 Init. Calib. Date(s): 11/14/96 11/15/96

Init. Calib. Times: 1927 0058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Nitrobenzene-d5 (SS)	0.469	0.476	0.050	1.5	20.0	
2-Fluorobiphenyl (SS)	1.391	1.298	0.050	6.7	20.0	
Terphenyl-d14 (SS)	1.098	1.438	0.050	31.0	20.0	<-
Phenol-d6 (SS)	1.847	1.622	0.050	12.2	20.0	
2-Fluorophenol (SS)	1.387	1.022	0.050	26.3	20.0	<-
2,4,6-Tribromophenol (SS)	0.203	0.216	0.050	6.4	20.0	

All other compounds must meet a minimum RRF of 0.010.

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date: 11/26/96 Time: 1457

Lab File ID: CQ611 Init. Calib. Date(s): 11/14/96 11/15/96

Init. Calib. Times: 1927 0058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
N-Nitrosodimethylamine	0.850	1.107	0.050	30.2	20.0	<-
Aniline	1.848	2.014	0.050	9.0	20.0	
Phenol	1.761	1.778	0.050	1.0	20.0	
Bis(2-chloroethyl)ether	1.418	1.505	0.050	6.1	20.0	
2-Chlorophenol	1.417	1.428	0.050	0.8	20.0	
1,3-Dichlorobenzene	1.576	1.688	0.050	7.1	20.0	
1,4-Dichlorobenzene	1.635	1.683	0.050	2.9	20.0	
Benzyl alcohol	0.860	0.911	0.050	5.9	20.0	
1,2-Dichlorobenzene	1.507	1.676	0.050	11.2	20.0	
2-Methylphenol	1.211	1.247	0.050	3.0	20.0	
Bis(2-chloroisopropyl)ether	2.018	2.508	0.050	24.3	20.0	<-
4-Methylphenol	1.305	1.509	0.050	15.6	20.0	
N-Nitrosodi-n-propylamine	1.256	1.441	0.050	14.7	20.0	
Hexachloroethane	0.698	0.762	0.050	9.2	20.0	
Nitrobenzene	0.427	0.419	0.050	1.9	20.0	
Isophorone	0.808	0.815	0.050	0.9	20.0	
2-Nitrophenol	0.210	0.230	0.050	9.5	20.0	
2,4-Dimethylphenol	0.354	0.349	0.050	1.4	20.0	
Bis(2-chloroethoxy)methane	0.455	0.482	0.050	5.9	20.0	
Benzoic acid	0.198	0.205	0.050	3.5	20.0	
2,4-Dichlorophenol	0.312	0.337	0.050	8.0	20.0	
1,2,4-Trichlorobenzene	0.340	0.327	0.050	3.8	20.0	
Naphthalene	1.028	1.034	0.050	0.6	20.0	
4-Chloroaniline	0.450	0.441	0.050	2.0	20.0	
Hexachlorobutadiene	0.243	0.259	0.050	6.6	20.0	
4-Chloro-3-methylphenol	0.377	0.360	0.050	4.5	20.0	
2-Methylnaphthalene	0.905	0.912	0.050	0.8	20.0	
Hexachlorocyclopentadiene	0.283	0.363	0.050	28.3	20.0	<-
2,4,6-Trichlorophenol	0.398	0.398	0.050	0.0	20.0	
2,4,5-Trichlorophenol	0.397	0.483	0.050	21.7	20.0	<-
2-Chloronaphthalene	1.131	1.128	0.050	0.3	20.0	
2-Nitroaniline	0.520	0.501	0.050	3.6	20.0	
Dimethylphthalate	1.478	1.462	0.050	1.1	20.0	
Acenaphthylene	1.763	1.954	0.050	10.8	20.0	
2,6-Dinitrotoluene	0.313	0.368	0.050	17.6	20.0	
3-Nitroaniline	0.391	0.385	0.050	1.5	20.0	
Acenaphthene	1.212	1.217	0.050	0.4	20.0	

All other compounds must meet a minimum RRF of 0.010.

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date: 11/26/96 Time: 1457

Lab File ID: CQ611 Init. Calib. Date(s): 11/14/96 11/15/96

Init. Calib. Times: 1927 0058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
2,4-Dinitrophenol	0.146	0.186	0.050	27.4	20.0	<-
Dibenzofuran	1.634	1.552	0.050	5.0	20.0	
4-Nitrophenol	0.256	0.177	0.050	30.8	20.0	<-
2,4-Dinitrotoluene	0.450	0.480	0.050	6.7	20.0	
Diethylphthalate	1.533	1.357	0.050	11.5	20.0	
Fluorene	1.242	1.386	0.050	11.6	20.0	
4-Chlorophenyl phenyl ether	0.578	0.574	0.050	0.7	20.0	
4-Nitroaniline	0.370	0.340	0.050	8.1	20.0	
4,6-Dinitro-2-methylphenol	0.141	0.144	0.050	2.1	20.0	
N-Nitrosodiphenylamine	0.473	0.460	0.050	2.7	20.0	
1,2-Diphenylhydrazine	0.897	0.987	0.050	10.0	20.0	
4-Bromophenyl phenyl ether	0.192	0.208	0.050	8.3	20.0	
Hexachlorobenzene	0.249	0.321	0.050	28.9	20.0	<-
Pentachlorophenol	0.125	0.141	0.050	12.8	20.0	
Benzidine	0.703	0.698	0.050	0.7	20.0	
Phenanthrene	0.999	0.968	0.050	3.1	20.0	
Anthracene	1.009	0.967	0.050	4.2	20.0	
Carbazole	1.093	1.039	0.050	4.9	20.0	
Di-n-butylphthalate	1.440	1.324	0.050	8.0	20.0	
Fluoranthene	1.053	1.019	0.050	3.2	20.0	
Pyrene	1.442	1.462	0.050	1.4	20.0	
Butyl benzyl phthalate	0.825	0.813	0.050	1.4	20.0	
Benzo(a)anthracene	1.227	1.183	0.050	3.6	20.0	
3,3'-Dichlorobenzidine	0.433	0.431	0.050	0.5	20.0	
Chrysene	1.142	1.217	0.050	6.6	20.0	
Bis(2-ethylhexyl)phthalate	1.135	0.980	0.050	13.6	20.0	
Di-n-octylphthalate	2.005	1.860	0.050	7.2	20.0	
Benzo(b)fluoranthene	1.361	1.197	0.050	12.0	20.0	
Benzo(k)fluoranthene	1.499	1.440	0.050	3.9	20.0	
Benzo(a)pyrene	1.056	0.968	0.050	8.3	20.0	
Indeno(1,2,3-cd)pyrene	0.977	0.867	0.050	11.2	20.0	
Dibenz(a,h)anthracene	0.752	0.702	0.050	6.6	20.0	
Benzo(g,h,i)perylene	0.793	0.855	0.050	7.8	20.0	

All other compounds must meet a minimum RRF of 0.010.

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: ITS-DALLAS Case No.: SAS No.: 8270 SDG No.: SV13386

Instrument ID: ITS4 Calibration Date: 11/26/96 Time: 1457

Lab File ID: CQ611 Init. Calib. Date(s): 11/14/96 11/15/96

Init. Calib. Times: 1927 0058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Nitrobenzene-d5 (SS)	0.469	0.460	0.050	1.9	20.0	
2-Fluorobiphenyl (SS)	1.391	1.446	0.050	4.0	20.0	
Terphenyl-d14 (SS)	1.098	1.131	0.050	3.0	20.0	
Phenol-d6 (SS)	1.847	1.598	0.050	13.5	20.0	
2-Fluorophenol (SS)	1.387	1.634	0.050	17.8	20.0	
2,4,6-Tribromophenol (SS)	0.203	0.267	0.050	31.5	20.0	<-

All other compounds must meet a minimum RRF of 0.010.

O'BRIEN & GERE
LABORATORIES, INC.

November 25, 1996

Mr. Praveen Srivastava
IMS
115 Metro Park
Rochester, New York 14623

Re: Asbestos Analysis Results

File: 1749.001.517

Dear Sir:

The purpose of this letter is to formally convey to you the results of the samples submitted by IMS.

Should you have any questions regarding the enclosed analytical report, please feel free to contact me at your convenience.

Very truly yours,

O'Brien & Gere Laboratories, Inc.

Michael J. Gerber
Manager - Analytical Services

MJG:slw/wptem\temrepor\2173.plm

O'BRIEN & GERE LABORATORIES, INC. an O'Brien & Gere Company
5000 Brittonfield Parkway / P.O. Box 4942 / Syracuse, NY 13221 / (315) 437-0200 FAX (315) 463-7554

O'BRIEN & GERE
LABORATORIES, INC.

ASBESTOS IN FRIABLE MATERIALS
ANALYSIS REPORT

FILE: 1749.001.517

CLIENT: IMS - Cannon AFB, New Mexico

Sample #	Description	Layer #	Color	Asbestos		Non-Asbestos	
				%	Type	%	Type
B8215	CAN-D-SB08-AB	1	Brown	20.0	Chrysotile	60.0 20.0	Gypsum Other Non-fibrous
B8216	CAN-D-AB01	1	Brown	5.0	Chrysotile	55.0 20.0 20.0	Gypsum Quartz Other Non-fibrous

Analyst: _____ Date: November 25, 1996

Authorized: _____

ND None Detected

ELAP Certification #: 10155 Method: ELAP Item Numbers 198.1

Analysis Only Performed By O'Brien & Gere Laboratories, Inc.

O'BRIEN & GERE LABORATORIES, INC. an O'Brien & Gere Company
5000 Brittonfield Parkway / P.O. Box 4942 / Syracuse, NY 13221 / (315) 437-0200 FAX (315) 463-7554

O'BRIEN & GERE LABORATORIES, INC.

Laboratory Analysis Report

CLIENT: Cash Sale
LOCATION:
DESCRIP: IMS
JOB NUMBER: 1749.1.517
METHOD: 7400
CERTIFICATION: 10155

AIR SAMPLE ANALYSIS FOR ASBESTOS

Client ID	Sample	Sample Date	Fibers/mm²	Fibers/cc	Location	Activity	Sample Type
CAN-D-AS-01	B8217	11/19/96	< 12.7	< 0.019	Cannon AFB	Not Specified	Not Specified
CAN-D-AS-02	B8218	11/19/96	205.1	0.275	Cannon AFB	Not Specified	Not Specified
CAN-D-AS-03	B8219	11/19/96	< 12.7	< 0.026	Cannon AFB	Not Specified	Not Specified

********* SAMPLE VOIDED
< LESS THAN
> GREATER THAN
Blank results are expressed in fibers per square millimeters

Authorized: [signature]

Date: November 25, 1996

Only fiber counting performed by O'Brien & Gere Laboratories personnel.
Laboratory not responsible for sample collection.

O'BRIEN & GERE LABORATORIES, INC. an O'Brien & Gere Company
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