DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON WHITE SANDS
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

October 30, 2013

ENTERED
RECEIVED
NOV 4 2013
NMED
Hazardous Waste Bureau

Environmental Division

Mr. John Kieling
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Dear Mr. Kieling,

Enclosed for your review is the report titled: *Revised Release Assessment Report SWMUs 107, 121, 122, 123, and 163 SWMU 107 Temperature Test Facility Evaporation Tank; SWMUs 121, 122, 123, the Asphalt Tanks at Stallion Range; and SWMU 163 Abandoned Disposal Trench at New Commissary, White Sands Missile Range, October 2013.*

The revised report was prepared in response to the New Mexico Environment Department (NMED) Notice of Disapproval (NOD) dated August 28, 2013 (WSMR-13-003).

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

If you have any questions regarding this matter, please contact Mr. Benito Avalos of our Environmental Compliance Branch at (575) 678-2225.

I am forwarding a copy of this letter with enclosure (1 print copy w/ CD) to Ms. Kristen Van Horn, NMED-HWB; and without enclosure to Ms. Neelam Dhawan, NMED-HWB; Mr. Dave Cobrain, NMED-HWB; Mr. Paul Torcoletti, EPA Region 6; and Mr. Sudhakar Matlapudi, Shaw Inc.

Sincerely,

Jose A. Gallegos
Chief, Environmental Division

Enclosure

CB&I
1401 Enclave Parkway, Suite 250
Houston, Texas 77077
Tel: +1 281 531 3100
Fax: +1 281 531 3143
www.CBI.com

Date: ***October 25, 2013***

Project No.: ***139791***

TRANSMITTAL LETTER:

To: Mr. Benito Avalos

Address: US Army Garrison – White Sands
ATTN: IMWE-WSM-PW-E-EC
Building 163 Springfield Street
White Sands Missile Range, NM 88002

Re: ***Revised Release Assessment Report***

Contract No. W91ZLK-05-D-0017, Task Order No. 0008

For: Review ____ ***As Requested*** ____ ***Approval*** ____ ***Corrections*** ____ ***Submittal*** ***X*** ***Other*** ____

Item No:	***No. of Copies***	***Date:***	***Document Title***
1	3 hard copies, 3 compact discs	October 2013	**Revised Release Assessment Report, Solid Waste Management Units 107, 121, 122, 123, and 163.**

Please call with questions or comments. Thank you.

Sincerely:

Sudhakar Matlapudi
Project Manager

PC: Robert Rowden – AEC (1 compact disc)
PC: Cynthia Borlinghaus – AEC (1 compact disc)

RESPONSE TO COMMENTS: DISAPPROVAL
RELEASE ASSESSMENT REPORT
SWMUs 107, 116, 117, 118, 121, 122, 123, 125, 126, 137, 153, and 163
WHITE SANDS MISSILE RANGE (WSMR)
EPA ID# NM2750211235
WSMR-13-003, August 28, 2013

Comment No.	NMED Comments	WSMR Response	Section/Page Reference in Release Assessment Report
1	The SWMUs included in the Report are listed in the 2009 RCRA Permit Table 8-2 (SWMUs and AOCs Requiring Corrective Action) as requiring release assessments. The Permittee was required to submit release assessments for these SMWUs because NMED did not have a record of corrective action having been conducted at the sites at the time the Permit was issued. The purpose of submitting a release assessment was to provide NMED with documentation showing whether or not the sites have been investigated. A release assessment is defined as an "assessment of a SWMU or AOC performed after the RCRA facility assessment, but before full site characterization to obtain information for use in focusing subsequent investigations or eliminating certain units or areas from further consideration" (20.4.2.7.II NMAC). The Permittee has submitted documentation of investigations conducted at the Rhodes Canyon Subgrade Asphalt Tanks (SWMUs 116, 117, and 118), the Veterinary Clinic and McAffee Clinic Incinerators (SWMUs 125 and 126), the Paint Shop Sump (SWMU 137), and the Vandal Burial Site (SWMU 153). These submittals both meet and replace the requirement for a release assessment report. There is no need to include these sites in the revised Report.	Comment noted. As per NMED's request, SWMUs 116, 117, 118, 125, 126, 137, and 153 have been removed from the Release Assessment Report. Text was added to Section 1.0, page 1 as follows: "*Table 8-2 of the RCRA Permit also includes Rhodes Canyon Subgrade Asphalt Tanks (SWMUs 116, 117, and 118); Veterinary Clinic and McAffee Clinic Incinerators (SWMUs 125 and 126); Paint Shop Sump (SWMU 137) and Vandal Burial Site (SWMU 153) as requiring a Release Assessment. However, according to an NMED letter dated August 28, 2013, the 2012 investigations conducted at SWMUs 116, 117, 118, 125, 126, 137 and 153 meet and replace the requirement for a Release Assessment Report (NMED, 2013). Therefore, these sites have not been included in this Release Assessment Report*".	Section 1.0

RESPONSE TO COMMENTS: DISAPPROVAL
RELEASE ASSESSMENT REPORT
SWMUs 107, 116, 117, 118, 121, 122, 123, 125, 126, 137, 153, and 163
WHITE SANDS MISSILE RANGE (WSMR)
EPA ID# NM2750211235
WSMR-13-003, August 28, 2013

Comment No.	NMED Comments	WSMR Response	Section/Page Reference in Release Assessment Report
2	Comment 3 of NMED's October 26, 2012 *Administratively Incomplete Corrective Action Complete Proposals* stated that the Permittee must, "revise the PMR to submit and/or cite documents showing that SWMUs 107, 121, 122, 123, and 163 have undergone release assessments or equivalent investigations. If release assessments have not been performed, the Permittee may submit plans to conduct the release assessments and then submit permit modification requests once all of the required work is completed and approved by NMED. "The documentation included in the Report is not sufficient to show that release assessments or equivalent (Phase I Environmental Site Assessment) has been performed at SWMU 107 (TTF Evaporation Tank), SWMUs 121, 122, and 123 (Asphalt Tanks at Stallion Range), and SWMU 163 (Abandoned Disposal Trench at New Commissary). Revise the Report to provide an overview of any investigations and cleanup activities performed at these sites and reference the appropriate documents. Demonstrate that the documents have been previously submitted to and reviewed by NMED.	Concur. Section 2.2 has been revised to include details about previous assessments, and closure activities at SWMU 107. The report documenting closure activities at SWMU 107 may not have been reviewed by NMED and is provided in Appendix A-1 of this report. Section 3.2 has been revised to include details about previous assessments, investigations and closure activities at SWMUs 121-123. The Phase I RFI report was previously approved by EPA in 1993. This letter is provided in Appendix B-2 of this report. The final closure report documenting the removal of the Stallion Asphalt Tanks may not have been reviewed by NMED and is provided in Appendix B-1 of this report. Section 4.2 has been revised to include details about previous assessments, and closure activities at SWMU 163. The two reports documenting the closure activities at SWMU 163 were reviewed and approved by the NMED Groundwater Protection Bureau. The Commissary Landfill Trench Sampling Report, the Commissary Landfill Excavation Material Sampling Report and the NMED approval letter are provided in Appendix C-1, Appendix C-1 and Appendix C-3 respectively.	Section 2.2, Section 3.2 and Section 4.2

RESPONSE TO COMMENTS: DISAPPROVAL
RELEASE ASSESSMENT REPORT
SWMUs 107, 116, 117, 118, 121, 122, 123, 125, 126, 137, 153, and 163
WHITE SANDS MISSILE RANGE (WSMR)
EPA ID# NM2750211235
WSMR-13-003, August 28, 2013

Comment No.	NMED Comments	WSMR Response	Section/Page Reference in Release Assessment Report
3	In Section 2.2 (Conclusion) the Permittee states, "SWMU 107 was constructed of steel and installed as an interim storage tank prior to the construction of a new stainless steel tank (SWMU 105). It is unknown whether this unit actually received waste. The potential waste stream is primarily wastewater/condensate with the expected low concentrations of hazardous constituents (methylene chloride); however, there is low potential for release to all media. The suggested action of the RFA was to recommend SWMU 107 for no further action (Kearney, 1988)." A letter dated May 18, 1989 regarding the Proposed Closure Plan Approval included documentation that described the tank's use at the TTF: "Previously, the liquids [NB: process wastewater] were drained to a polyvinyl chloride (PVC)-lined evaporation pond, which was used until about January, 1985. Leakage from this pond became apparent during 1984. A partially buried 25,000 gallon tank was used for storage on a temporary basis from late 1985 until the stainless steel evaporation tank became available." Then, in another section (Section 5.1.2) of the documentation included with the May 18, 1989 letter, the *Temporary Evaporation Pond Tank* is described as "presently located in the old evaporation pond. The tank has a total storage capacity of 25,000 gallons and presently contains 5" to 6" of sludge indicating that the tank was utilized during its operation". The text goes on to state, "the sludge is a hazardous waste and will be removed and drummed for shipment to the permitted hazardous waste disposal facility. Samples of the sludge will be taken from each of the sample points identified in Figure 5-5 prior to removal and tested to determine if the sludge is restricted from land disposal Samples will not be composited. WSMR may choose not to sample the sludge and will then notify the disposal facility that the sludge is restricted from land disposal. After the sludge is removed, the tank will be removed from the site and cleaned according to the procedures in Attachment A 'Decontamination Procedures for Tanks and Ancillary Equipment." In the revised Report, discuss whether or not any of the proposed actions were conducted and the disposition of the tank. Discuss the results of all sampling and analysis was conducted. Reference the documentation that discusses activities relevant to the SWMU.	Concur. Section 2.2 of the Release Assessment has been revised to include decontamination procedures for the tank prior to its disposal. The report documenting decontamination procedures was submitted to NMED in September 2003 (Appendix A-3). Additionally, the Decision Document documenting the tank cleaning activities have been provided as an attachment to the report (Appendix A-1).	Section 2.2

RESPONSE TO COMMENTS: DISAPPROVAL
RELEASE ASSESSMENT REPORT
SWMUs 107, 116, 117, 118, 121, 122, 123, 125, 126, 137, 153, and 163
WHITE SANDS MISSILE RANGE (WSMR)
EPA ID# NM2750211235
WSMR-13-003, August 28, 2013

Comment No.	NMED Comments	WSMR Response	Section/Page Reference in Release Assessment Report
4	In Section 4.2 (Conclusion), the Permittee states, "the potential for release is moderate to high based on the lack of release controls, the apparent age and condition of the tanks, and unknown nature of the materials managed, and the observed ground stain. No information is available to indicate the contents of these tanks. Based on the VSI, the tanks appear to be abandoned asphalt emulsion tanks. Identification of the contents and confirmation of the integrity of the tanks is warranted. The suggested action of the RFA is to conduct an RCRA Facility Investigation (RFI) at these units (Kearney, 1988). The RFA conducted by Kearney in 1988 is not a release assessment. The RFA identified potential environmental impacts throughout the facility. See Comment 1 for the definition of a release assessment. Discuss whether or not an RFI was conducted at this site and reference the documentation. Note that if the documentation is dated prior to 1996 NMED may not have access to the documents and it is appropriate to provide copies with the revised Report.	Concur. Section 4.2 of the report (previously) is now Section 3.2 of the report. Section 3.2 of the Release Assessment Report has been revised to include details about previous investigation/closure activities at SWMUs 121, 122 and 123. The Final Closure Report and EPA approval letters are provided as attachments to the report (Appendix B-1, Appendix B-2 and Appendix B-3).	Section 3.2
5	In Section 8.2 (Conclusion), the Permittee states, "based on the site operational history, the potential exists for the release of hazardous constituents to the soil and/or groundwater." In the revised Report, discuss whether or not the site was investigated and reference the documents that discuss any work conducted at the SWMU. See also Comment 4.	Concur. Section 8.2 of the report (previously) is now Section 4.2 of the report. Section 4.2 of the Release Assessment Report has been revised to provide an overview of the investigation/closure activities at SWMU 163. The Commissary Landfill Trench Sampling Report, the Commissary Landfill Excavation Material Sampling Report and the NMED letter approving closure activities have been provided as an attachment to the report (Appendix C-1, Appendix C-2 and Appendix C-3).	Section 4.2

Revised
Release Assessment Report

SWMUs 107, 121, 122, 123, and 163
SWMU 107 Temperature Test Facility Evaporation Tank;
SWMUs 121, 122, and 123 the Asphalt Tanks at Stallion Range;
SWMU 163 Abandoned Disposal Trench at New Commissary

White Sands Missile Range

October 2013

Shaw Environmental, Inc.
(A CB&I Company)
1401 Enclave Parkway, Suite 250
Houston, Texas 77077

U.S. ARMY GARRISON WHITE SANDS
DIRECTORATE OF PUBLIC WORKS ENVIRONMENTAL DIVISION
INSTALLATION RESTORATION PROGRAM

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.
PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE *(DD-MM-YYYY)*	**2. REPORT TYPE**	**3. DATES COVERED** *(From - To)*
10/17/2013	Release Assessment Report	October 2013

4. TITLE AND SUBTITLE Revised Release Assessment Report SWMUs 107, 121, 122, 123, and 163 SWMU 107- Temperature Test Facility Evaporation Tank SWMUs 121, 122 and 123- Asphalt tanks at Stallion Range SWMU 163- Abandoned Disposal Trench at New Commissary	**5a. CONTRACT NUMBER** W91ZLK-05-D-0017 **5b. GRANT NUMBER** **5c. PROGRAM ELEMENT NUMBER**
6. AUTHOR(S) Caitlin LaChance – Shaw Environmental, Inc (A CB&I Company)	**5d. PROJECT NUMBER** 139791 **5e. TASK NUMBER** Task Order 08
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Shaw Environmental, Inc. (A CB&I Company) 1401 Enclave Parkway, Suite 250 Houston, TX 77077	**5f. WORK UNIT NUMBER** **8. PERFORMING ORGANIZATION REPORT NUMBER** ACA08-037
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Department of the Army U.S. Army Garrison White Sands Benito Avalos, Environmental Division (Bldg 163) White Sands Missile Range, NM 88002	**10. SPONSOR/MONITOR'S ACRONYM(S)** **11. SPONSORING/MONITORING AGENCY REPORT NUMBER**

12. DISTRIBUTION AVAILABILITY STATEMENT

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The Release Assessment Report has been prepared for submission to the New Mexico Environment Department (NMED) Hazardous Waste Bureau, as required by Appendix 8, Table 8-2 of the Resource Conservation and Recovery Act (RCRA) Permit No. NM2750211235, containing the elements found in Permit Section VI.F.1. White Sands Missile Range (WSMR) was issued Hazardous Waste Permit No. NM2750211235 by the U.S. Environmental Protection Agency (EPA) on October 24, 1989 under the authority of RCRA, Part B. Before January 1, 1996, the EPA was the Administrative Authority for the permit; on January 1, 1996, the NMED became the Administrative Authority. The Solid Waste Management Units (SWMUs) included in this report are listed in Table 8-2 in the WSMR RCRA Permit (NMED, 2009) as having an outstanding requirement for a release assessment. The SWMUs included in this report have been part of previous investigations and/or remediation and are not newly identified. However, this Release Assessment Report is prepared to fulfill the requirement listed in Table 8-2 of the WSMR RCRA Permit.

15. SUBJECT TERMS
Release Assessment Report

16. SECURITY CLASSIFICATION OF:			**17. LIMITATION OF ABSTRACT**	**18. NUMBER OF PAGES**	**19a. NAME OF RESPONSIBLE PERSON**
a. REPORT	**b. ABSTRACT**	**c. THIS PAGE**	None	1019	Benito Avalos
Unclassified	Unclassified	Unclassified			**19b. TELEPHONE NUMBER (*Include area code*)** 575-678-5359

Revised
Release Assessment Report

SWMUs 107, 121, 122, 123, and 163
SWMU 107 Temperature Test Facility Evaporation Tank; SWMUs 121, 122, and 123 the Asphalt Tanks at Stallion Range; SWMU 163 Abandoned Disposal Trench at New Commissary

White Sands Missile Range, New Mexico
ACA08-037

October 2013

Prepared for:

U.S. Army Garrison White Sands
Directorate of Public Works, Environmental Division
White Sands Missile Range, NM 88002-5048

Prepared by:

Shaw Environmental, Inc
A CB&I Company
1401 Enclave Parkway, Suite 250
Houston, Texas 77077

139791, ZZ2020 • October 2013 • ACA08-037

Table of Contents

List of Figures ii
List of Appendices ii
Acronyms and Abbreviations iii

1.0 Introduction **1-1**
1.1 Facility Description 1-1
1.2 Environmental Setting 1-2
1.2.1 Geographic Setting 1-2
1.2.2 Climate 1-2
1.2.3 Geology and Soil Types 1-2
1.2.4 Hydrogeology 1-3
1.3 Land Use 1-4
1.3.1 Current Land Use 1-4
1.3.2 Future Land Use 1-4
2.0 SWMU 107 Temperature Test Facility Evaporation Tank **2-1**
2.1 SWMU 107 Description and Operational History 2-1
2.1.1 Site Description 2-1
2.1.2 Operational History 2-1
2.2 SWMU 107 Previous Assessments/Investigations 2-2
2.2.1 RCRA Facility Assessment 2-2
2.2.2 Closure Activities 2-3
2.3 Conclusion 2-4
3.0 SWMUs 121 – 123 Asphalt Tanks at Stallion Range **3-1**
3.1 SWMUs 121 – 123 Description and Operational History 3-1
3.1.1 Site Description 3-1
3.1.2 Operational History 3-1
3.2 SWMUs 121 – 123 Previous Assessments/Investigations 3-1
3.2.1 RCRA Facility Assessment 3-2
3.2.2 Phase I RCRA Facility Investigation 3-2
3.2.3 Closure Activities: Tank Removal 3-3
3.3 Conclusion 3-3
4.0 SWMU 163 Commissary Landfill Trench **4-1**
4.1 SWMU 163 Description and Operational History 4-1
4.1.1 Site Description 4-1
4.1.2 Operational History 4-1
4.2 SWMU 163 Previous Assessments/Investigations 4-1
4.2.1 Initial Characterization 4-1
4.2.2 Closure Activities 4-2
4.3 Conclusion 4-3
5.0 References **5-1**

List of Figures

Figure 1-1 Location Map of SWMU 107, SWMUs 121 - 123, and SWMU 163, Release Assessment Report, White Sands Missile Range, NM
Figure 1-2 WSMR Main Post Geologic Map, SWMU 107, and SWMU 163, Release Assessment Report, White Sands Missile Range, NM
Figure 1-3 WSMR Stallion Range Geologic Map, SWMUs 121 - 123, Release Assessment Report, White Sands Missile Range, NM
Figure 2-1 Site Location Map, SWMU 107, Release Assessment Report, White Sands Missile Range, NM
Figure 3-1 Site Location, Asphalt Tanks at Stallion Range, SWMUs 121 - 123, Release Assessment Report, White Sands Missile Range, NM
Figure 4-1 Site Plan, SWMU 163, Release Assessment Report, White Sands Missile Range, NM

List of Appendices

Appendix A-1 SWMU 107: Decision Document
Appendix A-2 SWMU 107: WSMR Letter to NMED Regarding RFI Activities at TTF
Appendix A-3 SWMU 107: WSMR Letter to NMED Regarding TTF Closure Data
Appendix B-1 SWMUs 121 – 123: 1993 Tank Closure Report
Appendix B-2 SWMUs 121 – 123: 1995 EPA Statement of Basis
Appendix B-3 SWMUs 121 – 123: 2000 EPA Letter Validating the Statement of Basis
Appendix C-1 SWMU 163: 1994 Trench Sampling Report
Appendix C-2 SWMU 163: 1994 Trench Excavation Material Sampling Report
Appendix C-3 SWMU 163: Approval Letter from NMED Dated February 16, 1995

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

Acronyms and Abbreviations

°F	degree(s) Fahrenheit
amsl	above mean sea level
ASI	Advanced Sciences Inc.
bgs	below ground surface
EPA	U.S. Environmental Protection Agency
MEVATEC	MEVATEC Corporation
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NMED	New Mexico Environment Department
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SSL	soil screening level
SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWMU	Solid Waste Management Unit
TCA	trichloroethane
TCE	trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbon
TTF	Temperature Test Facility
UST	Underground Storage Tank
VCA	voluntary corrective action
VOC	volatile organic compound
VSI	Visual Site Inspection
WSMR	White Sands Missile Range
WTS	White Sands Technical Services

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

1.0 INTRODUCTION

This Release Assessment Report has been prepared for submission to the New Mexico Environment Department (NMED) Hazardous Waste Bureau, as required by Appendix 8, Table 8-2 of the Resource Conservation and Recovery Act (RCRA) Permit No. NM2750211235, containing the elements found in Permit Section VI.F.1. White Sands Missile Range (WSMR) was issued Hazardous Waste Permit No. NM2750211235 by the U.S. Environmental Protection Agency (EPA) on October 24, 1989 under the authority of RCRA, Part B. Before January 1, 1996, the EPA was the Administrative Authority for the permit; on January 1, 1996, the NMED became the Administrative Authority. The Solid Waste Management Units (SWMUs) included in this report are listed in Table 8-2 in the WSMR RCRA Permit (NMED, 2009) as having an outstanding requirement for a release assessment. The SWMUs included in this report have been part of previous investigations and/or remediations and are not newly identified. However, this Release Assessment Report is prepared to fulfill the requirement listed in Table 8-2 of the WSMR RCRA Permit (NMED, 2009). The SWMUs in this release assessment report are shown in Figure 1-1. The SWMUs include the following:

- SWMU 107 the Temperature Test Facility Evaporation Tank
- SWMUs 121, 122, and 123 the Asphalt Tanks at Stallion Range
- SWMU 163 Abandoned Disposal Trench at New Commissary

Table 8-2 of the RCRA Permit also includes Rhodes Canyon Subgrade Asphalt Tanks (SWMUs 116, 117, and 118); Veterinary Clinic and McAffee Clinic Incinerators (SWMUs 125 and 126); Paint Shop Sump (SWMU 137); and Vandal Burial Site (SWMU 153) as requiring a Release Assessment. However, according to an NMED letter dated August 28, 2013, the 2012 investigations conducted at SWMUs 116, 117, 118, 125, 126, 137 and 153 meet and replace the requirement for a Release Assessment Report (NMED, 2013). Therefore, these sites have not been included in this Release Assessment Report.

This Release Assessment Report presents the historical records available for SWMUs discussed in this release assessment report and the specifications of all wastes managed and any hazardous wastes that have been released within each SWMU. Available historical records for each site have been summarized.

1.1 Facility Description

WSMR is a U.S. Army Development Test Command Installation established in 1945. WSMR is the largest land area military installation in the United States, encompassing

approximately 3,200 square miles of land in Doña Ana, Socorro, Lincoln, Otero, and Sierra Counties in south-central New Mexico. The installation is approximately 99 miles long (north to south) and 25 to 40 miles wide (east to west) (White Sands Technical Services [WTS], 2006). WSMR was established on July 9, 1945, as White Sands Proving Ground (the name was changed in 1958) to be the nation's testing range for the newly developed missile weapons. The New Mexico desert was selected as the testing range. The sparse population, almost year-round clear weather, and excellent visibility affording relatively easy recovery of spent missiles contributed to establishing the base in this location.

WSMR is located in the Tularosa Basin of south-central New Mexico, and portions of WSMR extend west into the Jornada del Muerto Basin. The headquarters (Main Post) area of WSMR is located at the southwestern corner of the installation, approximately 27 miles east-northeast of Las Cruces, New Mexico, and 45 miles north of El Paso, Texas. The main entrance to WSMR is on U.S. Highway 70, east from Interstate 25 at Exit 6.

1.2 Environmental Setting

1.2.1 Geographic Setting

Topographic relief across WSMR is dominated by two prominent geomorphic features, the San Andres Mountains and the Tularosa Basin. The average elevation of the Tularosa Basin is 4,000 feet above mean sea level (amsl). The San Andres range trends north-south along the western side of the missile range and varies in elevation from 5,700 feet amsl at San Augustin Pass, where Highway 70 crosses the mountains, to more than 9,000 feet amsl at Salinas Peak, the highest point on WSMR.

1.2.2 Climate

Average annual precipitation measured at gauging stations in the Tularosa Basin, southeast of the WSMR Main Post, is 10.8 inches per year. About 50 percent of the annual precipitation falls in the months of July through September in southern New Mexico. The average high temperature in the summer is about 92 degrees Fahrenheit (°F) with the lows reaching 65°F. During the winter months, the average high is about 57°F, and the average low is about 36°F. Average annual humidity readings are only 37 percent. Wind is a climatic factor at WSMR from February through May, as westerly winds can reach about 40 miles per hour.

1.2.3 Geology and Soil Types

WSMR lies within the Mexican Highland Section of the Basin and Range Province. This province is characterized by a series of tilted fault blocks forming longitudinal, asymmetric ridges, or mountains, and broad intervening basins. The geology of WSMR consists predominantly of the Tularosa Basin and surrounding mountain ranges. The San Andres,

139791, ZZ2020 • October 2013 • ACA08-037

San Augustin, and Oscura Mountains border the Tularosa Basin on the west, and the Sacramento Mountains form the eastern border. A narrow region of north-south–trending, large-displacement normal faulting separates the mountains from the basin, thus resulting in the change in relief across the missile range (Figure 1-1). The majority of WSMR property, including most test facilities, is located within the Tularosa Basin (WTS, 2006).

The Tularosa Basin contains thick sequences of Tertiary- and Quaternary-age alluvial and bolson fill deposits. These sediments, more than 5,000 feet in thickness in some areas, consist mainly of silt, sand, gypsum, and clay weathered from the surrounding mountain ranges. The average elevation of the basin floor is 4,000 feet amsl, and surface features consist of flat sandy areas, sand dunes, basalt flows, and playas (dry lake beds) (Figures 1-2 and 1-3; WTS, 2006).

The nature of the bolson-fill deposits varies both laterally and vertically throughout the Tularosa Basin. Coarse-grained, poorly-sorted sediments deposited near mountain fronts grade into finer-grained, well-sorted sediments toward the center of the basin (Kelly and Hearne, 1976). Sediments farther from the mountain fronts also contain a greater percentage of clay and gypsum. Vertically, the sediments are reported to become finer-grained and more consolidated until reaching a laterally continuous clay unit about 1,000 feet below ground surface (Kelly and Hearne, 1976).

In general, the stratigraphy is represented by unconsolidated to partially consolidated, fine- to medium-grained sand with subordinate amounts of clay. Caliche is present as discrete layers and nodules throughout the stratigraphic section. Although no faults within the basin fill are mapped within the immediate area, Quaternary faulting is known to exist within the region. These faults are reported to occur within the unconsolidated bolson sediments, trend north to south, and are most common near the mountain fronts.

1.2.4 Hydrogeology

Surface hydrogeology at WSMR is characterized by low precipitation, high evapotranspiration rates, and high soil infiltration. During the summer season, when thunderstorm activity is most common, playas within the basin may contain standing water. The arroyos that drain the surrounding mountain ranges usually contain water only following heavy precipitation events. The Tularosa Basin is a closed basin with no surface water drainage outside of WSMR (WTS, 2006).

The WSMR Main Post obtains its potable water supply from an aquifer located in the upper bolson deposits. The majority of groundwater recharge to this aquifer occurs through the coarse, unconsolidated Tertiary/Quaternary alluvial fan deposits and arroyos along the eastern flank of the Organ, San Augustin, and San Andres Mountains. To the east,

groundwater becomes more mineralized, primarily with sulfate and chloride. Groundwater flow direction is generally toward the center of the Tularosa Basin.

Recharge to the regional aquifer is from precipitation falling on the mountain ranges and alluvial fans, which border the bolson on the west (WTS, 2006). This precipitation infiltrates the unconsolidated, relatively coarse deposits of the alluvial fans, and the resultant groundwater flows toward the center of the Tularosa Basin, generally to the east-southeast. To the east, groundwater becomes more mineralized, primarily with sulfate and chloride, most likely due to the slow lateral migration rate of groundwater from recharge to discharge areas in the presence of readily soluble minerals in the bolson sediments. However, groundwater flow direction within the western Tularosa Basin region is presumed to discharge to the south as underflow into the contiguous, northern Hueco Basin of western Texas. No surface expressions of groundwater discharge have been reported within the western Tularosa Basin (WTS, 2006).

1.3 Land Use

1.3.1 Current Land Use

WSMR is withdrawn public domain land controlled by the U.S. Department of Defense. For safety and security reasons, access to WSMR is restricted to authorized military and civilian personnel. Residential areas are limited to concentrated tracts at the Main Post and several uprange command and control centers. The land on the missile range is predominantly used to stage tests of aerial weapons systems. Although much of the weapons testing occurs in the airspace above WSMR, designated support, launch, and impact areas have been established.

The five SWMUs discussed in this proposal (SWMU 107, , SWMUs 121, 122, and 123, , and SWMU 163) are located within the facility boundary, which is an industrial setting where public access is restricted by fences and military police.

1.3.2 Future Land Use

The U.S. Department of Defense will continue its primary mission at WSMR for the foreseeable future. Public access to the approximately 3,200 square miles of land comprising the missile range will continue to be restricted.

SWMU 107, SWMUs 121, 122, and 123, and SWMU 163will remain within the facility boundary, an industrial setting with public access restricted by fences and military police.

139791, ZZ2020 • October 2013 • ACA08-037

2.0 SWMU 107 TEMPERATURE TEST FACILITY EVAPORATION TANK

This section summarizes relevant historical information contained in available WSMR documents. The following subsections provide a site description, operational history, wastes managed, and any hazardous waste released, or potentially released for each individual SWMU, as well as a summary of relevant environmental information contained in the available reports.

Results and conclusion from the historical reports summarized below have not been re-evaluated or interpreted as part of the preparation of this document. The information below provides documentation of release (or potential release) of hazardous waste or hazardous constituents, as well as documentation of the location and circumstances of the release.

2.1 SWMU 107 Description and Operational History

2.1.1 Site Description

The Temperature Test Facility (TTF) is located 1.5 miles east of the Main Post on Nike Avenue (Figure 2-1). SWMU 107 was an evaporation tank that was installed within the former evaporation pond (SWMU 104) and was installed prior to the construction of the new stainless steel evaporation tank (SWMU 105). The evaporation tank (SWMU 107) had a capacity of 25,000 gallons and was installed as an interim measure to store any overflow from the TTF (Kearney, 1988). The dimensions of the evaporation tank are unknown.

2.1.2 Operational History

The TTF, completed in early 1984, was designed to simulate extreme weather conditions by inducing a wide range of temperature and climatic variations. The completed facility consisted of a main test building, several underground storage tanks (UST) with ancillary piping, and a surface evaporation pond (MEVATEC Corporation [MEVATEC], 2000). Originally, methylene chloride was used to cool the test chamber and was recycled via the USTs. In 1983, methylene chloride was flushed from the TTF to the evaporation pond (SWMU 104) due to leaks within the system. The methylene chloride subsequently eroded the polyvinyl chloride liner in the evaporation pond and leaked into the soil beneath it.

In response to the release, WSMR removed the polyvinyl chloride liner and replaced the liner with an impermeable RCRA cap, covering the soil contamination beneath the evaporation pond and the surrounding area (Section 1, paragraph 5, page 1, MEVATEC, 2000; Appendix A-1). Standing liquid in the pond was collected, placed into drums, and transferred to the Hazardous Waste Storage Facility. The contaminated soil beneath the

139791, ZZ2020 • October 2013 • ACA08-037

evaporation pond (SWMU 104) was not excavated. Between 1984 and 1986, the 25,000-gallon tank (SWMU 107) was installed as an interim measure to store any overflow of methylene chloride from the TTF (Section 1, paragraph 4, page 1, MEVATEC, 2000; Appendix A-1). SWMU 107 consisted of a closed, steel, cylindrical tank horizontally mounted on a concrete pad inside the former evaporation pond (SWMU 104). The 25,000 gallon evaporation tank was used as an interim measure prior to the construction of the 220,000 gallon stainless steel evaporation tank, SWMU 105. SWMU 105 was constructed to replace the former evaporation pond which failed to contain the methylene chloride spill due to the liner failure. In 1990, an impermeable, engineered cap was installed that covered the soil contamination beneath the evaporation pond and in the surrounding area (Section 1, paragraph 5, page 1, MEVATEC, 2000; Appendix A-1). Before installing the cap at the former evaporation pond (SWMU 104), the 25,000-gallon tank (SWMU 107) was decontaminated, dismantled, and removed (Section 3.4, paragraph 1, page 6, MEVATEC 2000; Appendix A-1). This former evaporation pond (SWMU 104) is a hazardous waste management unit described as having completed closure in the WSMR RCRA Permit (NMED, 2009). The vadose zone beneath the evaporation pond was successfully treated using a soil vapor extraction (SVE) system as part of SWMU 108 to address contamination from the historic methylene chloride spill (Section 1, paragraph 5, page 1, MEVATEC, 2000; Appendix A-1). The 220,000 gallon evaporation tank (SWMU 105) was closed in place and approved by the Hazardous Waste Bureau of NMED in 1998 (Section 2.2.7.2, page 16, BAE Systems, 2003).

2.2 SWMU 107 Previous Assessments/Investigations

The TTF Evaporation Tank, identified during the RCRA Facility Assessment (RFA) (Kearney, 1988), was decontaminated and dismantled by Rinchem (MEVATEC, 2000; Appendix A-1). No unit-specific environmental investigations were conducted for SWMU 107; however a number of investigations were conducted at the TTF following the discovery of a release at SWMU 104. Investigations were performed to characterize and delineate the impacts to soil beneath and surrounding surface impoundment, and to determine if the release had impacted the underlying groundwater. The RFI report documenting the investigation activities was submitted to NMED on August 15, 1996 (Woodward Clyde, 1996, Appendix A-2).

2.2.1 RCRA Facility Assessment

The RFA consisted of a Preliminary Review/Visual Site Inspection (VSI), which involved a search of facility records of hazardous waste-related activity at and a visual inspection of SWMU 107. The RFA report was issued in August 1988 (Kearney, 1988).

139791, ZZ2020 • October 2013 • ACA08-037

The records search found no documented evidence of a release or previous sampling activities at SWMU 107. No evidence of a release was observed during the VSI (Kearney, 1988). The RFA reported that the potential for the release of contaminants to soil, groundwater, surface water, and air, as well as production of subsurface gas from SWMU 107, was "low" (Section 5.65.2, page 5-103, Kearney, 1988).

2.2.2 Closure Activities

WSMR elected to remove the evaporation tank, SWMU 107. Tank decontamination and closure were selected as the remedy (Section 3.4, MEVATEC, 2000; Appendix A-1). The decision was based on several factors. An engineered cap was to be constructed over the former evaporation pond (SWMU 104). In order to construct the cap, removal of SWMU 107 was necessary. Removing SWMU 107 would eliminate the potential for a release from the tank (Section 3.3, MEVATEC, 2000; Appendix A-1). Tank decontamination and removal were performed by Rinchem in May 1990. The decontamination procedures were conducted in accordance with Attachment A of the TTF Closure Plan (WSMR, 1989). The tank was dismantled and rolled onto 10-milliliter plastic sheeting laid out over the entire work surface area (MEVATEC 2000; Appendix A-1). Sludge in the tank was shoveled and pumped into steel drums using spark-proof shovels and a heavy-duty sludge pump. The tank interior was decontaminated using hot steam and water with low sudsy, biodegradable soap. The tank was also rinsed with clean water four additional times. After removal, the tank was disposed of (Section 3.4, page 6, MEVATEC 2000; Appendix A-1).

Rinsate samples were collected as part of the tank cleaning process and analyzed for methylene chloride, tetrachloroethylene (PCE), toluene, 1,1,1-trichloroethane (TCA), 1,1,2-TCA, and trichloroethylene (TCE) for waste management purposes. Toluene was the only analyte detected at 3.8 milligrams per liter (mg/L) (Section 3.4, MEVATEC, 2000; Appendix A-1). This rinsate sample was collected just prior to the four additional washes with clean water and could explain the measurable toluene concentration.

Confirmatory soil samples were not collected around the tank since the tank did not exhibit any evidence of leaks and because any visually observed evidence of leaks beneath the evaporation pond liner may have been the result of the original release from the evaporation pond (SWMU 104) (Section 2.1, page 5, BAE Systems, 2003). An SVE system (SWMU 108) was used to remediate the soil beneath the evaporation pond that was impacted by the historic methylene chloride spill (Section 1, paragraph 5, MEVATEC, 2000; Appendix A-1). On January 21, 2011, WSMR submitted a Corrective Action Complete petition for SWMU 108 and is currently under review by NMED.

139791, ZZ2020 • October 2013 • ACA08-037

2.3 Conclusion

The TTF evaporation tank was identified during the RFA. Closure activities at SWMU 107 involved cleaning, removal and disposal of the tank. These clean closure activities were documented in the Decision Document (MEVATEC, 2000; Appendix A-1). The Decision Document is an Army internal report for documenting Army decisions regarding the selected response actions for the site. The Temperature Test Facility Spill Site Closure Plan and Closure Data referenced in the Decision Document were submitted to NMED separately in September 2003 (WSMR, 1990; Appendix A-3).

139791, ZZ2020 • October 2013 • ACA08-037

3.0 SWMUS 121 – 123 ASPHALT TANKS AT STALLION RANGE

3.1 SWMUs 121 – 123 Description and Operational History

3.1.1 Site Description

SWMUs 121, 122, and 123, located north of the Stallion Range Center just west of the Stallion Gate security checkpoint, consisted of three inactive, subgrade tanks (Figure 3-1). Two tanks were steel and one was aluminum (Kearney, 1988).

3.1.2 Operational History

Three sub-grade storage tanks were used in the 1960s during the paving of the Stallion Range Center roads (Advance Sciences Inc. [ASI], 1993). The storage tanks were labeled Tank 1 (SWMU 121), Tank 2 (SWMU 122), and Tank 3 (SWMU 123). Tanks 1 and 2 were constructed of plate steel. Tank 3 was constructed of aluminum. Each storage tank had a capacity of approximately 15,000 gallons and dimensions of 26 feet in length by 9 feet in diameter (Section 1, page 1, ASI, 1993; Appendix B-1).

Located on the side of a terraced hill, soil extended approximately halfway up the sides of the tanks on their northern end, while the soil on the southern ends of the tanks only extended approximately 1/8 up the tanks sides (ASI, 1993). The tanks were neither fully aboveground nor underground. One of the tanks appeared to be severely collapsed (Section 5.76.1, page 5-118, Kearney, 1988). The visible portions of the other two tanks appeared to be in good condition. All three tanks appeared to be empty and abandoned based upon the visual survey. No piping or vent lines were observed to be connected to or associated with the tanks (Section 2.1, page 1, ASI, 1993).

A tar-like odor was apparent on the downwind side of the tanks. The ground on the north side of the tanks appeared to be stained with a tar-like substance that looked dry, dark, and cracked and appeared to have been there a long time. Facility personnel were unable to provide a list of materials which may have been managed within the tanks, the age of the tanks, and the dates of operation of the units (Section 5.76.1, page 5-118, Kearney, 1988).

3.2 SWMUs 121 – 123 Previous Assessments/Investigations

The Stallion Asphalt Tanks, SWMUs 121, 122, and 123 were identified during the RFA visual site inspection (Kearney, 1988). The three SWMUs were also investigated during the Phase I RFI (IT Corporation, 1992), and were closed in August 1993 (ASI, 1993).

139791, ZZ2020 • October 2013 • ACA08-037

3.2.1 RCRA Facility Assessment

The RFA consisted of a search of the WSMR records of hazardous waste-related activity at SWMUs 121, 122, and 123 and a visual inspection of the sites in May 1988 (Kearney, 1988).

The three tanks were partially below grade with one of the tanks severely collapsed. The visible portions of the other two tanks appeared to be in good condition. All three tanks appeared to be empty and abandoned based upon a visual survey. A tar-like odor was apparent on the downwind side of the tanks. The ground on the north side of the tanks appeared to be stained with a tar-like substance that looked dry, dark, and cracked and appeared to have been there a long time (Section 5.76.1, page 5-118, Kearney, 1988). Facility personnel were unable to provide information on these tanks (Kearney, 1988).

The RFA concluded that the potential for the release of contaminants to soil, groundwater, air, and production of subsurface gas from SWMUs 121, 122, and 123 was “moderate.” For surface water, the RFA concluded that the potential for release to surface water was “low” due to the absence of a nearby surface water body (Section 5.76.2, page 5-119, Kearney, 1988).

3.2.2 Phase I RCRA Facility Investigation

The Phase I RFI was conducted in late February through April 1992 to determine whether a release of hazardous constituents occurred from SWMUs 121, 122, and 123 to the surrounding soil. The sampling plan was designed to characterize the site and to aid in determining whether additional site characterization or remediation was necessary (IT Corporation, 1992). The Phase I RFI included soil vapor sampling and soil sampling. The sampling locations are provided in Figure 2-38 of the Phase I RFI Report (Section 2.14, IT Corporation, 1992).

Soil vapor samples were collected from ten locations surrounding the three tanks. Soil samples were collected from eight site characterization locations at a depth of 0 feet below ground surface (bgs), 2 feet bgs, 5 feet bgs, and 10 feet bgs. Soil samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), organochlorine pesticides, organophosphorous pesticides and herbicides (Section 2.14.3, page 2-37, IT Corporation, 1992).

The soil vapor sampling did not measure any elevated volumetric concentrations. All concentrations for inorganic, VOCs, SVOCs, and PCBs/pesticide constituents detected during the Phase I RFI were below the NMED residential soil screening levels (SSL). The most common constituents detected were acetone, barium, and lead. Acetone was determined to be the result of using isopropyl alcohol to decontaminate equipment, and acetone is an oxidation product of isopropyl alcohol (IT Corporation, 1992). Barium concentrations were

far below the NMED residential SSL, and the results were typically at or below concentrations found at background locations. Lead concentrations were also far below the NMED residential SSL (NMED, 2012). A summary of the analytical results are provided in Table 2-13 of the Phase I RFI Report (Section 2.14, page 2-36, IT Corporation, 1992).

In September 1993, the EPA approved the Phase I RFI report and stated that SWMUs 121, 122, and 123 were among the "twenty-four (24) of the thirty-eight (38) SWMUs [that] require no further investigation and can be delisted or removed from WSMRs corrective action permit" (EPA, 1995; Appendix B-2). The EPA reconfirmed their decision in a letter to WSMR in April 2000 (EPA, 2000; Appendix B-3).

3.2.3 Closure Activities: Tank Removal

In 1993, WSMR performed a voluntary corrective action (VCA) to remove two storage tanks and excavate soil (ASI, 1993; Appendix B-1). The field work for the VCA was performed on April 26, 1993, and consisted of the removal of the two tanks and 3 feet of soil beneath and around the tanks (ASI, 1993; Appendix B-1). Tanks 1 and 2 were removed on June 28, 1993, and 3 feet of soil was excavated from beneath the tanks. A total of four soil samples were collected at the bottom of the excavation floor (3 feet bgs) and analyzed for total petroleum hydrocarbon (TPH); TPH ranged from 61 to 3,800 milligrams per kilogram (mg/kg) TPH (Section 3.2, page 5, ASI, 1993; Appendix B-1). The complete analytical data package can be found in Appendix C of the Final Closure Report (ASI, 1993; Appendix B-1). Since the contents of the tank were asphalt-related, TPH concentrations have been compared to the NMED-established residential direct exposure level for waste oil. The measured TPH concentrations are greater than the NMED-established residential direct exposure level for waste oil of 3,000 mg/kg TPH (NMED, 2012). The detected TPH concentrations maybe attributed to asphalt which is not a regulated hazardous waste and is relatively immobile and hence may not be considered a constituent of concern.

The asphalt emulsion in tanks 1, 2 and 3 were removed in June 1993 and April 1993 respectively and transported for recycling to Koch Materials Company located in Albuquerque, New Mexico. Tanks 1 and 2 were transported for recycling to Tom Black's Enterprises, a scrap recycler located in Doña Ana, New Mexico (Section 3.1, page 4, ASI, 1993; Appendix B-1). The third tank was removed at a later unknown date and is not present at the site. A records search did not yield information regarding removal of Tank 3.

3.3 Conclusion

The Stallion Asphalt Tanks were identified during the RFA. SWMUs 121, 122 and 123 were investigated as part of the Phase I RFI which was approved by the EPA as indicated in the Statement of Basis provided by the EPA (EPA, 1995). The EPA reconfirmed their decision

in a letter to WSMR in 2000 (EPA, 2000). Tank removal and closure activities were conducted in September 1992 and documented in the Final Closure Report (ASI, 1993; Appendix B-1). The Final Closure Report is provided in Appendix B-1 of this report for review (ASI, 1993).

REVISED RELEASE ASSESSMENT REPORT, SWMUS 107, 121 THROUGH 123, AND 163

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

4.0 SWMU 163 COMMISSARY LANDFILL TRENCH

4.1 SWMU 163 Description and Operational History

4.1.1 Site Description

SWMU 163, the Commissary Landfill Trench, is located on Picatinny Avenue, approximately one-quarter mile west of Headquarters Avenue at the WSMR Main Post, 27 miles east-northeast of Las Cruces, New Mexico (Figure 4-1).

4.1.2 Operational History

During the construction of a new WSMR commissary in 1994, an old, inactive landfill was discovered. Little is known about the landfill; it is estimated that the landfill operated between 1946 and 1952 (Section 1, page 1, ASI, 1994a; Appendix C-1). The exact contents or quantities of waste placed in this landfill are unknown (Section 1, ASI, 1994a; Appendix C-1). To allow construction to proceed, the landfill was investigated to determine the extent and waste type, excavated to remove the waste and stained soil, sampled to confirm waste removal, and backfilled with clean fill to complete facility construction (Section 1, page 1, ASI, 1994a; Appendix C-1). The former trench is now partially covered with asphalt (ASI, 1994a; Appendix C-1). There were no engineered release controls associated with SWMU 163 and no history of release.

SWMU 163was not part of the RFA performed at WSMR; however, SWMU 163 was identified as an area of concern in the 1997 SWMU Inventory Report (page 2-92, MEVATEC, 1995).

4.2 SWMU 163 Previous Assessments/Investigations

SWMU 163 was not part of any of the RFAs and RFIs performed at WSMR. The activities at SWMU 163 involved initial sampling to characterize the site, excavation of landfill material and visibly stained soil, and subsequent collection of confirmation soil samples (ASI, 1994a; Appendix C-1).

4.2.1 Initial Characterization

Soil samples were collected from various locations at the abandoned landfill in August 1994 to determine whether the soil contained any hazardous constituents. Sampling locations were not documented. A total of eight soil samples were collected (Section 1, ASI, 1994a; Appendix C-1). Three soil samples were analyzed for Toxicity Characterization Leaching Procedure (TCLP) metals; three soil samples were analyzed for total metals; and two soil samples were analyzed for VOCs. Results from the initial characterization event are provided

in Appendix A of the Commissary Landfill Trench Sampling report (ASI, 1994a; Appendix C-1).

Lead was the only constituent that exceeded the NMED residential SSL; the highest concentration of lead detected was 16,200 mg/kg well above the NMED Residential SSL of 400 mg/kg. Lead (TCLP) was measured at a concentration of 37 mg/L and exceeded the TCLP regulatory limit of 5 mg/L.

4.2.2 Closure Activities

Due to the high lead concentrations, WSMR prepared and implemented a plan to excavate, remove, and dispose of contaminated soil (ASI, 1994a; Appendix C-1). The landfill material was excavated and placed into roll-off containers. Waste characterization samples were collected from the excavated landfill material in roll-off containers to determine the appropriate disposition, as either hazardous or nonhazardous waste (ASI, 1994b, Appendix C-2). A summary of the waste characterization sample results can be found in Table 1 of the Commissary Landfill Trench Excavation Material Sampling Report (ASI, 1994b; Appendix C-2). The complete data package from the waste characterization sampling event can be found in Appendix F of the Commissary Landfill Trench Excavation Material Sampling Report (ASI, 1994b; Appendix C-2).

Confirmatory soil samples were collected from the trench to determine the efficacy of the excavation and removal procedures (Section 2, page 1, ASI, 1994a, Appendix C-1). Robin Brown, a representative from the NMED Hazardous and Radioactive Materials Bureau observed the sampling event and collected split samples (Section 2, page 6, ASI, 1994a; Appendix C-1). Twenty-two confirmation soil samples were collected from the trench in September 1994 as shown in Figure 2 of the Commissary Landfill Trench Sampling Report (ASI, 1994a; Appendix C-1). Sidewall samples were each located 1 foot above the trench floor. Samples from the trench floor were located on the bottom of the trench at a distance of 1 foot from the sidewall (Section 2, ASI, 1994a; Appendix C-1). The confirmation soil samples were analyzed for priority pollutant metals plus barium, pesticides and PCBs, chlorinated herbicides, VOCs, and SVOCs. A summary of the analytical results from the confirmation sampling event can be found in Table 1 of the Landfill Trench Sampling Report (ASI, 1994a; Appendix C-1).

None of the analytical results for metals exceed the NMED residential SSLs. The maximum concentration of lead was detected at 53 mg/kg, below the NMED Residential SSL of 400 mg/kg. The confirmation soil sampling data package is provided in Appendix F of the Commissary Landfill Trench Sampling Report (ASI, 1994a; Appendix C-1).

WSMR received a letter from the NMED Groundwater Protection and Remediation Bureau (NMED, 1995) in February 1995 approving the VCA at SWMU 163 (Appendix C-3).

4.3 Conclusion

SWMU 163 was identified in the SWMU Inventory Report. The site did not undergo a Phase I/Phase II RFI. A VCA was performed which involved excavation of landfill material and collection of confirmation soil samples. The reports documenting the VCA were reviewed by the NMED Groundwater Protection Bureau and approved as indicated in Appendix C-3. The two reports, the Commissary Landfill Trench Sampling Report and the Commissary Landfill Excavation Material Sampling Report are attached as Appendix C-1 and Appendix C-2 incase these files are not available in NMED's database.

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

5.0 REFERENCES

Advanced Sciences Inc. (ASI), 1993, *Final Closure Report for the Storage Tank Removal and Remediation at Stallion Range Center, White Sands Missile Range, New Mexico*, Contract No. DAAD07-90-C-0018, Work Assignment Order 400-11, Revision 4 and 5, August 30, 1993.

Advanced Sciences, Inc. (ASI), 1994a, *Commissary Landfill Trench Sampling at White Sands Missile Range, New Mexico,* Contract No. DAAD07-90-C0018, Work Assignment Order 600-11, October.

Advanced Sciences, Inc. (ASI), 1994b, *Commissary Landfill Trench Excavation Material Sampling at White Sands Missile Range*, New Mexico, Contract No. DAAD07-90-C0018, Work Assignment Order 600-11, December.

ASI, see Advanced Sciences, Inc.

BAE Systems, 2003, *RCRA Permit Modification Application for Post-Closure Care: TTF Disposal Surface Impoundment (SWMU 104), Permit Number NM2750211235-PCC, White Sands Missile Range, NM*, Report WS-ES-EC-0309.

IT Corporation, 1992, *Final RCRA Facility Investigation Report, Appendix II, III, and IV Sites, White Sands Missile Range, New Mexico, Volume 1*, USACE, Huntsville, Alabama, Contract No. DACA 8790-D-0015, Delivery Order 002, Project No. 42-1671, December 1992.

Kelly, T.E., and G.A. Hearne, 1976, *The Effects of Groundwater Development on the Water Supply in the Post Headquarters Area, White Sands Missile Range, New Mexico*, USGS Open File Report 76-277, U.S. Geological Survey.

Kearney, A.T., 1988, *RCRA Facility Assessment Preliminary Review/Visual Site Inspection Report, White Sands Missile Range*, USEPA Contract No. 68-01-7374, prepared for the U.S. Environmental Protection Agency Region VI, August.

MEVATEC Corporation (MEVATEC), 1995, *SWMU Inventory Report*, White Sands Missile Range, Contract No. DAAD07-95-C-0125.

MEVATEC Corporation (MEVATEC), 2000, *Decision Document for the Temperature Test Facility, 25,000 Gallon Evaporation Tank, SWMU 107, White Sands Missile Range, New Mexico*.

New Mexico Environment Department (NMED), 1995, Letter from M. Leavitt, Chief of the Ground Water Protection and Remediation Bureau, New Mexico Environment Department, to Brigadier General J.L. Laws, Commander, U.S. Army White Sands Missile Range, *RE: Approval of Corrective Action at the Commissary Landfill Site*, February 16.

New Mexico Environment Department (NMED), 2009, *Resource Conservation and Recovery Act Permit EPA ID No. NM 2750211235 to U.S. Department of Army for White Sands Missile Range Located in Doña Ana, Lincoln, Otero, Sierra and Socorro Counties, New Mexico,* Hazardous Waste Bureau, New Mexico Environment Department, Santa Fe, NM, December 3, 2009.

New Mexico Environment Department (NMED), 2012, *Risk Assessment Guidance for Site Investigation and Remediation, Volume I, Tier 1: Soil Screening Guidance Technical Background Document*, Tables 6-2 and A-1, New Mexico Environment Department., Hazardous Waste Bureau and Ground Water Quality Bureau, Santa Fe, NM, February 2012.

New Mexico Environment Department (NMED), 2013, Disapproval Release Assessment Report, SWMUs 107, 116, 117, 118, 121, 122, 123, 125, 126, 137, 153, 163, EPA ID# NM2750211235 to US Department of Army for White Sands Missile Range, New Mexico, Hazardous Waste Bureau, New Mexico Environment Department, Santa Fe, NM, August 28, 2013

NMED, see New Mexico Environment Department.

U.S. Environmental Protection Agency (EPA), 1995, *Statement of Basis, Final Decision and Response to Comments Summary, U.S. Army White Sands Missile Range, New Mexico, Approval of the Class III Permit Modification Request to remove twenty-four (24) Solid Waste Management Units (SWMUs) from the Corrective Action Permit (EPA Identification Number NM2750211235)*, Region 6, New Mexico and Federal Facilities Section (6PD-N), U.S. Environmental Protection Agency.

U.S. Environmental Protection Agency (EPA), 2000, Letter from D. Neleigh, Chief, New Mexico and Federal Facilities Section (6PD-N), U.S. Environmental Protection Agency, to T.A. Ladd, Director, Environment and Safety Directorate, Department of the Army, U.S. Army White Sands Missile Range, *RE: Confirmation for EPA Approval of the Class III Permit Modification Request to remove twenty-four (24) Solid Waste Management Units (SWMUs) from the Corrective Action Permit (EPA Identification Number NM2750211235)*, April 28, 2000.

White Sands Missile Range (WSMR), 1989, Temperature Test Facility Closure Plan, White Sands Missile Range, New Mexico, May, 1989.

WSMR, 1990, *Temperature Test Facility Spill Site Closure*, White Sands Missile Range, New Mexico, October, 1990.

White Sands Technical Services (WTS), 2006, *Phase III RCRA Facility Investigation, Main Post Multiple Sites: SWMUs 8-17, 21, 22, 80, 140, and 156, White Sands Missile Range, New Mexico*.

Woodward-Clyde Federal Services, 1996, *RCRA Facility Investigation Report, Temperature Test Facility,* White Sands Missile Range, New Mexico, April, 1996.

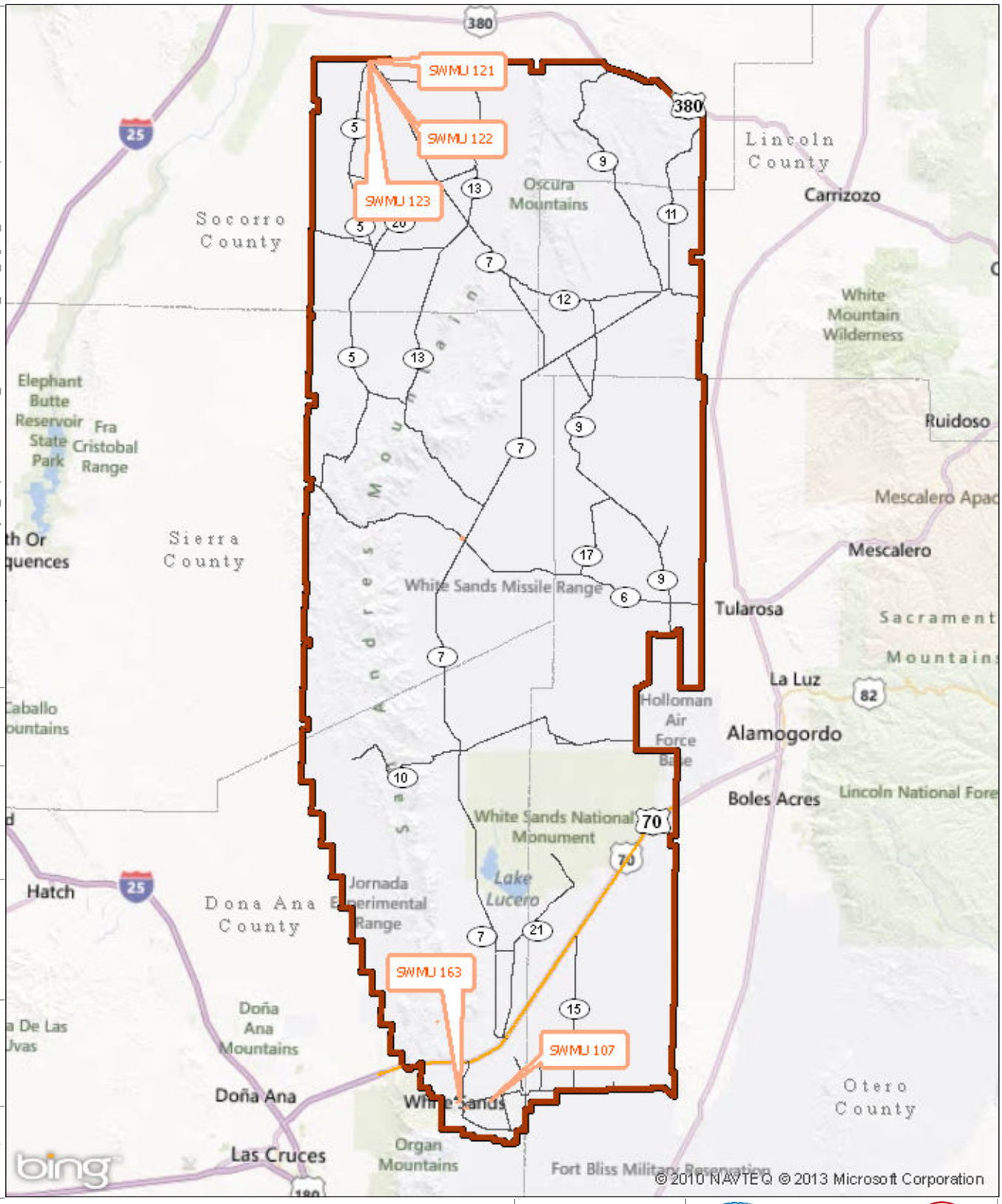
WTS, see White Sands Technical Services.

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

Figures



Office	Drawn By	Checked By	Approved By	Date	File Path
ABQ	ECARPIO	SSURYANARAYANAN	CLONG	09/13/13	G:\WSMR\GISDocuments\Project_Maps\MXD\Release_Assessment\RA_0018_Fig1-1_LocationMap.mxd

LEGEND

- WSMR Installation
- SWMU 107 — Site Location
- 25 — Interstate Highway
- 7 — WSMR Route
- 70 — US Highway

NOTES

SWMU = Solid Waste Management Unit

WSMR = White Sands Missile Range

0 5 10 Miles

0 4.75 9.5 19 Kilometers

N

WGS 84 UTM Zone 13N Meters

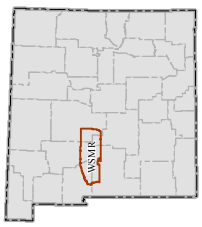
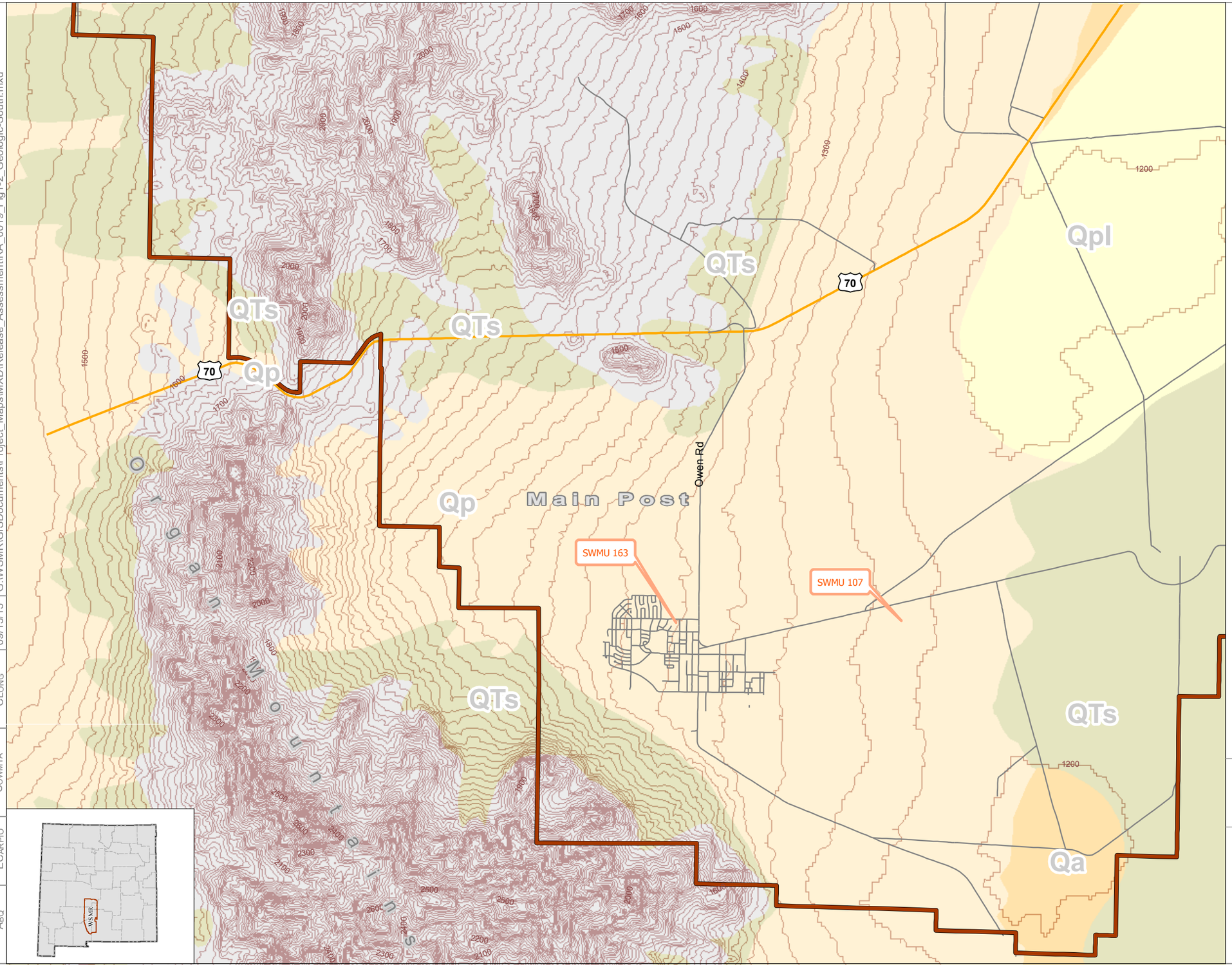


FIGURE 1-1

LOCATION MAP OF
SWMUs 107, 121, 122, 123,
AND SWMU 163
RELEASE ASSESSMENT REPORT

WHITE SANDS MISSILE RANGE, NM



L E G E N D

- WSMR Installation
- US Highway
- Other Roads
- Elevation Contours
- SWMU 107 Site Location
- Consolidated Units
- Qa
- Qp
- Qpl
- QTs

N O T E S

Qa = Alluvium; upper and middle Quaternary

Qp = Piedmont alluvial deposits; upper and middle Quaternary; includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the Piedmont slope, and alluvial fan

Qpl = Lacustrine and playa-lake deposits; includes associated alluvial and eolian deposits of major lake basins; upper Quaternary

QTs = Upper Santa Fe Group. Includes Camp Rice, Fort Hancock, Palomas, Sierra Ladrones, Ancho, Puye, and Alamosa formations; middle Pleistocene to uppermost Miocene

SWMU = Solid Waste Management Unit

WSMR = White Sands Missile Range

0 1 2 Miles

0 1 2 4 Kilometers

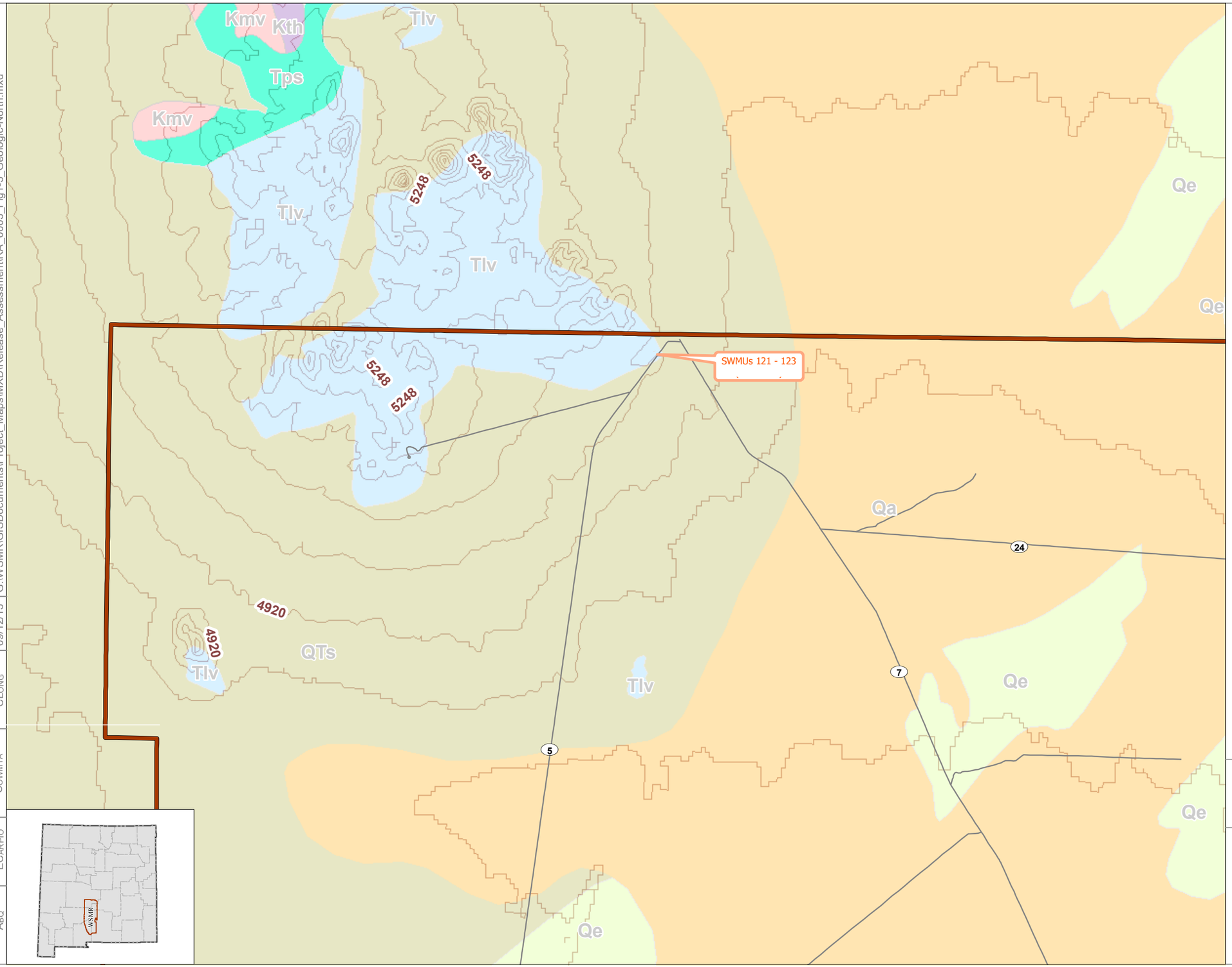
N

WGS 84 UTM ZONE 13N METERS

FIGURE 1-2

WSMR MAIN POST
GEOLOGIC MAP
SWMU 107 and SWMU 163
RELEASE ASSESSMENT REPORT
WHITE SANDS MISSILE RANGE, NM

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DATE	FILE PATH
ABQ	ECARPIO	SOWMYA	CLONG	09/13/13	G:\WSMR\GISDocuments\Project_Maps\MXD\Release_Assessment\RA_0019_Fig1-2_Geologic-South.mxd



L E G E N D

WSMR Installation	Qe
WSMR Roads	Qa
Other Roads	QTs
Elevation Contours	Tlv
SWMU 121 (WSMR-67) Site Location	Tps
Kth	Kmv

N O T E S

Tps = Paleogene sedimentary units; includes Baca, Galisteo, El Rito, Blanco Basin, Love Ranch, Lobo, Sander Canyon, Shunk Ranch, Timberlake, and Cub Mountain Formations

Tlv = Lower Oligocene and Eocene volcanic rocks, undifferentiated; dominantly intermediate composition, with interbedded volcaniclastic rocks; (31 - 44 Ma)

Kmv = Mesaverde Group includes the Gallup Sandstone, Crevasse Canyon Formation, Point Lookout Sandstone, Menefee Formation, and Cliff House Sandstone

Kth = Tres Hermanos Formation; formerly designated as Lower Gallup Sandstone in the Zuni Basin; Turonian

Qa = Alluvium; upper and middle Quaternary

Qe = Eolian deposits

QTs = Upper Santa Fe Group. Includes Camp Rice, Fort Hancock, Palomas, Sierra Ladrones, Ancho, Puye, and Alamosa Formations; middle Pleistocene to uppermost Miocene

SWMU = Solid Waste Management Unit

WSMR = White Sands Missile Range

0 0.5 1 Miles

0 0.5 1 2 Kilometers

N

WGS 84 UTM ZONE 13N METERS

FIGURE 1-3

WSMR STALLION RANGE
GEOLOGIC MAP
SWMUs 121-123
RELEASE ASSESSMENT REPORT
WHITE SANDS MISSILE RANGE, NM

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DATE	FILE PATH
ABQ	ECARPIO	SOWMYA	CLONG	09/12/13	G:\WSMR\GIS\Documents\Project_Maps\MXD\Release_Assessment\RA_0003_Fig1-3_Geologic-North.mxd

L E G E N D

- SWMU Boundary
- WSMR Installation
- WSMR Roads
- Fence

N O T E S

SWMU = Solid Waste Management Unit

WSMR = White Sands Missile Range

0 50 100
Feet

0 10 20 40
Meters

N

WGS 84 UTM ZONE 13N
METERS

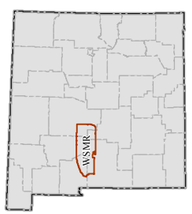


FIGURE 2-1

SITE LOCATION MAP
SWMU 107
RELEASE ASSESSMENT REPORT
WHITE SANDS MISSILE RANGE, NM

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DATE	FILE PATH
ABQ	ECARPIO	SOWMYA	CLONG	09/12/13	G:\WSMR\GIS\Documents\Project_Maps\MXD\Release_Assessment\RA_0008_Fig2-1_TTF_Layout.mxd

Office	Drawn By	Checked By	Approved By	Date	File Path
Hou	BGrod	DTso	Initial	09/11/13	G:\WSMR\GISDocuments\Project_Maps\MXD\Release_Assessment\RA_0020_Fig3-1_StallionAsphaltTanks.mxd

L E G E N D

WSMR Installation

SWMUs 121 - 123 (WSMR-67)

N O T E S

SWMU = Solid Waste Management Unit

WSMR = White Sands Missile Range

0 25 50 100 Meters

0 125 250 500 Feet

N

WGS 84 UTM Zone 13N Meters

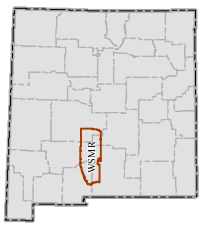


Figure 3-1

Site Location
Asphalt Tanks at
Stallion Range
SWMUs 121-123
Release Assessment Report
White Sands Missile Range, NM

LEGEND

- COMMISSARY LANDFIILL TRENCH
- FENCE
- CONSTRUCTION AREA
- DECONTAMINATION AREA
- ROLL-OFF BINS TEMPORARY STORAGE AREA

NOTES

SWMU = Solid Waste Management Unit
WSMR = White Sands Missile Range

0 10 20 40
Meters

0 37.5 75 150
Feet

N

WGS 84 UTM ZONE 13N
METERS

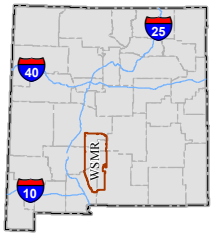


FIGURE 4-1
SITE PLAN
SWMU 163
RELEASE ASSESSMENT REPORT
WHITE SANDS MISSILE RANGE, NM

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DATE	FILE PATH
ABQ	ECCARPIO	SSURYANARAYANA	SMATLAPUDI	09/11/13	G:\WSMR\GISDocuments\Project_Maps\MXD\Release_Assessment\RA_0021_Fig4-1_Commsry-SitePlan.mxd

Appendix A-1
SWMU 107: Decision Document

WS-ES-EC-9917

DECISION DOCUMENT FOR THE TEMPERATURE TEST FACILITY 25,000 GALLON EVAPORATION TANK WSMR-35 (SWMU 107)

FOR

BY

January 2000

White Sands Missile Range
Environment and Safety Directorate
White Sands Missile Range, New Mexico 88002

28800000102427
200-1R
W35-DEC
2000

REPORT DOCUMENTATION PAGE			OMB No. 0704-0188
Public reporting burden for this collection of information estimated to average 1 hour per response, including the time for reviewing instructions. Send comments regarding this burden estimate or any other aspects of this collection information including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget Paperwork Reduction Project (0704-0188), Washington DC 20503			
1. AGENCY USE ONLY (LEAVE BLANK)	**2. REPORT DATE** January 2000		**3. REPORT TYPE AND DATES COVERED** Aug 1999 – Nov 1999
4. TITLE AND SUBTITLE Decision Document For The Temperature Test Facility 25,000-Gallon Evaporation Tank, WSMR-35 (SWMU 107)			**5. FUNDING NUMBERS**
6. AUTHOR(S) George Moon, P.E., Deputy Program Manager Benito Avalos, Environmental Engineer			
7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(ES) MEVATEC Corporation Box 399 White Sands Missile Range, NM 88002			**8. PERFORMING ORGANIZATION REPORT NUMBER** 400SS/99/01F
9. SPONSORING/MONITORING AGENCY NAMES(S) AND ADDRESS(ES) Attn: Ms. Robin Paul, Technical Inspector U.S. Army White Sands Missile Range WS-ES-EC			**10. SPONSORING/MONITORING AGENCY REPORT NUMBER** WS-ES-EC-9917
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION AVAILABILITY STATEMENT D			**12b. DISTRIBUTION CODE**
13. ABSTRACT (MAXIMUM 200 WORDS) The decision document describes the final remedial response action. It meets the requirements of RCRA, NEPA, and the Army Environmental Restoration Program. This document contains remedial alternatives considered and the selected remedial activities. The information will be used for the application of a Class III RCRA permit modification.			
14. SUBJECT TERMS Decision Document, Temperature Test Facility, DSERTS, SWMU, Remediation Alternatives, Remediation Action, Evaporation Tank.			**15. NUMBER OF PAGES** 10 **16. PRICE CODE**
17. SECURITY CLASSIFICATION OF REPORT Unclassified	**18. SECURITY CLASSIFICATION OF THIS PAGE** Unclassified	**19. SECURITY CLASSIFICATION OF ABSTRACT** Unclassified	**20. LIMITATION OF ABSTRACT**

NSN 7540-01-280-5500 STANDARD FORM 298 (2-89) PREPARED BY ANSI Std 239-8 299-102

DECISION DOCUMENT FOR THE TEMPERATURE TEST FACILITY 25,000 GALLON EVAPORATION TANK, WSMR-35 (SWMU 107)

Submitted to:

U.S. Army
White Sands Missile Range
Environment and Safety Directorate
White Sands Missile Range, New Mexico 88002-5048

January 2000

Submitted by:

MEVATEC Corporation
Building 126
White Sands Missile Range, New Mexico 88002

EXECUTIVE SUMMARY

This Decision Document serves as documentation of the final remedial response action performed at the White Sands Missile Range Temperature Test Facility (TTF) 25,000-gallon evaporation tank WSMR-31 (SWMU-107). As per the U.S. Army Environmental Restoration Programs Guidance Manual, the purposes of the decision document are to:

- Demonstrate that the response action chosen is consistent with, and meets the requirements of the Resource Conservation and Recovery Act (RCRA);
- Demonstrate that the evaluations and documentation supporting the response action satisfy the intent of the National Environmental Policy Act (NEPA) of 1969; and
- Document Army decisions regarding response action selection.

The TTF was designed to simulate extreme weather conditions by inducing a wide range of temperature and climatic variations. After completion of construction, the facility consisted of a main test building, several underground storage tanks (USTs) with ancillary piping, and a surface evaporation pond. The original refrigerant used to cool the test chamber was methylene chloride (MeCl), which was recycled using the USTs. The surface evaporation pond was used to evaporate process wastewater generated as a by-product of freezing rain tests performed in the test building. Prior to completion of construction, it was discovered that MeCl leaked within the TTF building and was subsequently flushed to the evaporation pond. It was then discovered that the HDPE liner had eroded and leaked the pond's contents to the underlying soil. A 25,000-gallon cylindrical closed steel tank was installed as an interim measure to store any overflow of MeCl from the TTF. The storage tank was placed above ground within the evaporation pond

Three remedial alternatives were considered for this site; 1) no action, 2) institutional controls, and 3) clean closure. Alternatives 1 and 2 would not have eliminated the potential risk of exposure. Additionally, as part of the remedial efforts on the evaporation pond and surrounding area, the tank had to be removed. Clean closure of the tank resulted in no hazardous substances remaining on-site, satisfying federal and state requirements. The following narrative describes and compiles results of the remedial alternatives considered, and a summary of the remedial alternative selected.

TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ii

1.0 PURPOSE 1

2.0 SITE RISK 5

3.0 REMEDIAL ALTERNATIVES 5
- 3.1 No Action 5
- 3.2 Institutional Controls 5
- 3.3 Clean Closure 5
- 3.4 Selected Alternative 6

4.0 PUBLIC/COMMUNITY INVOLVEMENT PLAN 6

5.0 DECLARATION 8

6.0 APPROVAL AND SIGNATURE 8
- 6.1 Cost of Remedial Action 8
- 6.2 Approval Signature 8

LIST OF ACRONYMS 9

REFERENCES 10

List of Figures

1-1 White Sands Missile Range Location 2
1-2 Temperature Test Facility Location 3
1-3 Temperature Test Facility Layout 4

List of Photographs

3-1 SWMU 107 Site after Remediation Efforts 7

List of Tables

3-1 Sampling Data Summary 6

APPENDIX A PROJECT HISTORY OF TEMPERATURE TEST FACILITY CLOSURE PLAN OF WHITE SANDS MISSILE RANGE, NEW MEXICO NM2750211235

DECISION DOCUMENT FOR THE TEMPERATURE TEST FACILITY 25,000 GALLON EVAPORATION TANK, WSMR-35

1.0 PURPOSE

This decision document describes the action selected to complete cleanup of the site at the White Sands Temperature Test Facility (TTF) 25,000 gallon evaporation tank, chosen in accordance with the Resource Conservation and Recovery Act (RCRA) and Army Regulation 200-1, as applicable.

White Sands is a U.S. Army Test and Evaluation Command (TECOM) installation. White Sands is located in Doña Ana, Socorro, Lincoln, Otero, and Sierra Counties, New Mexico (NM). The headquarters (Main Post) area of White Sands is located at the southwestern corner of the installation, approximately 27 miles [43.4 kilometers (km)] east-northeast of Las Cruces, NM and 45 miles (72.4 km) north of El Paso, Texas (TX) (Figure 1-1). The tank site is located approximately 1.8 miles (2.89 kilometers) east of Main Post on Nike Avenue (Figure 1-2). This tank site is designated as Solid Waste Management Unit (SWMU) 105 and is listed in the Defense Site Environmental Restoration Tracking System (DSERTS) as WSMR-35.

The TTF, completed in early 1984, was designed to simulate extreme weather conditions by inducing a wide range of temperature and climatic variations. The completed facility consisted of a main test building, several underground storage tanks (USTs) with ancillary piping, and a surface evaporation pond. The original refrigerant used to cool the test chamber was methylene chloride (MeCl), which was recycled using the USTs. The surface evaporation pond, WSMR-34, was used to evaporate process wastewater generated as a by-product of freezing rain tests performed in the test building. The evaporation pond was excavated approximately 70 feet [21.3 meters (m)] wide and 150 feet (45.7 m) long and lined with a high-density polyethylene liner (HDPE). (MEVATEC, 1999)

The TTF was originally designed to collect process wastewater in floor drains within the facility and discharge to the evaporation pond via underground pipes. In July 1983, prior to completion of construction, it was discovered that MeCl leaked within the TTF building and was subsequently flushed to the evaporation pond. The leakage occurred due to faulty seals in the coolant system. In January 1985, it was discovered that the HDPE liner had eroded and leaked the pond's contents to the underlying soil. A 25,000-gallon cylindrical closed steel tank, WSMR-35, was installed as an interim measure to store any overflow of MeCl from the TTF. The storage tank was placed above ground within the evaporation pond. Figure 1-3 shows the facility layout with the temporary tank location in the layout. (MEVATEC, 1999)

In 1990, an impermeable RCRA cap was installed covering soil contamination beneath the evaporation pond and surrounding area. In 1991, TTF personnel replaced MeCl with Syltherm, an environmentally "safer" heat exchange liquid, as the primary coolant at the facility. Additionally, the coolant system was re-engineered to prevent releases. Currently, a soil vapor extraction system (WSMR-41) is in operation at the TTF to remove contamination within the vadose zone beneath the evaporation pond. (MEVATEC, 1999).

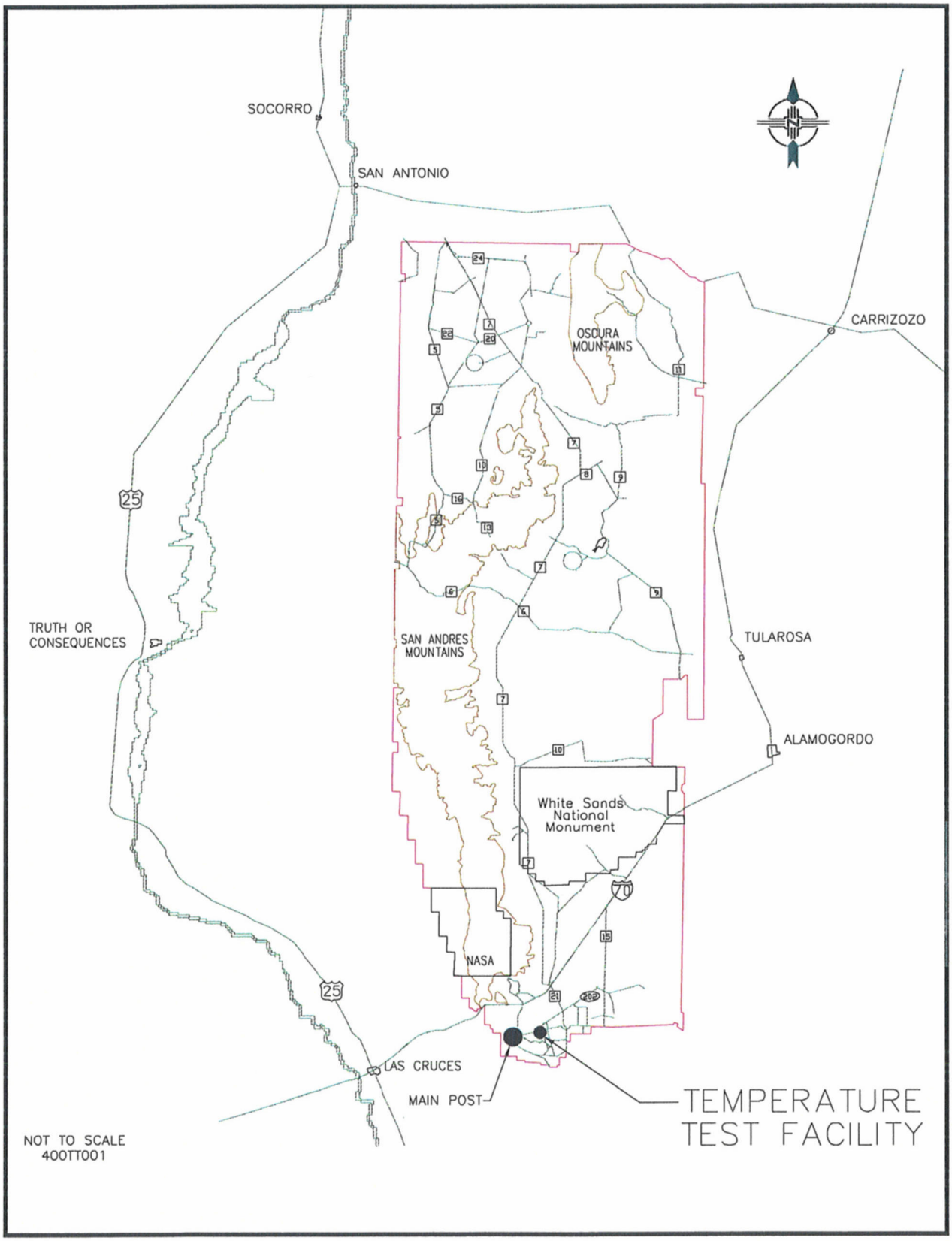


Figure 1-1. White Sands Missile Range Location.

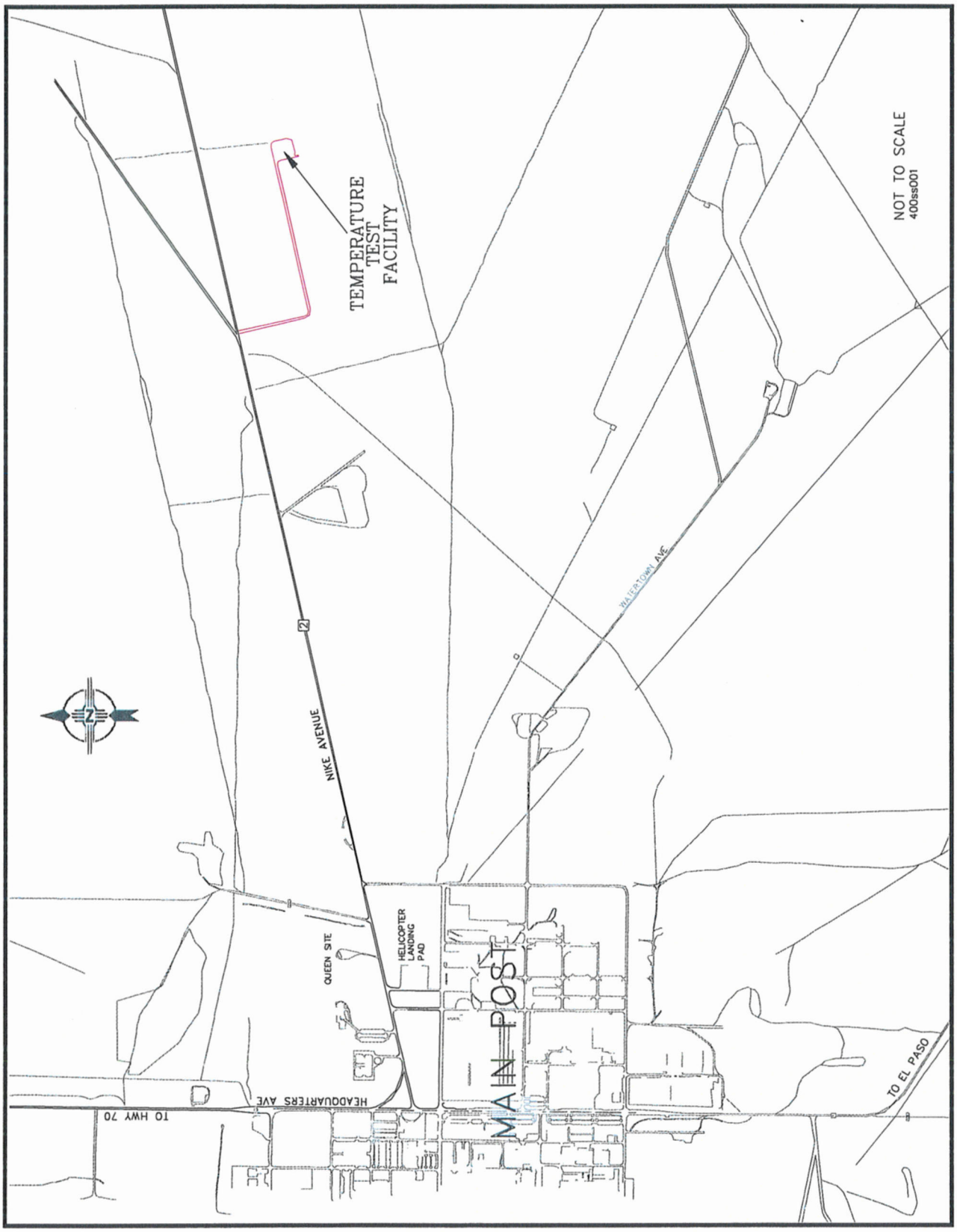


Figure 1-2. Temperature Test Facility Location.

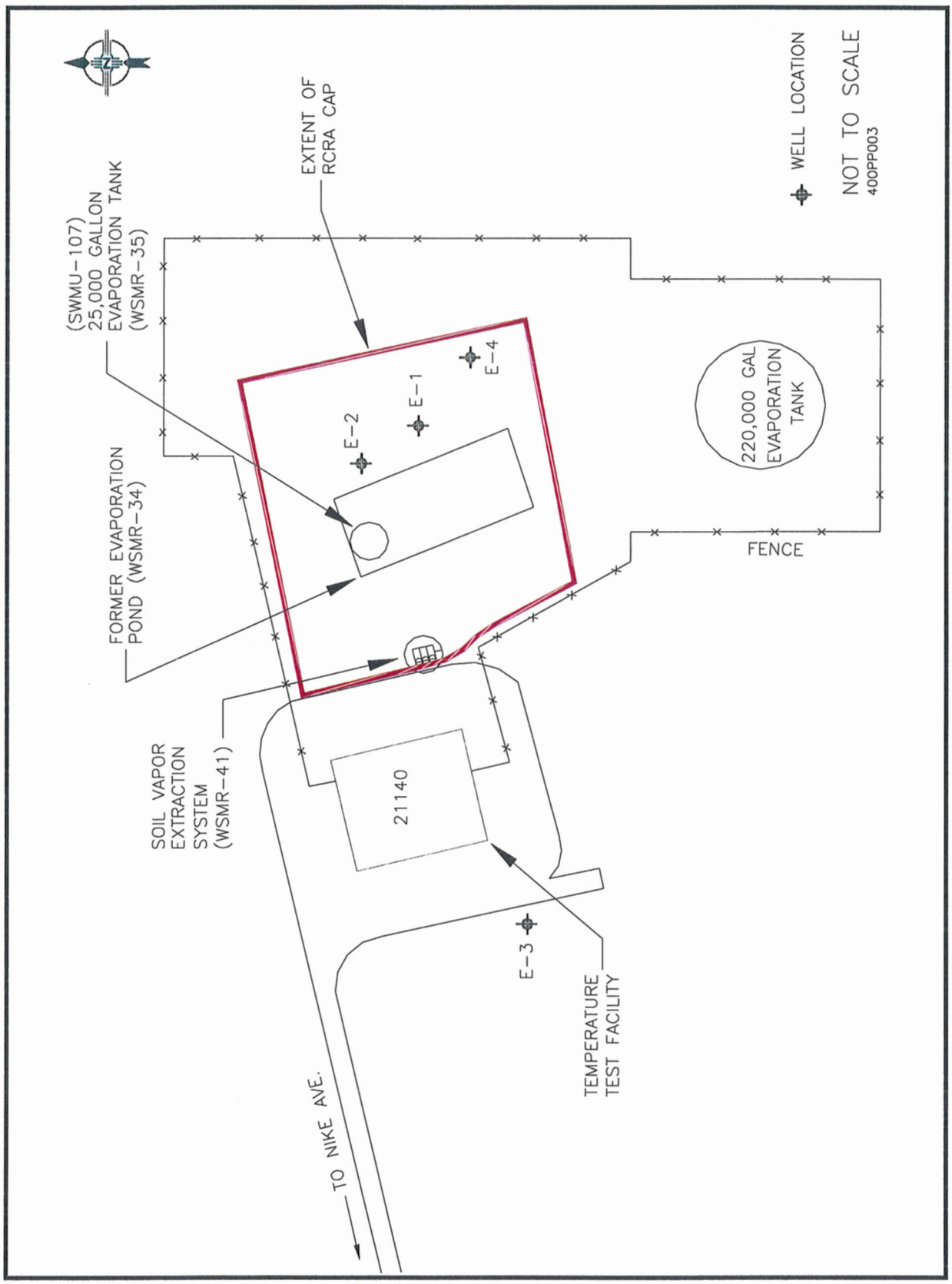


Figure 1-3. Temperature Test Facility Layout.

As a result of the construction of the cap at WSMR-34, the 25,000-gallon tank needed to be removed. Because White Sands personnel wished to reuse the storage tank, the remedial strategy was to remove the remaining contents and clean the tank (Geoscience, 1987). These actions, completed in May 1990, removed the source of contaminants and eliminated potential for contamination to leak onto the ground.

2.0 SITE RISK

The intent of the 25,000-gallon tank was to temporarily store any overflow of MeCl from the TTF. The tank was a closed steel, cylindrical tank horizontally mounted on a concrete pad inside the former evaporation pond. The potential for release to soil and groundwater was low due to the concrete pad sitting beneath the elevated tank. The potential for release to surface water was low due to the concrete pad and because there is no surface water located in the area. There was no potential for subsurface gas generation as the tank was located above ground.

3.0 REMEDIAL ALTERNATIVES

Alternatives proposed for remedial actions and closure of the temporary tank with overflow MeCl from the TTF were as follows:

3.1 No Action

This action would not have prevented the potential contaminant from being released, therefore the potential risk of exposure would have remained. Potential exposure to personnel working near the site and exposure to the ecology would remain. Additionally, a no further action alternative did not coincide with the plans for remediation efforts on the evaporation pond (WSMR-34).

3.2 Institutional Controls

This action would have provided site fencing and monitoring, thus protecting personnel and several ecological factors. However, the potential for exposure would have remained since the source of contamination, as well as the potential migration pathways would not have been removed. Additionally, this did not coincide with plans for remediation efforts on the evaporation pond (WSMR-34).

3.3 Clean Closure

This action consisted of removing the tank and conducting decontamination procedures. These procedures include rinsing and scrubbing the tank with surfactant solution until the rinsate tested clean. Removal of the source eliminated the potential for exposure to the ecology and for any potential migration of contamination.

3.4 Selected Alternative

The remediation alternative selected for the 25,000-gallon tank was clean closure. Since the tank sat directly in the evaporation pond (WSMR-34) and it was decided to cap the pond similar to a landfill, it was only feasible to remove the tank. Remedial efforts for the pond can be referred to WSMR-34 (SWMU-104), Decision Document for the TTF High Density Polyethylene Lined Lagoon (MEVATEC, 1999). RINCHEM Company Inc conducted cleaning and testing of the tank. A copy of the report is in Appendix A. The tank was dismantled and rolled onto 10-mil plastic sheeting laid out over the entire work surface area. Sludge in the tank was shoveled and pumped into steel drums via spark-proof shovels and a heavy-duty sludge pump and discarded properly. The interior of the tank was washed with a hot steam wash of water and low sudsing, biodegradable soap. A total of four rinses were completed. The rinsate was pumped into 55-gallon steel drums and was tested for methylene chloride, tetrachloroethene, toluene, 1,1,1-Trichloroethane, 1,1,2-Trichlorothane and trichlorethene. The results of the sampling effort for the tank materials are presented in Table 3-1. All samples tested as non-hazardous. The site after remediation efforts is shown in Photograph 3-1. (White Sands Missile Range, 1990)

Table 3-1. Sampling Data Summary.

PARAMETER	METHOD	DETECTION LIMIT	RESULT	REGULATORY LIMIT
Methylene Chloride	EPA 8021	1.0 mg/L	BDL	20 mg/L
Tetrachloroethene	EPA 8021	1.0 mg/L	BDL	16 mg/L
Toluene	EPA 8021	1.0 mg/L	3.8 mg/L	520 mg/L
1,1,1-Trichloroethane	EPA 8021	1.0 mg/L	BDL	1400 mg/L
1,1,2-Trichloroethane	EPA 8021	1.0 mg/L	BDL	1.9 mg/L
Trichloroethene	EPA 8021	1.0 mg/L	BDL	6.1 mg/L

*BDL – Below Detection Limit

4.0 PUBLIC/COMMUNITY INVOLVEMENT PLAN

White Sands provides the interested public with opportunities for environmental restoration involvement via:

- Quarterly newsletters detailing the restoration activities of the previous fiscal quarter, and providing plans and soliciting input for activities planned during the following quarter;
- Annual publication of the Installation Action Plan;
- Invitations to tour environmental restoration sites; and,
- Open access to the public Installation Restoration Program Resource Room.

The interested public did not provide any comments on this remedial action.

Photograph 3-1. SWMU-107 Site after remediation efforts.

5.0 DECLARATION

The selected remedy was protective of human health and the environment, attained federal and State of New Mexico requirements that were applicable or relevant and appropriate to this removal action, and was cost effective. The removal of any residual contamination satisfies the statutory preference for permanent solutions to the maximum extent practicable. Because this remedy did not result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure, a five-year review of the selected alternative does not apply to this action.

6.0 APPROVAL AND SIGNATURE

6.1 Cost of Remedial Action

The cost of the 25,000-gallon tank remediation was included with the cost of the lined lagoon (WSMR-34) remediation efforts which totaled $800,000.

6.2 Approval Signature

The undersigned is the appropriate approval authority for the White Sands Missile Range Installation Commander.

APPROVED BY:

Thomas A. Ladd

Thomas A. Ladd
Director,
Environment and Safety

27 Jan 00
Date

LIST OF ACRONYMS

BDL	Below Detection Limit
DSERTS	Defense Site Environmental Restoration Tracking System
EPA	United States Environmental Protection Agency
HDPE	High Density Polyethylene
m	Meter
MeCl	Methylene Chloride
mg/L	milligrams per liter
NMED	New Mexico Environment Department
NEPA	National Environmental Policy Act
RCRA	Resource Conservation Recovery Act
SWMU	Solid Waste Management Unit
TTF	Temperature Test Facility
UST	Underground Storage Tank

REFERENCES

Geoscience Consultants Ltd., 1997. *Closure Plan and Preliminary Engineering Design for Closure Temperature Test Facility.* Albuquerque, New Mexico. October.

MEVATEC Corp., 1999. *Decision Document for the Temperature Test Facility High Density Polyethylene Lined Lagoon, WSMR-34 (SWMU-104).* White Sands Missile Range, New Mexico. January.

White Sands Missile Range, 1990. *Temperature Test Facility Spill Site Closure.* White Sands Missile Range, New Mexico. October.

White Sands Missile Range, 1998. *Installation Action Plan.* White Sands Missile Range, New Mexico. February.

APPENDIX A

PROJECT HISTORY OF TEMPERATURE TEST FACILITY
CLOSURE PLAN OF WHITE SANDS MISSILE RANGE, NEW MEXICO
NM2750211235

IMS INTER-MECHANICAL SYSTEMS IMS
CONSULTING ENGINEERS

4336 Donnybrook Ln. • El Paso, TX 79902

18 October 1990

New Mexico Health and Environmental Department
Environmental Improvement Division
1190 St. Frances Drive
Santa Fe, New Mexico 87503
ATTN: Ms. Suzanne Moore-Mayne

Subject: Certification of Closure
Temperature Test Facility
White Sands Missile Range, NM
88002

Reference: U.S. Army Corp Of Engineers Solicitation No. DACA63-89-0309 (14 December 1989) and Proposed Closure Plan Approval, EPA I.D. No. NM2750211235

Dear Ms. Moore-Mayne:

Herewith, I certify that the specified area of the Temperature Test Facility has been closed in accordance with the above referenced documents. Furthermore, the specified site of closure is correct. The overall workmanship on this project was good in all aspects.

E.C. Hansel, P.E.

TEMPERATURE TEST FACILITY
OWNER-OPERATOR CERTIFICATION
SPILL SITE CLOSURE

WHITE SANDS MISSILE RANGE, NEW MEXICO 88002

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

Richard R. Walker
Colonel, Aviation
Director, Army Materiel Test and Evaluation

PROJECT HISTORY

OF

TEMPERATURE TEST FACILITY

CLOSURE PLAN

OF

WHITE SANDS MISSILE RANGE,

NEW MEXICO

EPA I.D. No. NM 2750211235

By: E.C. Hansel P.E.

TABLE OF CONTENT

1. Job history of TTF closure.
2. Sketch - typical section of TTF- closure.
3. Certification letter.
4. Plat plan of TTF closure.
5. Correspondence (5 letters).
6. Contractor's daily activities, notes & comments.

permission from the New Mexico Health and Environment Department to substitute Model 2800K1 Guelph Permeameter (Soilmoisture Equipment Corp., Santa Barbra, CA), Reference: EID letter, 13 April 1990. The Hydraulic Conductivity Range of Model 2800K1 is 10^{-2} to 10^{-6} cm/sec. Whereas the original specifications required a range of 10^{-7} cm/sec. The test of April ,1990 resulted in a permeability reading of 7.4×10^{-5}. The manufacturer stated that according to their previous experience with the Model 2800K1 the current results of our test would actually fall within the specified range if the recently developed attachments were available. At this point, we had exhausted all possible options of the apparatus. During the time needed to research all possible options, we were able to observe the effects of prolonged exposure of the clay layer to the elements. This gave us invaluable practical information of the integrity of the clay and we incorporated these findings into the actual procedure of laying and protecting the clay layer. Since the lab tests exceeded the specified permeability, the manufacturer had previous experience, and we were able to observe the clay in actual conditions, we concluded our field permeability test.

4. Lab Permeability Test

The lab permeability test results were excellent.

Hydraulic Conductivity:

LAB TEST RANGE	:	1.5×10^{-9} to 7.5×10^{-9} cm/sec
SPECIFIED	:	10^{-7} cm/sec or less

5. Two Feet Thick Clay Liner and Two Inch Thick Sand Layer

Prior to this work the contractor submitted a clay cap placement procedure which was refined by W.J. Cooper of Corps in Engineers and accepted by all involved parties. The clay liner was built up of four 6" thick lifts. Compaction and moisture contents were met as per specifications. In order to keep the specified moisture and integrity of the clay line and the 2" sand layer the area was sprayed twice daily with water, up until the synthetic liner was laid.

6. Thirty-Six Mil. Synthetic Liner

One day before, the Snow Company started to lay the synthetic liner. Mr.

Snow, Jerry Warner from Corps of Engineers and E.C. Hansel reviewed the specifications DACA63-89-B-0309 SECTION 02585. Mr. Snow explained his proposed installation method and testing procedure for the synthetic liner and we all agreed to it. The synthetic liner and the well pipe boots were installed per specification and manufacturers recommendation. I witnessed approximately 70% of all field seam testing. (Test Air Pressure 60 lbs was used where normally 40 lbs of pressure is used to test this type of work). Only a few areas failed the test and were repaired instantly and retested. In general, good workmanship was provided. In order to protect the liner against punctures, the decision was made to try to make a 3" thick layer rather than the specified 2" thick sand layer to guarantee that the 2"thick sand layer was achieved over the entire surface. This was especially important since the next 6" base course layer contained small stones which could puncture the synthetic liner.

7. Six Inch Thick Base Course

For reasons due to the unavailability (Actually, the reason for deviation here is that the material specified for use in the base course could NOT be processed within a reasonable cost and time frame to meet the 10^{-2} cm/sec criteria!) of the specified composition of base course, the Mew Mexico Health and Environment Department agreed the composition could somewhat deviate from the original specified composition, as long as the permeability of 10^{-2} cm/sec or greater is met. (see letter dated July 3, 1990 from Dynaspan to Ms. Moore - Mayne of the New Mexico Department of Health & Environment) The base course used is close to the specified material, with a permeability of 7.2×10^{-2} cm/sec (see report dated July 16, 1990, EID letter of 21 June 1990 and dynaspan letter nº. M & S 90-135) This 6" thick layer of base course material was spread without difficulties.

8. Six Inch Thick Portland Cement Stabilized Aggregate Base

After the final blue topping of the second layer, of 6" base course, which will be mixed in place with portland cement. I found an area approximately 4800 square feet that needed about 2" more base course material, to reach the specified elevation. The contractor corrected the situation. The original planed DISC METHOD to mix the base course with cement was replaced by using a BUMAC. The reason for the replacement was that the DISC METHOD was too slow. The mixing of both materials was very efficient and there were no problems in achieving the specified compaction. The finished surface of the finished portland cement

stabilized, aggregate base was smooth.

9. Two Inch Thick Crushed Rock/Asphalt Layers

The final layer of the crushed rocks on top of the 6" portland cement aggregate base, including the geotextile membrane liner and the asphalt layer at the TTF area were placed without any problems.

10. New Tank Vault and Concrete Ditch

All concrete was installed as per specifications and drawings with one exception. Due to the concrete enclosure in the transformer vicinity, a minor modification in the ditch depth had to be made. This modification will not effect the function of the ditch.

11. Drain Pipe System and Well Extensions

Drain pipe system and well extensions were fabricated and installed per drawings and specifications. The drain pipe system passed the test and exceeded the specified requirements.

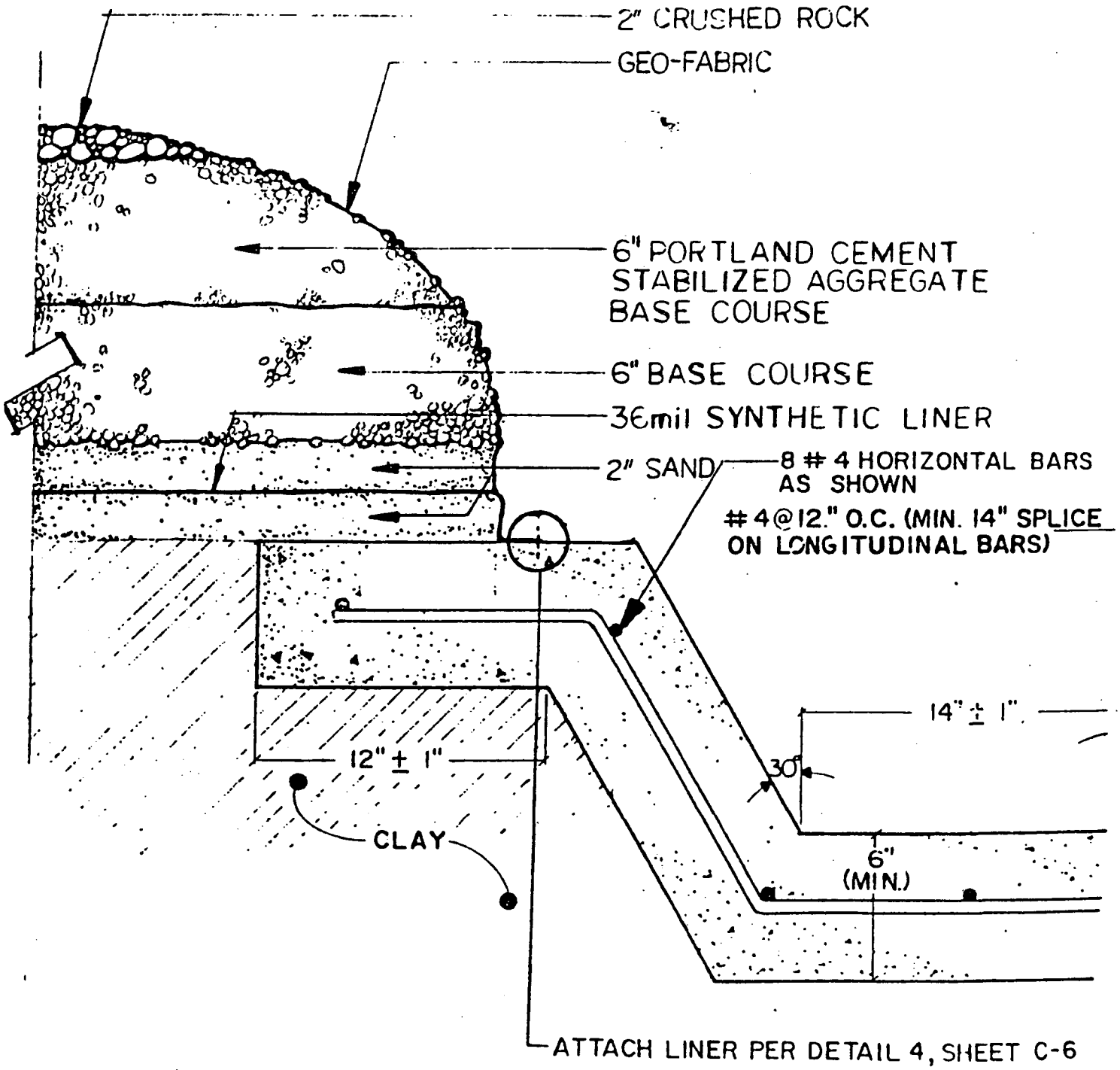
12. Cathodic Protection System

This system was installed per the construction documents. The existing rectifier station had to be relocated due to interference with the concrete ditch of the closure area.

Acknowledgements. On this project my special thanks goes to Mr. William J. Copper, Corps of Engineers and Mr. Jim Martin, TE-AE, Mr. Juan M. Ontiveros, Mr. Aaron Syers, and Mr. Don Bell, DEHL, Dynaspan for their support and coordination on this project.

General Contractor	: Smith & Aguirre Const., Inc., Las Cruces, NM.
Mechanical Contractor	: H & B Mechanical, Las Cruses, NM.
Synthetic Liner Installator	: Snow Company, Albuquerque, NM.
Electrical Contractor	: Kendrick Electric Corp., El Paso, TX.

CONSTRUCTION PERIOD : APRIL 1990 to SEPTEMBER 1990



TYPICAL SECTION OF THE CLOSURE

RINCHEM COMPANY, INC.
6133 EDITH BOULEVARD NE
ALBUQUERQUE, NM 87107
PHONE (505) 345-3655

FINAL REPORT

US ARMY CORPS OF ENGINEERS
WHITE SANDS MISSILE RANGE, NEW MEXICO
TEMPERATURE TEST FACILITY CLOSURE PLAN
TANK CLEANING SUBCONTRACT
WORK DATES:
MAY 22-25, 1990

SUBMITTED BY: RINCHEM COMPANY INC.
6133 Edith Blvd
Albuquerque, NM 87107

SUBMITTED TO: Smith & Aguierre
P.O. Box 2276
Las Cruces, NM 88004
Mr. Lyndon Fruit
with copy to Marvin Mathis

SCOPE OF WORK: Cleaning and testing of storage tanks and ancillary equipment used for the containment and transport of methylene chloride at the Temperature Test Facility. Underground pipelines to be disposed of also to be cleaned in accordance with this procedure.

HOURS AND PERSONNEL: 48 total hours spent by crew on job - see attachment A

Team Leader: Gary Michaelson
Technician: Neil Day
Technician: Gil Fried
Safety Professional: Margo A. Watkins

MAY 22, 1990: Onsite survey of tanks, sump, and contamination area to be plastic sheeting coated berm-to-berm.

MAY 23, 1990: Plastic sheeting laid out over entire work surface area. Duct tape used on seams. Sump in NE corner of work site completely lined. 10-mil black plastic laid down four layers deep in prime work area and two layers deep in less used area of the work site.

Smith & Aguierre personnel assisted in rolling tanks over so they each were slanted with site - downhill to north - and ports exposed on East side for access.

MAY 23, 1990: (cont.)

All port covers removed - three each per tank. Gastech Model GX-82 triple range gas monitor was placed by hand inside each of the tanks and readings noted: at ports utilizing squeeze bulb and sample probe inside approximately 3 feet the readings indicated NO FLAMMABLE/ EXPLOSIVE GAS LEVELS - NO ELEVATION OR REDUCTION IN OXYGEN LEVELS - AND NO CARBON MONOXIDE.

Ventilator fan was attached to the north end ports of the tanks and allowed to run for over 20 minutes per tank which would represent over 6 air changes per tank.

A reading of 13-20 ppm Carbon Monoxide picked up from in and around tanks - heavy equipment working adjacent to the work site was noted as source.

Entry of the large tank (#4) was authorized by Safety Officer Watkins. Technicians entered suited up in: Positive Pressure full face respirators on supplied air, PVC gloves and liners, Tyvek full coveralls, PVC knee boots-steel toe, safety glasses and hard hat.

A hot steam wash of water and TCP (low sudsing, biodegradable) soap was used on the interior of all four tanks.

Water was tested for pH and Chlorinated. The pH tested neutral on Tanks 1-3 and ranged from 11-7 on Tank 4. No chlorinated materials were detected using the Bellestein copper wire test method.

An explosion-proof light was hung in Tank 4 during work. A lifeline was attached to personnel before entering Tank 4 and one person continually observed person inside from the outside looking through the center porthole on the tank. Submersible pump used in North end to fill drums.

Work periods allowed in Tank 4 was 10 minutes per person. Pulse monitored, Gatorade administered and cold compress pressed on pulse points. Workers required to rest in shade until physical state allowed reentry.

Samples taken from all four tanks, labeled, chain of custody forms completed, samples iced down and packed in cooler with vermiculite and shipped via Federal Express overnight to National Analytical Laboratories in Tulsa, Oklahoma to comply with the 48-hour sample hold time as requested in the contract.

Samples from Tanks 1-3 represented the third hot steam rinse. The sample from Tank 4 represented the first rinse hot water. The level of dirt-like material present only in Tank 4 required much more time and work than required in Tanks 1-3.

May 24, 1990: Tank 4 entry procedures followed as previous day with entry authorization given by Safety Officer Watkins. The mud/dirt substance was shoveled out of tank into steel drums. Because of the heat stress potential, work periods were monitored at 15-minute periods. An ice-vest was utilized by tank entry personnel. Rinse water used throughout day alternated between hot and cold. Sludge was shoveled and pumped via spark-proof shovels and heavy duty sludge pump. A total of four complete rinses were completed on Tank 4 with all rinseate being pumped into 55-gallon steel drums. Onsite records maintained by Watkins noting drum contents, drum number, and Tank source number.

May 25, 1990: Final rinse of Tank 4 - all particulate material had been removed the day previous. Final rinse water contained drum #11. All drums tested for pH, numbered, labeled and moved to plastic sheeted area on the northeast end of the worksite. See Attachment B - Tank and Drum Inventory.

Since site contractor personnel were not available to move the 4 tanks off of the plastic sheeting liner, 4 open head steel drums were left with contractor for waste plastic.

One additional small scrap white tank was steam cleaned on the plastic lined area at the request of the site contractor.

The used copper pipes were moved onto the plastic and each pipe was steam cleaned and rinsed inside and outside. The water that drained into the sump at the northeast corner of the worksite had evaporated during the days onsite. There was no water to be pumped out of the sump.

Drums and site secure, check out with M. Mathis, site contractor contact.

Respectfully submitted,

Margo A. Watkins

Margo A. Watkins
Technical Representative
Rinchem Company, Inc.

Attachments:
A - Hours
B - Tank and Drum Inventory
C - NAL test results from TANK 1
D - NAL test results from TANK 2
E - NAL test results from TANK 3
F - NAL test results from TANK 4

ATTACHMENT A

WHITE SANDS MISSILE RANGE TANK CLEANING JOB - MAY 22-25, 1990

PRIME CONTRACTOR: Smith & Aguierre SUBCONTRACTOR: Rinchem Company, In

HOURS AND PERSONNEL ASSIGNED TO JOB:

PERSONNEL:
Gary Michaelson, Team Leader
Rinchem Company, Inc.
Neil Day, Lead Technician
Rinchem Company, Inc.
Gil Fried, Technician
Rinchem Company, Inc.
Margo A. Watkins, Safety Professional
Rinchem Company, Inc.

HOURS:	May 22, 1990	Depart ABQ	11:00 am	
		Work Site Survey	5:00 pm - 6:00 pm	
		Hotel check-in	7:00 pm	
	May 23, 1990	Depart Hotel	5:30 am	
		Arrive Site	7:00 am	
		Leave Site	4:30 pm	(To Federal Express)
		Arrive Hotel	6:30 pm	
	May 24,1990	Depart Hotel	5:30 am	
		Arrive Site	7:00 am	
		Leave Site	6:30 pm	
		Arrive Hotel	7:30 pm	
	May 25, 1990	Depart Hotel	6:00 am	
		Arrive Site	8:00 am	
		Leave Site	12:30 pm	
		Arrive ABQ	7:30 pm	

RINCHEM COMPANY, INC.
6133 EDITH BOULEVARD NE
ALBUQUERQUE NM 87107
PHONE (505) 345-3655

ATTACHMENT B

WHITE SANDS MISSLE RANGE TANK CLEANING JOB

MAY 22, 1990 - MAY 25, 1990 PRIME CONTRACTOR: SMITH & AGUIERRE

TANK INVENTORY:

Tank #4 46' long X 11' Diameter

Steel with three ports, inside ladder and outside ladder and liner material

Analytical test: 3.8 ppm Toluene

Action: Tank rinsed with clean H_2O four additional times (this action was after sample was taken).

TANK #3, #2, #1 22' long X 72" Diameter

Stainless steel tanks with three ports

Analytical test: none of the suspect target five chemicals found

Action: The three rinses on each of these tanks was sufficient to completely clean them

DRUM INVENTORY:

DRUM NUMBER	DRUM TYPE	pH	TANK	DRUM NUMBER	DRUM TYPE	pH	TANK
1	17E	10	4	16	17E	9	4
2	17E	10	4	17	17E	9	4
3	17E	9	4	18	17E	9	4
4	17E	9	4	19	17E	9	4
5	17E	9	4	20	17H	10	4
6	17E	10	4	21	17H	10	4
7	17E	11	4	22	17H	10	4
8	17E	11	4	23	17H	N/A	*
9	17E	10	4	24	17E	6	1
10	17E	10	4	25	17E	7	1
11	17E	7	4	26	17H	N/A	*
12	17E	9	4	27	17H	N/A	*
13	17E	10	4	28	17H	N/A	*
14	17E	10	4	29	17H	N/A	*
15	17E	10	4				

17E = drum with bungs

17H = drum with flat top

*** = tyvek, gloves, respirator cartridges and tape

** = plastic sheeting used as liner

NATIONAL ANALYTICAL LABORATORIES

A Division of U.S. POLLUTION CONTROL INC.

RINCHEM ATTACHMENT C

GARY MICHAELSON
RINCHEM
6133 EDITH BLVD. N.E.

ALBUQUERQUE, NM 87107

PORT NUMBER: 6816A01

MPLE IDENTIFICATION: 6816-01
STOMER IDENTIFICATION: #1
E SAMPLED:
E OF MATERIAL: WATER

DATE RECEIVED: 5/24/90
DATE COMPLETED: 5/25/90

AMETER	REF. METHOD	DET. LIMIT	RESULT
THYLENE CHLORIDE	EPA 8021	1.0 MG/L	BDL MG/L
RACHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L
UENE	EPA 8021	1.0 MG/L	BDL MG/L
,1,1-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
,2-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
CHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L

BDL = BELOW DETECTION LIMIT

4022 South 49th West Avenue • Tulsa, Oklahoma 74107 • (918) 446-1162

NATIONAL ANALYTICAL LABORATORIES
A Division of
U.S. POLLUTION CONTROL INC.

RINCHEM ATTACHMENT D

GARY MICHAELSON
RINCHEM
6133 EDITH BLVD. N.E.

ALBUQUERQUE, NM 87107

EPORT NUMBER: 6816A01

PAGE 2

AMPLE IDENTIFICATION: 6816-02
USTOMER IDENTIFICATION: #2
E SAMPLED:
YPE OF MATERIAL: WATER

DATE RECEIVED: 5/24/90
DATE COMPLETED: 5/25/90

PARAMETER	REF. METHOD	DET. LIMIT	RESULT
ETHYLENE CHLORIDE	EPA 8021	1.0 MG/L	BDL MG/L
ETRACHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L
OLUENE	EPA 8021	1.0 MG/L	BDL MG/L
1,1-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
1,2-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
RICHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L

DL = BELOW DETECTION LIMIT

1322 South 19th West Avenue • Tulsa, Oklahoma 74107 • (918) 446-1162

NATIONAL ANALYTICAL LABORATORIES
A Division of
US POLLUTION CONTROL INC

RINCHEM ATTACHMENT 2

GARY MICHAELSON
RINCHEM
6133 EDITH BLVD. N.E.

ALBUQUERQUE, NM 87107

ORT NUMBER: 6815A01

PAGE 3

PLE IDENTIFICATION: 6815-03
STOMER IDENTIFICATION: #3
TE SAMPLED:
E OF MATERIAL: WATER

DATE RECEIVED: 5/24/90
DATE COMPLETED: 5/25/90

RAMETER	REF. METHOD	DET. LIMIT	RESULT
ETHYLENE CHLORIDE	EPA 8021	1.0 MG/L	BDL MG/L
ETRACHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L
OLUENE	EPA 8021	1.0 MG/L	BDL MG/L
,1,1-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
,1,2-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
RICHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L

BDL = BELOW DETECTION LIMIT

4322 South 49th West Avenue • Tulsa, Oklahoma 74107 • (918) 446-1162

NATIONAL ANALYTICAL LABORATORIES
Division of
U.S. POLLUTION CONTROL, INC.

RINCHEM ATTACHEMENT F

GARY MICHAELSON
RINCHEM
6133 EDITH BLVD. N.E.

ALBUQUERQUE, NM 87107

PAGE 4

ORT NUMBER: 6816A01

DATE RECEIVED: 5/24/90
DATE COMPLETED: 5/25/90

PLE IDENTIFICATION: 6816-04
STOMER IDENTIFICATION: #4
TE SAMPLED:
E OF MATERIAL: WATER

RAMETER	REF. METHOD	DET. LIMIT	RESULT
ETHYLENE CHLORIDE	EPA 8021	1.0 MG/L	BDL MG/L
ETRACHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L
LUENE	EPA 8021	1.0 MG/L	3.8 MG/L
1,1,1-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
1,1,2-TRICHLOROETHANE	EPA 8021	1.0 MG/L	BDL MG/L
CHLOROETHENE	EPA 8021	1.0 MG/L	BDL MG/L

DL = BELOW DETECTION LIMIT

Appendix A-2
SWMU 107: WSMR Letter to NMED Regarding RFI Activities at TTF

DEPARTMENT OF THE ARMY

U.S. ARMY WHITE SANDS MISSILE RANGE
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-

April 15, 1996

REPLY TO ATTENTION OF

Directorate of Environment and Safety

Mr. Benito Garcia
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502

Dear Mr. Garcia:

White Sands Missile Range (WSMR) has been actively pursuing remediation efforts at the Temperature Test Facility (TTF). In 1988 at this facility, a release of methylene chloride (MeCl) was identified and a RCRA cap was constructed to mitigate the possibility of MeCl migration from the site. Consequently in 1995, WSMR performed an investigation to identify the extent of all the MeCl contamination at the TTF so that a soil vapor extraction system could be installed to properly remediate this site.

Attached for your review and comment, is the final draft of the investigation report entitled, "RCRA Facility Investigation Report , Temperature Test Facility - White Sands Missile Range, New Mexico". We request any comments or suggested modifications from your staff regarding the report so that we may finalize the document. A response concerning our report at your earliest convenience is appreciated. Please contact Mr. Hector Magallanes, (505) 678-2073, should you or your staff have questions regarding the TTF RFI Report submitted for review.

Sincerely,

Thomas A. Ladd

Thomas A. Ladd
Director, Environment and Safety

Attachment

Copy Furnished:
Mr. James Harris, U.S. EPA, Region VI, Dallas, TX

Appendix A-3
SWMU 107: WSMR Letter to NMED Regarding TTF Closure Data

DEPARTMENT OF THE ARMY
U.S. ARMY WHITE SANDS MISSILE RANGE
100 HEADQUARTERS AVENUE
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000
September 10, 2003

REPLY TO
ATTENTION OF:
Environment and Safety Directorate

Ms Cheryl Frischkorn
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Subject: Submittal of Additional Reports in Support of the Final Permit Modification Application for Post-Closure Care: TTF Disposal Surface Impoundments, WSMR, NM Permit Number: NM2750211235-PCC

Dear Ms. Frischkorn:

White Sands Missile Range submits the subject reports as requested per teleconference call held on 13 August 2003 with the NMED HWB. Required data and supporting documentation are included in the attachment:

White Sands Missile Range, New Mexico Temperature test facility Spill Site Closure Plan, October 1990
White Sands Missile Range, New Mexico Temperature Test Facility Closure Data, October 1990

Should you have any questions regarding this submittal, please contact Mr. Gene Forsythe or Mr. Jose Gallegos at (505) 678-1007.

Copies of this correspondence, without enclosures, are being furnished to Ms. Sandra Martin and Mr. John Kieling, NMED HWB; Mr. James Harris, Region VI EPA; Mr. Mike Kelly, U.S. Army Environmental Center; and to BAE Systems, Inc. (formerly MEVATEC Corporation).

The following certification is provided as required by our permit:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true,

accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Thomas A. Ladd

Thomas A. Ladd
Director, Environment and
Safety Directorate

encl
as

Appendix B-1
SWMUs 121 – 123: 1993 Tank Closure Report

LIBRARY COPY

FINAL CLOSURE REPORT FOR THE STORAGE TANK REMOVAL AND REMEDIATION

AT

STALLION RANGE CENTER, WHITE SANDS MISSILE RANGE

30 AUGUST 1993

DEPARTMENT OF THE ARMY

U.S. ARMY WHITE SANDS MISSILE RANGE
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5048

AUG 1999 RECEIVED

REPLY TO
ATTENTION OF

August 16, 1999

National Range Directorate of Environment and Safety

COPY

Mr. James Bearzi
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502

SUBJECT: Annual Unit Audit Revision Request - Clarification

Dear Mr. Bearzi:

We wish to clarify that portion of our response 5 which discussed Solid Waste Management Units (SWMUs) 121-123, Stallion Asphalt Tanks, submitted in our July 29, 1999 letter responding to your letter to us dated July 19, 1999, wherein you addressed our concerns on a number of specific SWMU sites that appeared on our Annual Unit Audit (AUA) and fee schedule. Our original response 5 on this issue read as follows:

> **SWMUs 121-123** - The underground storage tanks at Stallion Range Center identified by these SWMUs were removed and clean closed in 1993. At that time the action was coordinated with Ms. Nina Wells of the NMED UST Bureau. Closure records are on file with the UST Bureau. For that reason we believe that these sites should be removed from the AUA baseline.

In a telephone conversation on August 4, 1999, Mr. Phillip Solano of your staff requested Ms. Robin Smith of our staff provide the registration numbers on the Stallion Asphalt Tanks so that the stated coordination with the NMED UST Bureau could be verified. While researching this requested information, it was discovered that the Stallion Asphalt Tanks were not registered with the NMED UST Bureau. The asphalt tanks were not buried, but were placed on the side of a terraced hill with the soil on the north side of the tanks extending approximately halfway up the tank sides. No piping or vent lines were associated with the tanks.

FINAL CLOSURE REPORT FOR THE STORAGE TANK REMOVAL AND REMEDIATION

AT

STALLION RANGE CENTER, WHITE SANDS MISSILE RANGE

CONTRACT DAAD07-90-C-0018
WORK ASSIGNMENT ORDER 400-11, REVISION 4 AND 5

30 August 1993

Submitted to:

U. S. Army
White Sands Missile Range
Director of Contracting
Services Contracting Branch
White Sands Missile Range, New Mexico 88002-5201

Submitted By:

Advanced Sciences, Inc.
555 South Telshor, Suite 310
Las Cruces, New Mexico 88001

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 PHASE I EFFORTS/PRELIMINARY INVESTIGATION 1
2.1 Site Reconnaissance 1
2.2 TCLP Sampling 1

3.0 PHASE II EFFORTS TO REMOVE THE TANK CONTENTS AND TANKS 4
3.1 Second Attempt to Remove the Contents and Tanks 4
3.2 Soil Excavation and Sampling 5

4.0 SUMMARY OF FINDINGS 7

5.0 RECOMMENDATIONS 7

LIST OF FIGURES

FIGURE 1.0 Location of Stallion Range Center

FIGURE 2.0 Site Plan

FIGURE 3.0 Site Plan side View

FIGURE 4.0 Sample Location Plan

LISTS OF TABLES

TABLE 1.0
STORAGE TANK CONTENTS
COMPOSITE TCLP AND pH RESULTS 3
TABLE 2.0
SOIL SAMPLES TPH ANALYTICAL RESULTS 6

LISTS OF APPENDICES

APPENDIX A PHOTOGRAPHS

APPENDIX B CERTIFICATE OF ANALYSIS

APPENDIX C RECEIPTS FOR RECYCLED MATERIALS

1.0 INTRODUCTION

This report presents a description of actions taken during the draining of three above ground storage tanks and the removal of two of those storage tanks. These storage tanks were located approximately 1/4 mile North of the Stallion Ranger Center, White Sands Missile Range (WSMR) (See Figure 1.0). The work described was conducted in response to Work Assignment Order (WAO) 400-11 Revisions 4 and 5.

The three above ground storage tanks were used approximately 30 years ago during the paving of the Stallion Range Center roads. The storage tanks were labeled tank #1, tank #2, and tank #3 (Figure 2.0). Tanks #1 and #2 contained an asphalt emulsion, and tank #3 contained a thin watery asphalt primer substance which was observed to have a viscous asphalt like material floating on it. Tanks #1 and #2 were constructed of plate steel and tank #3 was constructed of aluminum. Each storage tank had a capacity of approximately 15,000 gallons, and dimensions of 26 feet in length by 9 feet in diameter.

2.0 PHASE I EFFORTS/PRELIMINARY INVESTIGATION

Efforts accomplished under Phase I included the following;

- Site visit by ASI, D&C Construction (selected subcontractor) and ES-E personnel on 23 September 1992;
- The collection of a composite sample of the storage tank contents to evaluate its suitability for recycling. The sample was analyzed for pH and Toxicity Characteristic Leaching Procedure (TCLP) which included RCRA metals , volatile organics, and semi-volatiles; and
- The preparation of a site specific Health and Safety Plan (HASP) for tank draining and removal activities.

2.1 Site Reconnaissance

On 23 September 1992, a site visit was made to the storage tanks located at Stallion Range Center by ASI, ES-E and the selected subcontractor. The storage tanks are located approximately 1/4 mile North of Stallion Range Center in an open semi-vegetated area. The site reconnaissance revealed that the tanks contained a total of approximately 15,000 gallons of an asphalt type substance. The storage tanks were not buried, but were placed on the side of a terraced hill where the soil on the north side of the tanks extends approximately halfway up the tank sides. The soil on the south side of the tanks covered approximately 1/8 of the tank sides. No piping or vent lines were observed to be associated with these tanks.

2.2 TCLP Sampling

On 15 April 1993, a single composite sample of the contents of all three tanks was collected. This sample was analyzed for TCLP, by U.S. EPA Method 1311 and for pH by U.S. EPA Method 9040. The TCLP analysis included the eight Resource Conservation Recovery Act (RCRA)

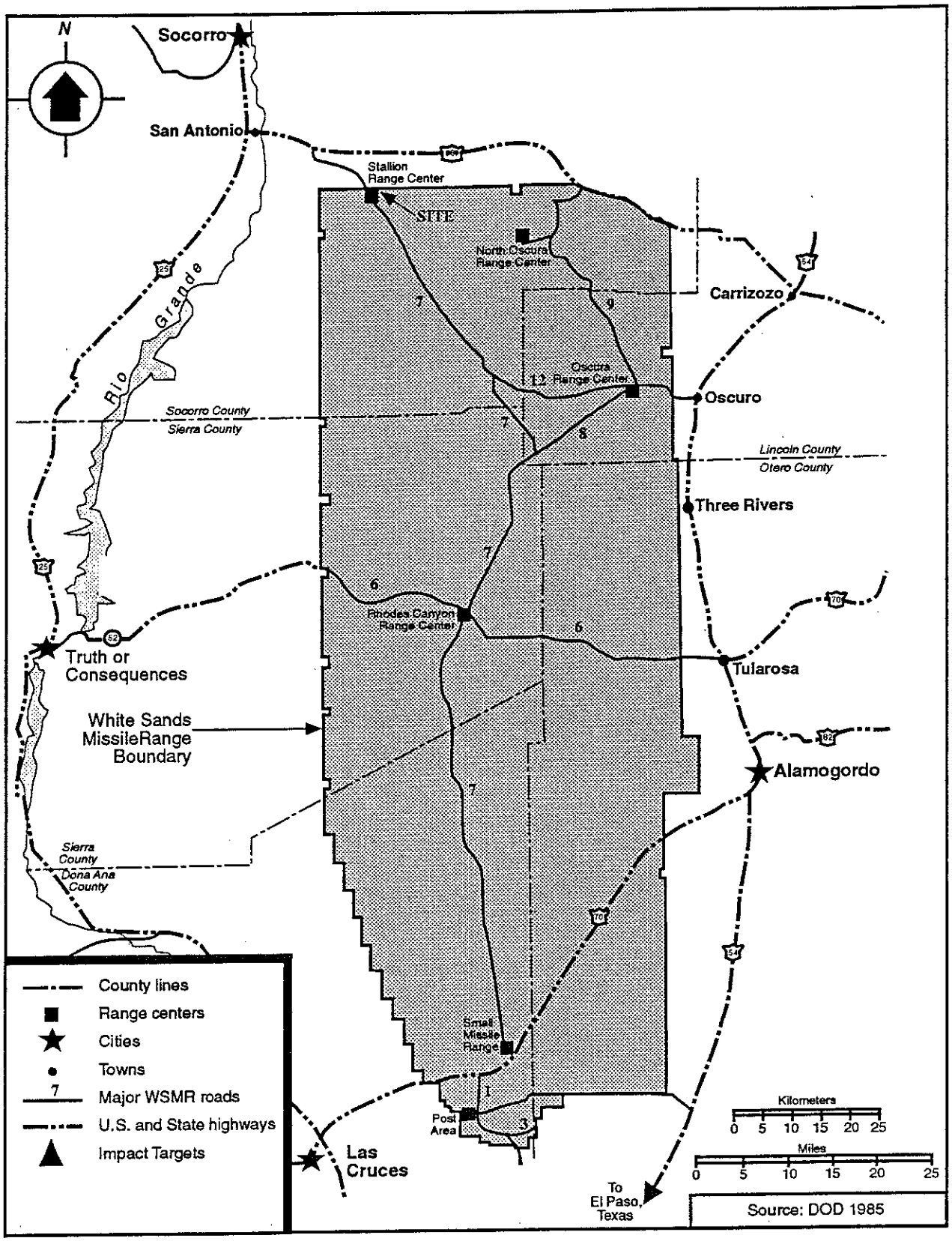


Figure 1.0 Location of Stallion Range Center

Metals, analyzed by U.S. EPA Method 6010, Organic Volatiles by U.S. EPA Method 8260, and Semi-Volatiles by U.S. EPA Method 8270. Only one value in the TCLP analysis was above detection limits, but below TCLP regulatory limits. The excedance of was barium at 0.12 milligrams per liter (mg/L) which was acceptable for recycling. Results of the ph analysis indicated a pH value of 8.8 standard units (S.U.), which was also acceptable for recycling. The recycler of the asphalt was the determining factor in the criteria for acceptance. The recycler used internal constraints on the analytical results. See Table 1.0 for complete TCLP and pH results.

TABLE 1.0
STORAGE TANK CONTENTS
COMPOSITE TCLP AND pH RESULTS
SAMPLE COLLECTED 04/15/93

PARAMETERS	RESULT	UNIT	DETECTION LIMIT	TCLP REGULATORY LIMITS
ARSENIC	ND	mg/L	0.05	5.0
BARIUM	0.12	mg/L	0.05	100
CADMIUM	ND	mg/L	0.05	1.0
CHROMIUM	ND	mg/L	0.05	5.0
LEAD	ND	mg/L	0.05	5.0
MERCURY	ND	mg/L	0.01	0.2
SELENIUM	ND	mg/L	0.05	1.0
SILVER	ND	mg/L	0.05	5.0
ORGANIC VOLATILES	ND	mg/L	*	*
SEMI-VOLATILES	ND	mg/L	*	*
pH	8.8	S.U.	N/A	N/A

NOTES:
1) ND=Not detected
2) mg/L=milligram per liter/parts per million
3) N/A Not applicable
4) S.U.=Standard unit
5) *=Listed as separate compounds
6) Metals analyzed by U.S. EPA Method 6010
7) Organic Volatiles analyzed by U.S, EPA Method 8260
8) Semi-volatiles analyzed by U.S. EPA Method 8270
9) ph analyzed by U.S. EPA Method 9040
10) TCLP extraction by U.S. EPA Method 1311

3.0 PHASE II EFFORTS TO REMOVE THE TANK CONTENTS AND TANKS

On 26 April 1993, an attempt to remove the three tanks and heat the contained asphalt was only partially successful. The method used to heat the asphalt material utilized a heat exchanger in which 180° Fahrenheit water was recirculated continually as the heat transfer fluid. After the asphalt had softened sufficiently, in tank #3 a mechanical pump was used to transfer the asphalt to a tanker truck. The tanker truck was then taken to the recycler. Heating of tank #3 began at approximately 12:30 pm on 26 April 1993, the tank contents were heated for 32 hours. Approximately 5,550 gallons of asphalt was successfully removed from tank #3. Approximately one foot of unpumpable asphalt was left in tank #3. An attempt at removing any of the contents of tanks #1 and #2 in the same manner was unsuccessful. Therefore due to the remaining asphalt in tank #1, #2, and #3 the tanks were left in place.

It was determined that the contents of tank #3 differed greatly from the contents of tanks #1 and #2. The contents of tank #3 was found to be an asphalt primer solution which had stratified in the tank. The watery fraction sank to the bottom and the unpumpable portion had floated to the top. Therefor it was impossible to get a probe through the floating faction to detect the stratification. When a probe was pushed through the top layer the probe became coated and the underlying layer was not detected.

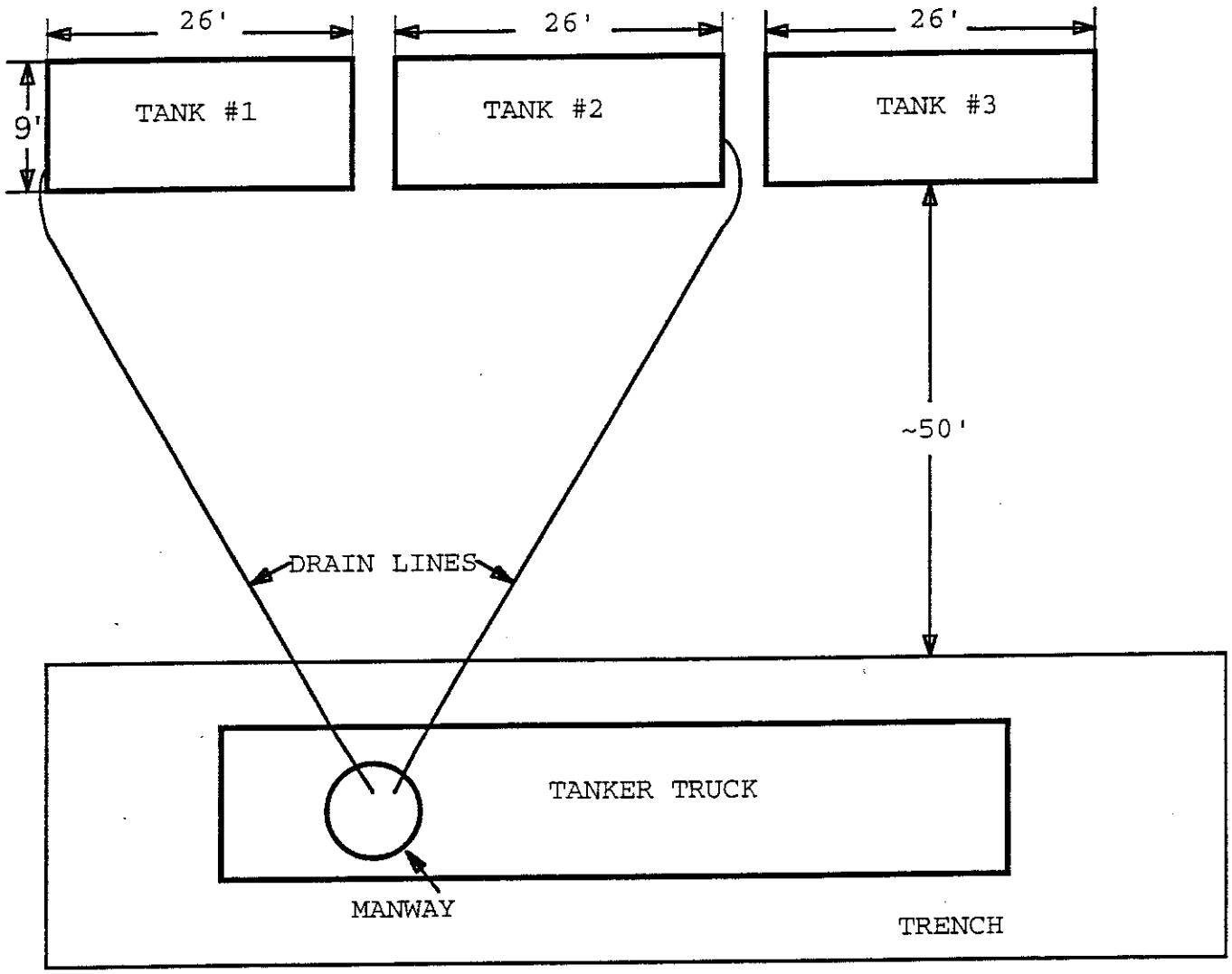
Tanks #1 and #2 contained a different type of asphalt. It was found that these tanks contained an asphalt emulsion. This substance did not stratify but was too viscous to pump even when heated with a 180° Fahrenheit water circulation system.

3.1 Second Attempt to Remove the Contents and Tanks

On 28 June 1993 a new experimental process was developed to remove the product from tanks #1 and #2. This method involved the placement of a tanker truck down hill of tanks #1 and #2, and tapping a 4-inch drain line into the bottom end of tanks #1 and #2 (Figures 2 and 3). These drain lines were then laid down gradient to the manway atop the tanker truck. Total elapsed time for gravity drainage of the asphalt from tanks #1 and #2 was 10 days for both tanks. At the point that normal flow had ceased, the tanks were tilted slightly on one end to allow the remaining product to flow to the tapped end to further aid in removing the product. Approximately 8,470 gallons of product was removed from tanks #1 and #2. The product was transported for recycling to Koch Materials Company located in Albuquerque, New Mexico. See Appendix C for confirmation letter.

After tanks #1 and #2 were probed and found to be empty, a backhoe was used to remove the soil from the north side of the tanks. A WSMR supplied crane was then used to lift the tanks for subsequent inspection and cleaning of the outside of the tanks. A visual inspection of the tank bottoms did not reveal any apparent perforations. The tank surfaces were cleaned of any loose debris for transport. The tanks were transported for recycling to Tom Black's Enterprises; a scrap recycler located in Dona Ana, New Mexico. the tanks will be cut up and melted down. Receipts for tanks #1 and #2 are also contained in Appendix C.

Inspection of the ground surface beneath the tanks revealed a large amount of a semi-solid



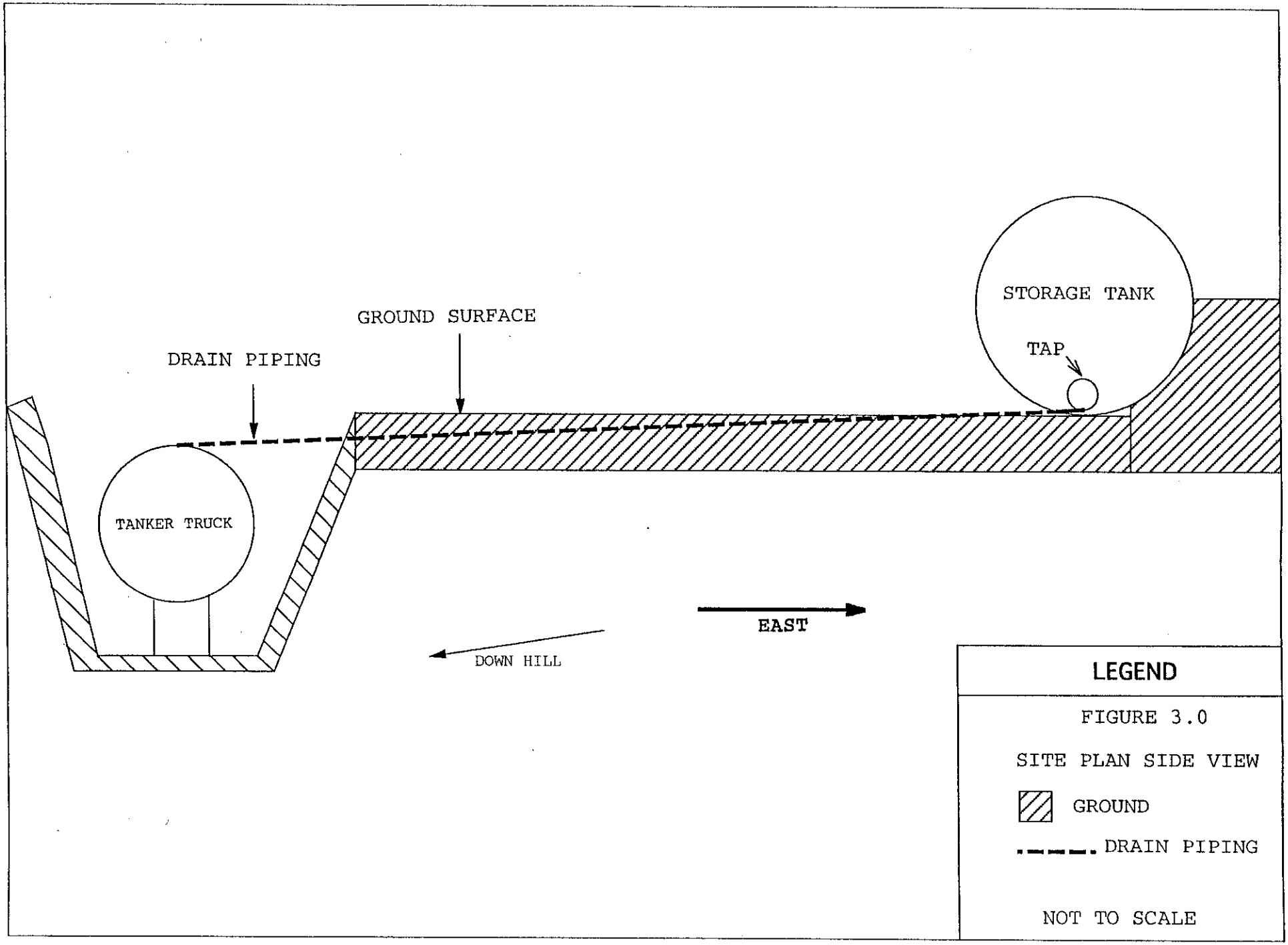
NORTH

LEGEND

FIGURE 2.0.

SITE PLAN

NOT TO SCALE


STORAGE TANK
TAP
GROUND SURFACE
DRAIN PIPING
TANKER TRUCK
EAST
DOWN HILL
LEGEND
FIGURE 3.0
SITE PLAN SIDE VIEW
GROUND
DRAIN PIPING
NOT TO SCALE

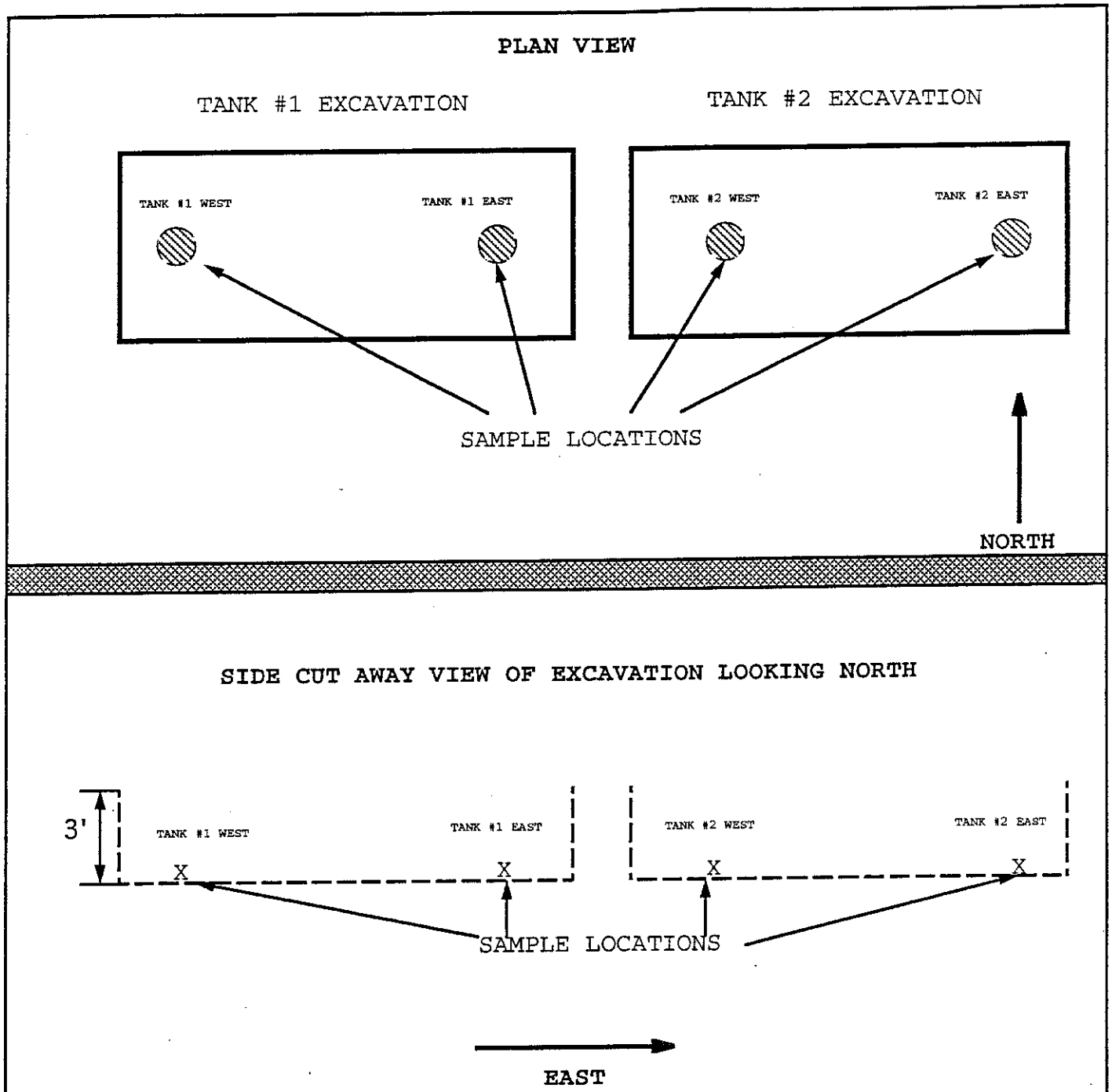
asphalt. During the construction of the trenches for the tanker truck and drain lines some asphalt was observed flowing from the excavated areas.

3.2 Soil Excavation and Sampling

Three feet of soil containing the semi-solid asphalt was excavated from beneath tanks #1 and #2 and placed on bermed visqueen. Although the remaining soil was not completely free of asphalt, soil samples were collected at the bottom of the excavation on July 8,1993 at an approximate depth of three feet below the ground surface, See Figure 4.0.

It was not possible to sample beneath tank #3 because it is still in place. Soil samples were collected using a pre-cleaned stainless steel scoop. Each soil was placed into a laboratory supplied, pre-labeled, one liter glass jar fitted with a teflon lined lid. The sample was immediately placed on ice. The stainless steel scoops were decontaminated between each sampling location. The decontamination procedure consisted of a Alconox and deionized water scrub followed by a triple deionized water rinse and subsequent air drying. A total of four soil samples were collected; one sample from beneath each end of each tank. These soil samples were shipped to Westech Laboratories located in El Paso, Texas under strict chain-of-custody protocols for analysis.

The soil samples were labeled Tank #1 West, Tank #1 East, Tank #2 West, and Tank #2 East. See Figure 4.0 for sample locations. The samples were analyzed for total petroleum hydrocarbons (TPH) by U.S. EPA Method 418.1. All TPH results were above detection limits with TPH values ranging from 61 parts per million (ppm) to 3800 ppm. See Table 2.0 for complete TPH results. The certificate of analytical results and chain-of-custody are contained in Appendix B.



LEGEND

FIGURE 4.0
SAMPLE LOCATION PLAN

=SAMPLE LOCATION

X=SAMPLE LOCATION

NOT TO SCALE

TABLE 2.0
SOIL SAMPLES TPH ANALYTICAL RESULTS
STALLION RANGE CENTER
SAMPLES COLLECTED 07/08/93

SAMPLE I.D.	PARAMETER	RESULT	UNIT	DETECTION LIMIT
TANK#1 WEST	TPH	280	mg/kg	10
TANK#1 EAST	TPH	61	mg/kg	10
TANK#2 WEST	TPH	3800	mg/kg	10
TANK#2 EAST	TPH	1700	mg/kg	10

NOTES:
1) TPH=Total Petroleum Hydrocarbons
2) mg/kg=milligram per kilogram

4.0 SUMMARY OF FINDINGS

1) Semi-solid asphalt was observed on the surface of the ground and seeped out from the subsurface along the trench walls when heated by the sun.

2) Tanks #1 and #2 were emptied of their asphalt contents and removed from the site for recycling.

3) Tank #3 had approximately 5,550 gallons of product removed, but still contains one foot of a hard asphalt-like substance in the bottom of the tank. This tank was left in place.

4) It is unknown where the product found in and on the soil originated from. Possible sources include past tank overflows, leakage from tank #3, or leakage from tanks #1 and #2 not visually detected.

5) All soil sample TPH results exceeded detection limits ranging from 61 ppm to 3800 ppm.

5.0 RECOMMENDATIONS

There is an unknown amount of asphalt that appears to be located in the subsurface soils, and approximately one foot of semi-solid asphalt in tank #3. Tank #3 can not be transported on state highways with any material remaining in the tank. ASI recommends that tank #3 be hauled to the Stallion landfill and disposed of properly. ASI also recommends that an area immediately below the tanks of approximately 100 feet in a North-South direction and 100 feet in an East-West direction and up to five feet deep be excavated. This excavated soil can be landfilled, or used as dust suppression on dirt roads within WSMR.

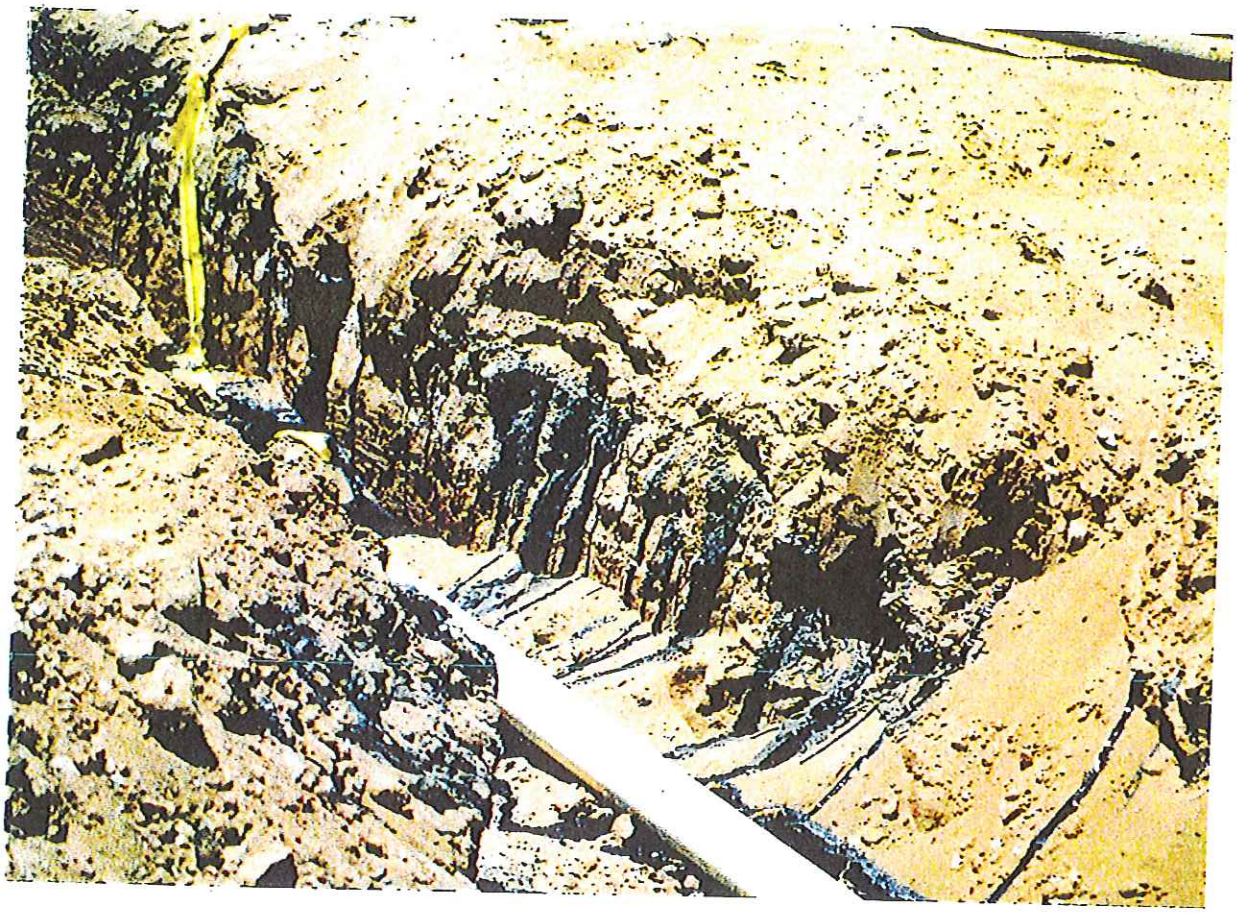
Tank #3 may be disposed of in a sanitary landfill due to the TCLP results reported above. Due to the TCLP results the asphalt in the soil may also be placed into the WSMR landfill. The asphalt was originally intended to be used for road paving, thus the asphalt in the soil can be used for dust suppression on dirt roads. This use would not deviate from the original purpose of the asphalt, and should be acceptable.

After the excavation has been completed confirmatory soil samples should be collected. The excavated area should be divided into 25 equal sample locations. Each sample to be collected should be analyzed for TPH by U.S. EPA Method 418.1 to verify that the soils with detectable TPH levels have been removed.

APPENDIX A
PHOTOGRAPHS

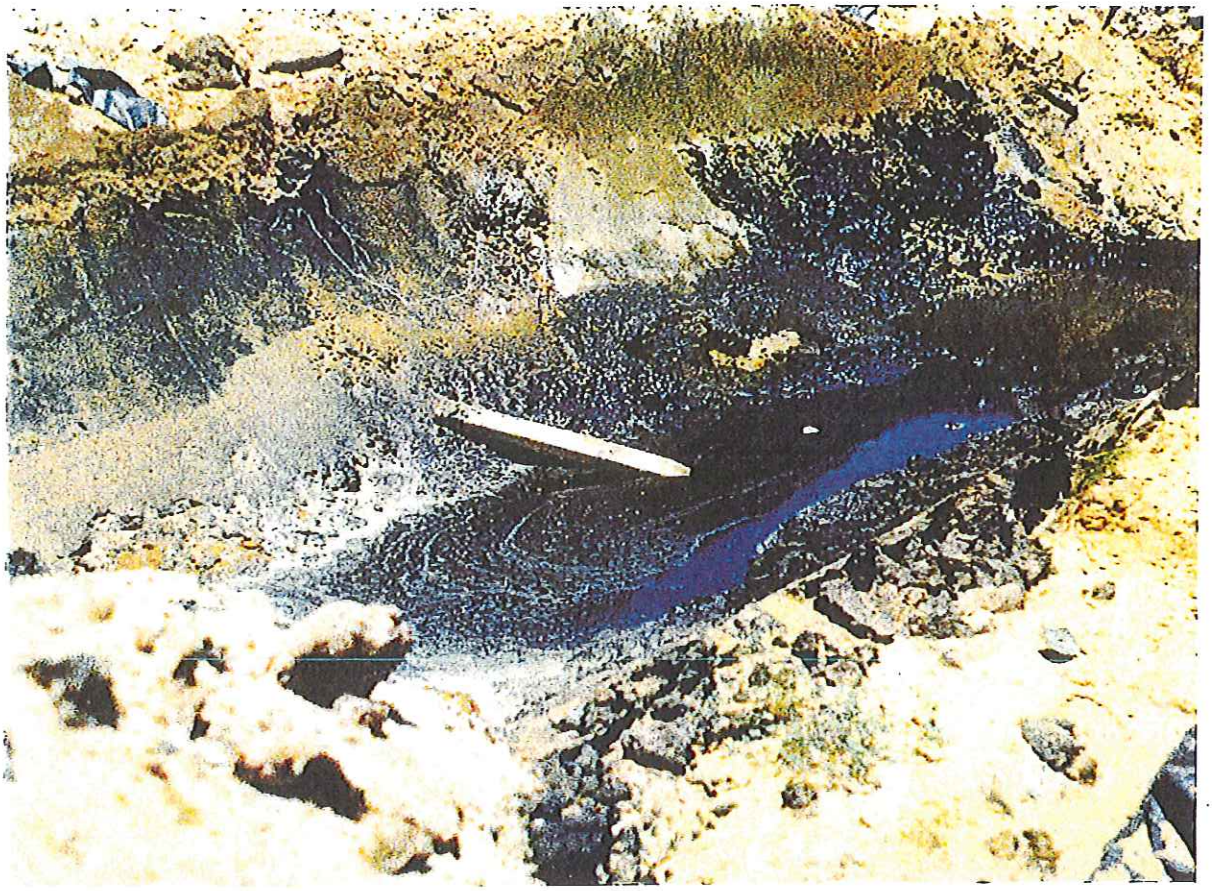
View looking North-northwest of tanks #1 and #2

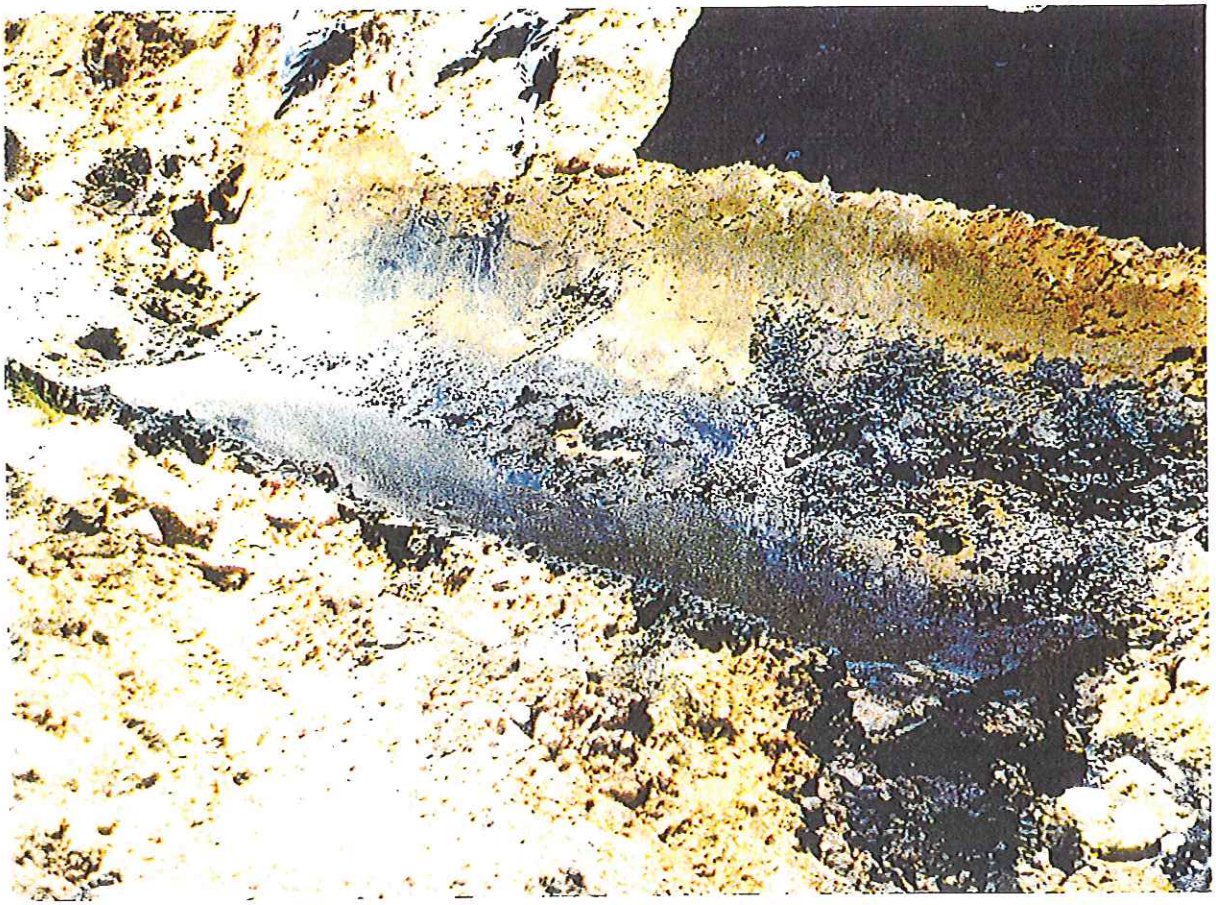
A view looking West of the tanker truck in the trench.



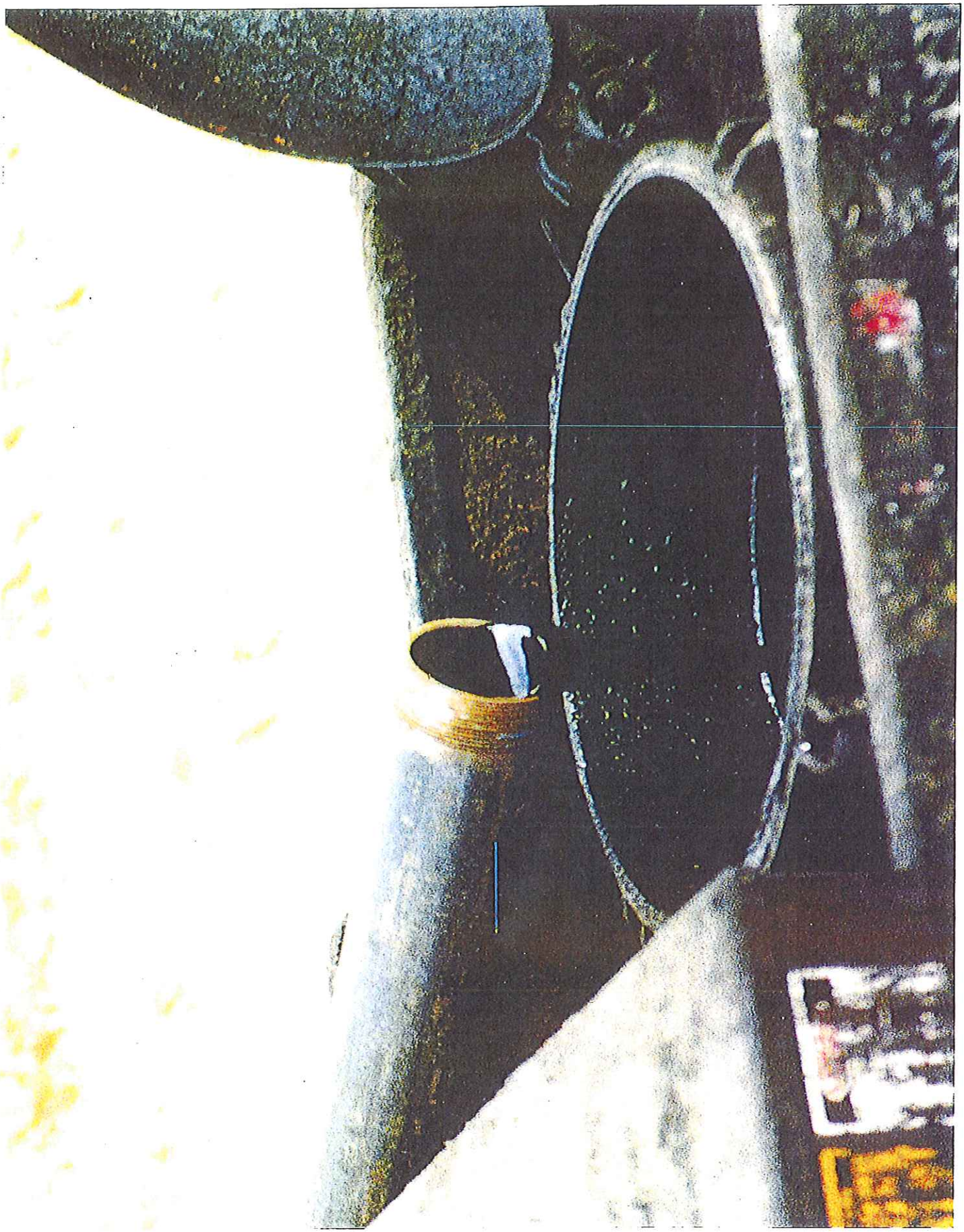
Top photo: asphalt seeping from subsurface soils in pipe trench. Bottom photo: close up of same trench with shovel for scale.

Asphalt flowing from the subsurface into the tanker trench. Note 12-inch ruler for scale.





Top photo: area below tank #1. Bottom photo: area below tank #2.



Asphalt flowing into the manway on top of the tanker truck.

View of the 4-inch tapping device, Note asphalt on ground is flowing from beneath the tank.

APPENDIX B
CERTIFICATE OF ANALYSIS
AND CHAIN-OF-CUSTODY FORMS

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6301215
INVOICE NO.: 62130297
REPORT DATE: 04-19-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank Composite
SAMPLE TYPE .....: Sludge
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: George Esqueda
SAMPLE SOURCE ...: Asphalt Tank

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003
SAMPLE DATE ...: 04-15-93
SUBMITTAL DATE : 04-16-93
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.05	mg/L	0.05	04-22-93
Barium (TCLP) .....:	0.12	mg/L	0.05	04-22-93
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	04-22-93
Chromium (TCLP) .....:	<0.05	mg/L	0.05	04-22-93
Lead (TCLP) .....:	<0.05	mg/L	0.05	04-22-93
Mercury (TCLP) .....:	<0.01	mg/L	0.01	04-23-93
Selenium (TCLP) .....:	<0.05	mg/L	0.05	04-22-93
Silver (TCLP) .....:	<0.05	mg/L	0.05	04-22-93

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6301215
INVOICE NO.: 62130297
REPORT DATE: 04-19-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank Composite
SAMPLE TYPE .....: Sludge
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: George Esqueda
SAMPLE SOURCE ...: Asphalt Tank
ANALYST .....: R.Peck

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003
SAMPLE DATE ...: 04-15-93
SUBMITTAL DATE : 04-16-93
EXTRACTION DATE: 04-16-93
ANALYSIS DATE .: 04-17-93

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<0.5	mg/L	0.5
Carbon tetrachloride	<0.5	mg/L	0.5
Chlorobenzene	<100.	mg/L	100.
Chloroform	<6.0	mg/L	6.0
1,2-Dichloroethane	<0.5	mg/L	0.5
1,1-Dichloroethylene	<0.7	mg/L	0.7
Methyl ethyl ketone	<200.	mg/L	200.
Tetrachloroethylene	<0.7	mg/L	0.7
Trichloroethylene	<0.5	mg/L	0.5
Vinyl Chloride	<0.2	mg/L	0.2

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6301215
INVOICE NO.: 62130297
REPORT DATE: 04-19-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank Composite
SAMPLE TYPE .....: Sludge
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: George Esqueda
SAMPLE SOURCE ...: Asphalt Tank
ANALYST .....: R.PECK

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003
SAMPLE DATE ...: 04-15-93
SUBMITTAL DATE : 04-16-93
EXTRACTION DATE: 04-16-93
ANALYSIS DATE .: 04-22-93

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 34-071593-2
REFERENCE NOTEBOOK : TPH #3
REFERENCE PAGE ....: 19

INSTRUMENT : IR-TPH
ANALYZED BY : B. Flynn
ANALYZED ON : 07-15-93

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result} - \text{Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result} - \text{Replicate Result}}{(\text{Sample Result} + \text{Replicate Result})/2} \times 100$$

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 E. Broadway Rd. • AZ 85040 • 602-437-1080 • fax 437-8706
Flagstaff • 2400 E. Huntington Dr. • AZ 86004 • 602-774-2312 • fax 774-6469
El Paso • 10737 Gateway West #100 • TX 79935 • 915-592-3591 • fax 592-3594

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS	
ASI	555 Telshor #310	
	Las Cruces NM 88001	
TELEPHONE 505 526 7229	PROJECT 40.11.R5	JOB/P.O. NO. 40.11.R5

• REFER TO FEE SCHEDULE FOR ANALYSES SELECTION •

SAMPLER (SIGNATURE): [signature]
SAMPLER (PLEASE PRINT): Kevin Sedlak

SAMPLE TYPE CODES: S – SOIL, O – OIL, T – TRAVEL BLANK, W – WATER, G – SLUDGE, F – FIELD BLANK, X – OTHER (SPECIFY)

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	NUMBER OF CONTAINERS	HOLD	REQUESTED ANALYSES: TPH 418.1	COMMENTS	LABORATORY IDENTIFICATION
Tank #1 West	7/3/95	800	Beneath Tanks		X	S	1		X		
Tank #1 East	↓	815	↓		X	S	1		X		
Tank #2 West		830			X	S	1		X		
Tank #2 East		900			X	S	1		X		

[signature] 7/24

RELINQUISHED BY (SIGNATURE)	PRINT NAME	DATE/TIME	RECEIVED BY (SIGNATURE)	PRINT NAME
[signature]	Kevin Sedlak	7/8/95		
		7/13/95	[signature]	

REMARKS: Sample [illegible] c/c
Submit [illegible] lines

SAMPLE PROCESS TURNAROUND TIME: ☑ 10 BUSINESS DAYS ☐ OTHER (SPECIFY) 5

623 (8/92) White - Testing Laboratory; Yellow - Department Job File; Pink - Client

APPENDIX C
RECEIPTS FOR RECYCLED MATERIALS

KOCH

KOCH MATERIALS COMPANY

April 30, 1993

Mr. Ron Davis
D & C Construction
Las Cruces, NM

Dear Ron:

This letter is to acknowledge the receipt of one (1) 5550 gallon truck load of asphalt material from the Stallion Sight on White Sands Missle Range. Groendyke Transport brought the load to our plant in Albuquerque on the morning of April 30.

The material was blended with 120/150 pen asphalt to be processed into emulsified asphalt.

Sincerely,

Dick Heintzelman

Dick Heintzelman
Regional Operations Manager

DH/jt

2825-G Broadbent Parkway, Northeast • Albuquerque, New Mexico 87107 • 505/345-9439
505/345-9487 • FAX

KOCH

KOCH MATERIALS COMPANY

July 13, 1993

Mr. Ron Davis
D & C CONSTRUCTION

FAX# 1-523-6076

Dear Ron:

This letter is to acknowledge the receipt of two (2) truck loads of asphalt material from the Stallion ~~Sight~~ SITE on White Sands Missle Range. Groendyke Transport brought the first load on morning of July 1st of 3980 gallons. Second load was received on morning of July 13th of 4040 gallons.

Material was blended with 180,000 gallons of(125 pen) virgin asphalt and then processed into emulsified asphalt.

Thanks for the inexpensive material and glad we could help.

Sincerely,

Dick Heintzelman

Regional Operations Manager

DH/jt

2825-G Broadbent Parkway, Northeast • Albuquerque, New Mexico 87107 • 505/345-9439
505/345-9467 • FAX 505/344-0181

PH. (505) 382-9008

TOM BLACK'S ENTERPRISES

AUTO SALVAGE & GARAGE & USED CARS

P.O. BOX 296
DONA ANA, NEW MEXICO 88032

WE GUARANTEE OUR PARTS TO BE IN GOOD WORKING CONDITION AND TO FIT - BUT WE CANNOT GUARANTEE THAT THE PARTS YOU PURCHASE WILL SOLVE YOUR PROBLEMS. NO CASH REFUNDS.

Customer's Order No. _____ Date 7/7, 19 93

Name D & C CONSTRUCTION

Address _____

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RET'D.	PAID OUT	

QUAN.	DESCRIPTION	PRICE	AMOUNT	
APPROX	12,000 TANK			
	PICKED FROM ABOVE			
	FOR RESALE ☐ SALES TAX			
	TOTAL			

OUR SALES POLICIES

NO REFUNDS ON DEPOSITS ON MERCHANDISE ORDERED OUT OF TOWN.

We do guarantee motors not to have cracked blocks, heads, bad crankshafts for 30 days from date of this invoice.

We do guarantee parts to be in good working condition when purchased.

Exchange Must be returned within 7 days for deposit refund.

We do not make refunds through no fault of this firm.

We do not guarantee labor on defective parts.

Our liability is limited to the purchase price of above items.

NO CASH REFUNDS — NO REFUNDS ON DEPOSITS AFTER 10 DAYS.

Thank You

SIGNED _____

PH. (505) 382-9008

TOM BLACK'S ENTERPRISES

AUTO SALVAGE & GARAGE & USED CARS

P.O. BOX 296
DONA ANA, NEW MEXICO 88032

WE GUARANTEE OUR PARTS TO BE IN GOOD WORKING CONDITION AND TO FIT - BUT WE CANNOT GUARANTEE THAT THE PARTS YOU PURCHASE WILL SOLVE YOUR PROBLEMS. NO CASH REFUNDS.

Customer's Order No. _____ Date 7-8-, 1993

Name DFC Construction

Address _____

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RET'D.	PAID OUT	Recvd

QUAN.	DESCRIPTION	PRICE	AMOUNT
	Received		
	12000 GAL TAR		
	THANK FOR Scale		
	FOR RESALE ☐	SALES TAX	
		TOTAL	

OUR SALES POLICIES

NO REFUNDS ON DEPOSITS ON MERCHANDISE ORDERED OUT OF TOWN.

We do guarantee motors not to have cracked blocks, heads, bad crankshafts for 30 days from date of this invoice.

We do guarantee parts to be in good working condition when purchased.

Exchange Must be returned within 7 days for deposit refund.

We do not make refunds through no fault of this firm.

We do not guarantee labor on defective parts.

Our liability is limited to the purchase price of above items.

NO CASH REFUNDS — NO REFUNDS ON DEPOSITS AFTER 10 DAYS.

Thank You

SIGNED _____

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6302059
INVOICE NO.: 62130486
REPORT DATE: 07-15-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank #2 West
SAMPLE TYPE .....: Soil
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: Kevin Sedlak
SAMPLE SOURCE ...: Benette Tanks
ANALYST .....: B. Flynn

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003-0000
SAMPLE DATE ...: 07-08-93
SUBMITTAL DATE : 07-08-93
EXTRACTION DATE: --
ANALYSIS DATE .: 07-15-93

REMARKS -

Q.C. on this sample does not meet normal criteria. This is probably due to the presence of unequally distributed asphalt-like clumps in the sample.

Modified 418.1 - Total Petroleum Fuel Hydrocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	3800.	mg/kg	10.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6301215
INVOICE NO.: 62130297
REPORT DATE: 04-19-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank Composite
SAMPLE TYPE .....: Sludge
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: George Esqueda
SAMPLE SOURCE ...: Asphalt Tank

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003
SAMPLE DATE ...: 04-15-93
SUBMITTAL DATE : 04-16-93
EXTRACTION DATE: --

Inorganic Non-Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
pH .....:	8.8	S.U.	N/A	04-16-93

(1) Copy to Client

Managing Director

Westech Laboratories Inc.

Phoenix • 3737 E. Broadway Rd. • AZ 85040 • (602) 437-1080 • fax 437-8706
Flagstaff • 2400 E. Huntington Dr. • AZ 86004 • (602) 774-8708 • fax 774-6469
El Paso • 10737 Gateway West #100 • TX 79935 • (915) 592-3591 • fax 592-3594

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS
ASI	555 Telshor Blvd Suite 310 Las Cruces NM 88001
TELEPHONE: 505 522 7229	PROJECT: 51.01
	JOB / P.O. NO.: 9962411003 ~~51.0~~

• REFER TO FEE SCHEDULE FOR ANALYSES SELECTION •

SAMPLER (SIGNATURE): [signature]

SAMPLER (PLEASE PRINT): Kevin Sedlak

SAMPLE TYPE CODES: S – SOIL, W – WATER, O – OIL, G – SLUDGE, T – TRAVEL BLANK, F – FIELD BLANK, X – OTHER

CLIENT SAMPLE IDENTIFICATION NUMBER	DATE	TIME	SAMPLE LOCATION	HOLD	COMPOSITE	GRAB	SAMPLE TYPE	NUMBER OF CONTAINERS	TCLP Full	PH 9040								COMMENTS	LABORATORY SAMPLE IDENTIFICATION NUMBER
Tank Composit	4/15/93	1300	Asphalt Tanks		X		G	1	X	X								Tar	6301215

RELINQUISHED BY (SIGNATURE)	RECEIVED BY (SIGNATURE)	DATE	TIME
[signature]	George Esqueda	4/16/93	8:20
George Esqueda	B. Thompson	4/16/93	1010

REMARKS: Please Fax Results ASAP upon it is available

RUSH

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6302057
INVOICE NO.: 62130486
REPORT DATE: 07-15-93
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank #1 West
SAMPLE TYPE .....: Soil
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: Kevin Sedlak
SAMPLE SOURCE ...: Benette Tanks
ANALYST .....: B. Flynn

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003-0000
SAMPLE DATE ...: 07-08-93
SUBMITTAL DATE : 07-08-93
EXTRACTION DATE: --
ANALYSIS DATE .: 07-15-93

REMARKS -

Q.C. on this run does not meet normal criteria. This is probably due to the presence of unequally distributed asphalt-like clumps in the sample.

Modified 418.1 - Total Petroleum Fuel Hydrocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	280.	mg/kg	10.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6302058
INVOICE NO.: 62130486
REPORT DATE: 07-15-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank #1 East
SAMPLE TYPE .....: Soil
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: Kevin Sedlak
SAMPLE SOURCE ...: Benette Tanks
ANALYST .....: B. Flynn

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003-0000
SAMPLE DATE ...: 07-08-93
SUBMITTAL DATE : 07-08-93
EXTRACTION DATE: --
ANALYSIS DATE .: 07-15-93

REMARKS -

Q.C. on this sample does not meet normal criteria. This is probably due to the presence of unequally distributed asphalt-like clumps in the sample.

Modified 418.1 - Total Petroleum Fuel Hydrocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	61.	mg/kg	10.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT Advanced Sciences Inc.
555 S. Telshor Ste 310
Las Cruces, NM 88001

SAMPLE NO. : 6302060
INVOICE NO.: 62130486
REPORT DATE: 07-15-93
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : Tank #2 East
SAMPLE TYPE .....: Soil
SAMPLED BY .....: Kevin Sedlak
SUBMITTED BY ....: Kevin Sedlak
SAMPLE SOURCE ...: Benette Tanks
ANALYST .....: B. Flynn

AUTHORIZED BY : Kevin Sedlak
CLIENT P.O. : 9967411003-0000
SAMPLE DATE ...: 07-08-93
SUBMITTAL DATE : 07-08-93
EXTRACTION DATE: --
ANALYSIS DATE .: 07-15-93

REMARKS -

Q.C. on this sample does not meet normal criteria. This is probably due to the presence of unequally distributed asphalt-like clumps in the sample.

Modified 418.1 - Total Petroleum Fuel Hydrocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	1700.	mg/kg	10.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 34-071593-2
REFERENCE NOTEBOOK : TPH #3
REFERENCE PAGE ....: 19

INSTRUMENT : IR-TPH
ANALYZED BY : B. Flynn
ANALYZED ON : 07-15-93

TEST DESCRIPTION ..: Total Petroleum Hydrocarbons
TEST METHOD .....: 418.1

SAMPLES IN THIS RUN: 6302057 6302058 6302059 6302060 6302077 6302078 6302079 6302080 6302083

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Total Petroleum Hydrocarbons	mg/L	200	180.	90.0
Total Petroleum Hydrocarbons	mg/L	200	180.	90.0

REPLICATES -

SAMPLE NUMBER	PARAMETER	UNIT	RESULT	REPLICATE	RPD%
6302058	Total Petroleum Hydrocarbons	mg/kg	61.	84.	31.7

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE AMOUNT	SAMPLE+SPIKE RESULT	%RECOVERY
6302058	Total Petroleum Hydrocarbons	mg/kg	61.	80.	130.	86.3

WESTECH
LABORATORIES, INC.
QUALITY ASSURANCE OFFICER

DATE 7-15-93

Appendix B-2
SWMUs 121 – 123: 1995 EPA Statement of Basis

WSMR Enviro Administrative Record
28800000369529
200-1H
N105-PER
1995

STATEMENT OF BASIS - FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

U. S. ARMY WHITE SANDS MISSILE RANGE NEW MEXICO

EPA ANNOUNCES STATEMENT OF BASIS/FINAL DETERMINATION AND RESPONSE TO COMMENTS SUMMARY

In this Statement of Basis, the U.S. Environmental Protection Agency (EPA) has made a final determination to approve the White Sands Missile Range (WSMR) Class III permit modification request to remove twenty-four (24) solid waste management units (SWMUs) from its Corrective Action permit (EPA Identification Number NM2750211235).

Facility Type: WSMR is a storage facility. It accumulates quantities of waste necessary to facilitate proper recovery, treatment, or disposal.

Contaminants: The facility operations generated spent solvents, paint strippers, waste paints, waste oils, waste hydraulic fluids, and waste fuel at concentrations below regulatory levels.

Media: The primary media impacted by a release from the SWMUs are soils.

Remedy: EPA has determined no further action is required at the listed SWMUs.

A. FACILITY DESCRIPTION

WSMR is located in the Tularosa Basin of south central New Mexico, about thirty (30) miles east of Las Cruces, New Mexico. The range covers an area of approximately 3200 square miles. WSMR is a government owned facility under the command of the U.S. Army Testing and Evaluation Command. WSMR was established in July 1945 as the White Sands Proving Ground. The property is used to test rocket, missile, and laser weapon systems. Wastes generated at the facility are mainly related to missile testing operation and associated support facilities, fire training, refueling facilities, equipment maintenance, and vehicle maintenance. Prior to the mid 1980's, hazardous wastes generated at the facility might have been disposed on-site in some of the SWMUs identified. Since then, hazardous wastes have been disposed off-site through the Defense Reutilization and Marketing Office.

200-1H
N105-PER
1995

B. HISTORY OF INVESTIGATION

WSMR was issued a Corrective Action Permit on October 24, 1989. As a result of the RCRA Facility Assessment and a Class I permit modification (1994) to add one additional SWMU to the permit 139 SWMUs and 26 AOCs were identified. Ninety-two (92) were included in the HSWA permit issued and required to go through the RCRA Facility Investigation process. These 93 SWMUs were divided into four (4) groups, Appendix I - 18 SWMUs, Appendix II - 18 SWMUs, Appendix III - 40 SWMUs, and Appendix IV - 17 SWMUs.

Under the corrective action process WSMR is required to determine the type, concentration and extent of hazardous waste released into the environment at all SWMU sites. Once the delineation is complete WSMR must recommend corrective action options to remove hazardous waste from the affected media. Corrective action options must be approved by EPA. The Phase I RFI investigation for Appendix I SWMUs was completed, the final report submitted to EPA for review, and approved in April 1992. The Phase I RFI final report field investigation for Appendices II, III, and IV SWMUs was approved in September 1993.

C. INVESTIGATION RESULTS

At the completion of Phase I of the RCRA Facility Investigation WSMR submitted a Class III Permit Modification listing thirty-eight (38) SWMUs to be removed from the corrective action process based on field and analytical results which indicate little or no contamination exist at these sites. EPA reviewed the RFI report and the Class III Permit Modification and has determined that twenty-four (24) of the thirty-eight (38) SWMUs require no further investigation and can be delisted or removed from WSMRs corrective action permit. The list of SWMUs identified for delisting from WSMRs corrective action permit is attached. The remaining SWMUs will be included in the Phase II investigation of the RFI process.

A copy of the permit, the Class III permit modification request, EPA's final determination/statement of basis, analytical data supporting EPAs final decision and supporting documents may be reviewed at:

Alamogordo Public Library
10th and Oregon Avenue
Alamogordo, NM Learning Resources Center

El Paso Community College
Transmountain Campus
9570 Gateway North
El Paso, TX

Branigan Memorial Library, Suite 200 E
Picacho, Las Crusas, NM

Public Affairs Office
White Sands Missile Range, NM

D. STABILIZATION MEASURES IMPLEMENTED

No stabilization measures are necessary.

E. EXPOSURE PATHWAYS

The only media for potential impacts to the environment is soil.

F. ENVIRONMENTAL JUSTICE INDEX

The minority population within 50 square miles of study area is less than one percent

New Mexico has a minority population that is 49 percent of the total population of the State.

Within 50 square miles of study area there are less than one percent minority econmocally stressed housholds (Note: Economically stressed is defined as households making less than $15,000 a year):

G. SELECTED REMEDY

EPA's determination for no further action is based on analytical and fieldwork results which show no or insignificant release(s) of hazardous waste into the environment. In addition EPA performed risk screening on SWMUs which had insignificant release(s) of hazardous waste into the environment.

Table I lists the highest concentrations of constituents detected at any SWMU during the investigation. The levels are compared against State and Federal concentration levels. Table I also lists residential risk based concentrations and proposed Federal action levels which the hazardous constituent concentrations are screened. Results indicate the releases have no impact on human health and the environment.

H. INNOVATIVE TECHNOLOGIES CONSIDERED

No innovative technologies are required under this determination.

I. PUBLIC PARTICIPATION

Public hearings were held by WSMR at three locations. The first hearing was held on March 22, 1994, in Conference Room D, Alamogordo Civic Center, 800 East 1st Street, Alamogordo, NM. Six people attended the meeting including local citizens, representatives from the WSMR and the Alamogordo Daily news.

Five questions were asked concerning the history of the paint dump site, cleanup criteria and disposal of ordinance. WSMR responded by saying abandoned sealed paint cans were found in a dump site. The cans were removed and the underlying soils were tested for hazardous waste. Analytical results from confirmation sampling showed no hazardous materials in the soils. WSMR representatives said specific bombing areas are designated for warhead impacts and any unexploded or exploded ordinance are recovered. The area was made pristine for further ordinance testing.

The second hearing was held March 23, 1994, in the National Guard Armory, 9100 Gateway North, El Paso, TX. No one attended the meeting.

The third hearing was held March 24, 1994, in the Curry Room, Corbett Center, New Mexico State University, Las Cruces, NM. Seven people attended including two representatives from WSMR.

Five questions were asked concerning what does the taxpayer gain by having this hearing and by removing the twenty-four (24) sites. In addition questions were asked about further investigations at WSMR, and how to expedite removing sites that pose no threat to the public. WSMR responded that by removing sites which pose no threat to the public, funding can be redirected to more practical useful purposes.

WSMR also said since it is regulated by a RCRA/HSWA, permit it is required to continuously monitor the facility for known and potential threats to human health and the environment. In addition, WSMR indicated that by good communication and providing adequate evidence to the regulatory community, the process of requesting and receiving approval to remove sites which pose no threat to human health and the environment can be streamlined.

I. NEXT STEPS

In addition to advertising the final decision EPA will notify the applicant and each person on the public comment mailing list of the final decision. The final decision will become effective thirty (30) days after service of notice of the decision unless a later date is specified or review is requested under regulation 40 CFR 124.19. If no comments are received to request a change in the final determination, the decision to approve the application will become effective immediately upon issuance.

CONTACT:

James A. Harris, Jr.
U.S. EPA, Region 6
New Mexico and
Federal Facilities Section (6PD-N)
1445 Ross Avenue
Dallas, TX 75202
(214) 665-8302

Discussion of SWMU's Requiring No Further Investigation Under the Class III Permit Modification Process.

APPENDIX I SWMU's:

SWMU # 18, Waste Accumulation Area: The unit is currently active. It is used to accumulate discarded rags and cans of petroleum, oils and lubricants (POLs) on an asphalt pavement underlain by a gravel base. No contamination was detected above regulatory or proposed action levels. Sample concentrations were screened against and exceeded residential risk concentration levels for total petroleum hydrocarbons (TPH). The samples are taken from a degraded asphalt drainage ditch. Typically TPH is a constituent of asphalt and POLs. Since no regulatory or proposed action levels were exceeded no further action is necessary under the corrective action process. WSMR has volunteered to work with the New Mexico Environment Department to determine if any improvements to the drainage ditch is required.

SWMU # 62, Former Sewer Treatment Plant: The unit is a buried Imhoff tank that may have contained toxic heavy metals, petroleum hydrocarbons and solvents. Operations at the tank were terminated in 1958. No contamination was detected via test borings and field geophysics tentatively identified the tank, no further investigation will be required. However WSMR should consult with the New Mexico Environment Department (NMED) RCRA program for removal of the tank.

SWMU # 79, STP Sludge Beds: The unit is currently active, and consist of a series of 11 parallel parallel beds used for drying sewage treatment plant sludge. The sludges are non-hazardous and should be disposed of at a non-hazardous waste facility.

APPENDIX II SWMU's:

SWMU #'s 33/34 HELSTF Flurspar Tanks: These tanks are drying beds for fluorspar sludge which is transported to the tanks from the Laser System Pressure Recovery System via a 4 inch poly-vinyl-chloride line. Periodically the dried fluorspar is removed for off-site disposal. The sludges are non-hazardous and should be disposed of at a non-hazardous waste facility.

SWMU # 61, Tula Peak Unexploded Ordinance Incinerator: The unit is inactive and contains partially melted cluster bomb units and military ordinance. Soil sampling results detected no waste source or release. No further action under the corrective action process is required. WSMR has volunteered to close the site under NMEDs Solid Waste program.

APPENDIX III SWMU's

SWMU # 90 Hazardous Waste Storage Evaporation Tank: The tank was used to to evaporate liquid waste from photograpic laboratory processes. The remaining sludge was removed, drummed, and disposed of in a hazardous waste landfill. The unit is undergoing closure through the NMED RCRA program. Consequently no further action under the corrective action process is required for this unit.

SWMU # 92A, 93, 95 - 100, Liquid Propellent Storage Area Pits (Evaporation - Neutralization Pits): These units are unlined and were designed to collect spilled material from respective storage areas via a drain and pipe. No hazardous constituents were detected above regulatory standards. Consequently no further action is required. WSMR has volunteered to upgrade the pits to prevent future discharges to the surface/subsurface and subsequent releases to ground water media.

SWMU #'s 121-123 Stallion Range Center Subgrade Tanks: The units are inactive subgrade steel tanks. No hazardous constituents were detected and the tanks are empty. The units are no longer required to follow the corrective action process. WSMR has volunteered to coordinate the removal of the tanks with NMED's RCRA program.

SWMU # 137, Paint Shop Sump: The unit is used as a drain or receptacle for wastewater discharging from the paint shop spray booth. The sump is intact. No releases were detected outside of the sump. Sludges and surface water from the sump exceed regulatory limits and should be disposed of as a hazardous waste.

APPENDIX IV SWMU's

SWMU #141 HELSTF Equipment Storage Area: The unit is utilized for storage of various materials for the High Energy Laser System Test Facility operation. No releases above regulatory levels were detected. No further action is required at this unit.

SWMU # 149, Maintenance Bldg Septic System (HELSTF); SWMU # 151, Trailer Area Septic System (HELSTF); SWMU # 152, Property and Supply Septic System (HELSTF): All the septic systems are active. Sampling results detected selenium levels exceeding MCL limits and State ground water protection standards. The RFI reference data indicate high concentrations of selenium are naturally occurring in the ground water regime at WSMR. EPA's determination is no further action is necessary.

SWMU # 153, Vandal Burial Site: The unit is an open field with partially buried and excavated missile and rocket parts and shell casings. No hazardous constituents were detected. Trace Bis(2-ethylhexyl)phthalate (commonly associated with poly vinyl chloride monitor well casing and plastics) below the Subpart S action level was detected. WSMR has volunteered to clear the site of any potential hazards posed by exposed and buried debris. No further investigation under the corrective action process will be required.

TABLE I
HAZARDOUS CONSTITUENT CONCENTRATION COMPARISIONS

Constituent	Highest Concentration (mg/kg)	New Mexico Land Disposal Standard	Federal Land Disposal Standard (mg/l)	Proposed Subpart S Action Level (mg/kg)	Residential Risk Based Concentrations, Soil Ingestion Level (mg/kg)[1]
Arsenic	22	D	5	80	23
Barium	1600	D	100	4000	5500
Lead	35	D	5	NA	400
Mercury	0.13	D	0.2	20	23
Cadmium	1.0	D	1	40	39
Chromium	63	D	5	NA	390
Beta-BHC (HCH (Beta)	0.0059	NA	*	4	.35
4,4'-DDE	.022	NA	*	2	1.9
4,4'DDT	.06	NA	*	2	2.7
Total Cyanide	1.8	D	590	2000	390
Methylene Chloride	0.023	NA	*	90	85
Silver	48	D	5	200	390
Total Petroleum Hydrocarbons: Benzo(a)pyrene	52	1000	NA	NA	.088

1 = From the EPA Region III Risk-Based Concentration Table, January - June 1995

D = Defer to Federal Standards

* = Land disposal of solid wastes with total halogenated organic compounds greater than or equal to 1,000 mg/kg is restricted per 40CFR, 268.32(e)(2)

TABLE 2-2
SOIL ANALYTICAL RESULTS
SWMU 18 (Page 1 of 5)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	18SB-1 @ 2 / Soil / 2 feet / 03/27/91	18SB-1 @ 5 / Soil / 5 feet / 03/27/91	18SB-1 @ 10 / Soil / 10 feet / 03/27/91	18SB-1 @ 15 / Soil / 15 feet / 03/27/91	18SB-1B @ 15 / Soil / 15 feet / 03/27/91
INORGANICS		**TC LEVEL[2]**					
Arsenic	mg/kg	100	1.2	ND	ND	0.72	ND
Barium	mg/kg	2000	46	54	35	34	34
Chromium	mg/kg	100	8.6	4.8	4.8	7.3	7.1
Lead	mg/kg	100	5.1	3.2	3.8	8.1	4.4
MISCELLANEOUS							
Total Petroleum Hydrocarbons	mg/kg	NA	52	15	ND	ND	ND

TABLE 2-2
SOIL ANALYTICAL RESULTS
SWMU 18 (Page 2 of 5)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	18SB-1 @ 20 Soil 20 feet 03/27/91	18SB-2 @ 2 Soil 2 feet 03/27/91	18SB-2B @ 2 Soil 2 feet 03/27/91	18SB-2 @ 5 Soil 5 feet 03/27/91	18SB-2 @ 10 Soil 10 feet 03/27/91
PESTICIDES AND PCB's		**TC LEVEL[2]**					
4, 4'-DDE	mg/kg	NA	ND	0.012	0.012	ND	ND
4, 4'-DDT	mg/kg	NA	ND	0.06	0.06	0.013	ND
INORGANICS							
Silver	mg/kg	100	ND	ND	1.5	ND	ND
Arsenic	mg/kg	100	ND	0.90	1.1	0.53	0.61
Barium	mg/kg	2000	20	48	45	33	65
Chromium	mg/kg	100	3.2	9.6	7.6	4.9	6.1
Lead	mg/kg	100	3.5	5.4	5.2	4.2	5.2
MISCELLANEOUS							
Total Petroleum Hydrocarbons	mg/kg	NA	ND	25	16	ND	ND

TABLE 2-2
SOIL ANALYTICAL RESULTS
SWMU 18 (Page 3 of 5)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	18SB-2 @ 15 / Soil / 15 feet / 03/27/91	18SB-2 @ 20 / Soil / 20 feet / 03/27/91	18SB-3 @ 2 / Soil / 2 feet / 03/27/91	18SB-3 @ 5 / Soil / 5 feet / 03/27/91	18SB-3 @ 10 / Soil / 10 feet / 03/27/91
INORGANICS		**TC LEVEL[2]**					
Silver	mg/kg	100	ND	ND	1.1	1.3	ND
Arsenic	mg/kg	100	ND	ND	0.92	ND	0.57
Barium	mg/kg	2000	57	29	69	16	82
Chromium	mg/kg	100	5.6	4.7	9.1	2.7	7.0
Lead	mg/kg	100	4.6	3.1	6.4	4.5	6.2
MISCELLANEOUS							
Total Petroleum Hydrocarbons	mg/kg	NA	ND	25	ND	15	24

TABLE 2-2
SOIL ANALYTICAL RESULTS
SWMU 18 (Page 4 of 5)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	18SB-3 @ 15 / Soil / 15 feet / 03/27/91	18SB-3 @ 20 / Soil / 20 feet / 03/27/91	18SB-4 @ 2 / Soil / 2 feet / 03/27/91	18SB-4 @ 5 / Soil / 5 feet / 03/27/91	18SB-4 @ 10 / Soil / 10 feet / 03/27/91
INORGANICS		**TC LEVEL[2]**					
Silver	mg/kg	100	ND	ND	ND	ND	17
Arsenic	mg/kg	100	0.51	ND	1.1	ND	ND
Barium	mg/kg	2000	24	36	110	19	22
Chromium	mg/kg	100	6.2	5.3	8.5	3.3	3.3
Lead	mg/kg	100	5.3	5.0	7.0	4.4	4.8
MISCELLANEOUS							
Total Petroleum Hydrocarbons	mg/kg	NA	15	21	ND	ND	ND

TABLE 2-2
SOIL ANALYTICAL RESULTS
SWMU 18 (Page 5 of 5)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	18SB-4 @ 15 Soil 15 feet 03/27/91	18SB-4 @ 20 Soil 20 feet 03/27/91	18BG-01 Soil 5 feet 04/15/91
INORGANICS		**TC LEVEL[2]**			
Silver	mg/kg	100	7.6	ND	ND
Arsenic	mg/kg	100	0.59	ND	0.81
Barium	mg/kg	2000	44	23	35
Chromium	mg/kg	100	4.3	4.7	4.8
Lead	mg/kg	100	5.4	3.9	3.4
MISCELLANEOUS					
Total Petroleum Hydrocarbons	mg/kg	NA	ND	ND	14

NOTES:
* = Sample identification nomenclature is described in 3.1.1 of Volume 1 of the RFI Report.
[1] Only samples with constituent concentrations above the detection limit are noted; concentrations exceeding TC levels are in bold type.
[2] From Toxicity Characteristic--Final Rule; values are in mg/L; values for inorganics are twenty times the TC leachate level -- see text for explanation.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NA = Not applicable.

TABLE 2-8
SOIL ANALYTICAL RESULTS
SWMU 62 (Page 1 of 3)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	62SB-1 @ 25 Soil 25 feet 03/30/91	62SB-1B @ 25 Soil 25 feet 03/30/91	62SB-1 @ 30 Soil 30 feet 03/30/91	62SB-1B @ 30 Soil 30 feet 03/30/91	62SB-1 @ 35 Soil 35 feet 03/30/91
INORGANICS		**TC LEVEL[2]**					
Barium	mg/kg	2000	13	16	15	30	25
Chromium	mg/kg	100	3.2	3.6	2.8	6.0	7.6
Lead	mg/kg	100	4.2	24	8.1	8.1	8.0

TABLE 2-8
SOIL ANALYTICAL RESULTS
SWMU 62 (Page 2 of 3)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	62SB-2 @ 30 / Soil / 30 feet / 03/30/91	62SB-2 @ 35 / Soil / 35 feet / 03/30/91	62SB-3 @ 25 / Soil / 25 feet / 03/30/91	62SB-3 @ 30 / Soil / 30 feet / 03/30/91	62SB-3 @ 35 / Soil / 35 feet / 03/30/91
INORGANICS		**TC LEVEL[2]**					
Arsenic	mg/kg	100	0.48	0.56	ND	0.72	0.63
Barium	mg/kg	2000	24	34	22	42	41
Chromium	mg/kg	100	4.7	8.3	2.9	5.8	8.7
Lead	mg/kg	100	5.3	6.1	4.2	8.0	11

TABLE 2-8
SOIL ANALYTICAL RESULTS
SWMU 62 (Page 3 of 3)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	62SB-4 @ 25 / Soil / 25 feet / 03/30/91	62SB-4 @ 30 / Soil / 30 feet / 03/30/91	62SB-4 @ 35 / Soil / 35 feet / 03/30/91	62BKG @ 30 / Soil / 30 feet / 03/28/91
INORGANICS		**TC LEVEL[2]**				
Arsenic	mg/kg	100	ND	0.51	ND	ND
Barium	mg/kg	2000	12	20	53	21
Chromium	mg/kg	100	4.3	4.9	8.6	3.4
Lead	mg/kg	100	4.1	7.5	6.1	4.4

NOTES:
* = Sample identification nomenclature is described in 3.1.1 of Volume 1 of the RFI Report.
(1) Only samples with constituent concentrations above the detection limit are noted; concentrations exceeding TC levels are in bold type.
(2) From Toxicity Characteristic--Final Rule; values are in mg/L; values for inorganics are twenty times the TC leachate level -- see text for explanation.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NA = Not applicable.

TABLE 2-5
SOIL ANALYTICAL RESULTS
SWMUs 33-34 (Page 1 of 4)
FLUORSPAR TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	33/34BGSO01	33/34BGSO02	33/34BGSSD	33/34B1SSO	33/34B1SO01
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	1 foot	2 feet	Surface	Surface	1 feet
		SAMPLE DATE:	04/4/92	04/4/92	04/4/92	04/7/92	04/7/92
pH	None		8.0	8.0	8.0	8.0	7.8
Fluoride	mg/kg		0.60	1.1	0.83	0.98	0.49

TABLE 2-5
SOIL ANALYTICAL RESULTS
SWMUs 33-34 (Page 2 of 4)
FLUORSPAR TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	33/34B1SO02	33/34B1SO02B	33/34B2SSO	33/34B2SO01
		SAMPLE TYPE:	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	2 feet	2 feet	Surface	1 feet
		SAMPLE DATE:	04/7/92	04/7/92	04/7/92	04/7/92
pH	None		7.9	8.0	7.9	8.1
Fluoride	mg/kg		0.35	0.37	0.65	0.51

TABLE 2-5
SOIL ANALYTICAL RESULTS
SWMUs 33-34 (Page 3 of 4)
FLUORSPAR TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	33/34B2SO01B	33/34B2SO02	33/34B3SSO	33/34B3SO01
		SAMPLE TYPE:	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	1 foot	2 feet	Surface	1 feet
		SAMPLE DATE:	04/7/92	04/7/92	04/7/92	04/7/92
pH	None		8.0	8.0	8.0	7.9
Fluoride	mg/kg		0.54	0.50	0.74	0.49

TABLE 2-5
SOIL ANALYTICAL RESULTS
SWMUs 33-34 (Page 4 of 4)
FLUORSPAR TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	33/34B3SO02	33/34B4SSO	33/34B4SO0	33/34B4SO02
		SAMPLE TYPE:	Soil	Soil	1	Soil
		SAMPLE DEPTH:	2 feet	Surface	Soil	2 feet
		SAMPLE DATE:	04/7/92	04/7/92	1 foot	04/7/92
					04/7/92	
pH	None		7.8	8.1	7.8	7.5
Fluoride	mg/kg		0.46	0.65	0.48	0.36

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.

TABLE 2-6
GROUNDWATER ANALYTICAL RESULTS
SWMUs 33-34 (Page 1 of 1)
FLUORSPAR TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	HMW-19GW
		UPGRADIENT/DOWNGRADIENT:	DG
		SAMPLE TYPE:	Water
		SAMPLE DATE:	05/30/92
INORGANICS			
Fluoride	mg/L		2.3

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.

TABLE 2-15
SOIL AND SLUDGE ANALYTICAL RESULTS
SWMU 79 (Page 1 of 2)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	79/80BKG11 Soil 1 foot 03/12/91	79B11 Soil 1 foot 03/12/91	79B12 Soil 2 feet 03/12/91	79B21 Soil 1 foot 03/12/91	79B22 Soil 2 feet 03/12/91	79B31 Soil 1 foot 03/12/91	79B32 Soil 2 feet 03/12/91
INORGANICS		**TC LEVEL[2]**							
Silver	mg/kg	100	26	ND	ND	ND	ND	ND	ND
Arsenic	mg/kg	100	0.85	ND	0.71	0.64	0.88	ND	1.0
Barium	mg/kg	2000	59	49	53	43	58	59	54
Chromium	mg/kg	100	63	6.2	7.0	7.4	9.8	7.4	8.5
Mercury	mg/kg	4	0.13	ND	ND	ND	ND	ND	ND
Lead	mg/kg	100	10	7.0	7.4	7.1	7.6	7.1	7.1
Total cyanide	mg/kg	NA	1.8	ND	ND	ND	ND	ND	ND

TABLE 2-15
SOIL AND SLUDGE ANALYTICAL RESULTS
SWMU 79 (Page 2 of 2)
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX I SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[1]	UNITS OF MEASURE	SAMPLE ID*: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	79B41 Soil 1 foot 03/12/91	79B42 Soil 2 feet 03/12/91	79C11 Sludge Surface 03/12/91	79CTR1 Sludge Surface 03/12/91	79C1 Sludge Surface 03/12/91	79C2 Sludge Surface 03/12/91	79C3 Sludge Surface 03/12/91
EXTRACTABLES		**TC LEVEL[2]**							
Phenanthrene	mg/kg	NA	ND	ND	ND	ND	ND	1.1	ND
Pyrene	mg/kg	NA	ND	ND	ND	ND	ND	1.1	ND
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	ND	ND	4.7	20	43	66	52
Di-n-octylphthalate	mg/kg	NA	ND	ND	ND	ND	ND	2.1	ND
INORGANICS									
Silver	mg/kg	100	ND	ND	68	93	88	76	74
Arsenic	mg/kg	100	0.92	0.99	ND	3.3	2.6	1.8	0.5
Barium	mg/kg	2000	55	50	160	610	740	860	610
Cadmium	mg/kg	20	ND	ND	2.1	15	16	13	9.4
Chromium	mg/kg	100	9.1	7.2	**110**	**460**	**430**	**530**	**320**
Mercury	mg/kg	4	ND	ND	3.1	**10**	**6.7**	**5.6**	**5.2**
Lead	mg/kg	100	6.9	9.0	60	**250**	**270**	**250**	**200**
Selenium	mg/kg	20	ND	ND	1.1	6.2	5.9	13	6.2
Total cyanide	mg/kg	NA	ND	ND	9.0	19	13	16	22

NOTES:
* = Sample identification nomenclature is described in 3.1.1 of Volume 1 of the RFI Report.
[1] Only samples with constituent concentrations above the detection limit are noted; concentrations exceeding TC levels are in bold type.
[2] From Toxicity Characteristic--Final Rule; values are in mg/L; values for inorganics are twenty times the TC leachate level -- see text for explanation.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NA = Not applicable.

TABLE 2-11
SOIL AND SLUDGE ANALYTICAL RESULTS
SWMU 90 (Page 1 of 3)
HWSF EVAPORATION TANK
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	90B1SO05 Soil 5 feet 05/19/92	90B1SO10 Soil 10 feet 05/19/92	90B1SO15 Soil 15 feet 05/19/92	90B1SO20 Soil 20 feet 05/19/92
INORGANICS						
Barium	mg/kg		39	150	ND	ND
Lead	mg/kg		ND	5.7	5.3	6.1

TABLE 2-11
SOIL AND SLUDGE ANALYTICAL RESULTS
SWMU 90 (Page 2 of 3)
HWSF EVAPORATION TANK
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	90SL1 Sludge Surface 04/20/92	90SL2 Sludge Surface 4/20/92	90SL3 Sludge Surface 04/20/92	90SL4 Sludge Surface 04/20/92	90SL5 Sludge Surface 04/20/92	90SL6 Sludge Surface 04/20/92
INORGANICS								
Barium	mg/kg		38	ND	38	51	40	32
Lead	mg/kg		9.2	ND	7.3	9.2	9.0	7.3
Silver	mg/kg		12	5.3	9.6	8.5	18	14
Total Cyanide	mg/kg		30	5.6	8.6	39	59	37
Sulfide	mg/kg		12	8.0	ND	8.0	24	12
TCLP INORGANICS								
Silver	mg/L		0.14	ND	0.13	0.11	0.24	0.33
PESTICIDES/PCBs								
PCB-1260	mg/kg		0.060	ND	0.062	0.063	0.16	0.11
MISCELLANEOUS								
pH	NA		7.5	8.1	7.1	8.0	7.9	7.8

TABLE 2-11
SOIL AND SLUDGE ANALYTICAL RESULTS
SWMU 90 (Page 3 of 3)
HWSF EVAPORATION TANK
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II & III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	90SL6B Sludge Surface 04/20/92	90SL7 Sludge Surface 04/20/92	90SL8 Sludge Surface 04/20/92	90SL9 Sludge Surface 04/20/92	90SL10 Sludge Surface 04/20/92
INORGANICS							
Barium	mg/kg		ND	62	49	37	48
Lead	mg/kg		ND	19	12	10	7.4
Silver	mg/kg		25	7.4	6.7	14	7.7
Total Cyanide	mg/kg		39	34	94	36	22
Sulfide	mg/kg		12	8.0	8.0	12	8.0
TCLP INORGANICS							
Silver	mg/L		0.42	0.11	0.12	0.34	0.17
PESTICIDES/PCBs							
PCB-1260	mg/kg		0.088	0.10	0.086	0.076	0.056
MISCELLANEOUS							
pH	NA		7.5	8.0	8.1	7.8	7.8

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NA = Not applicable.

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 1 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	92-100BKGSO05	92-100BKGSO15	92-100BKGSO25	92-100TB7
		SAMPLE TYPE:	Soil	Soil	Soil	Trip blank Water
		SAMPLE DEPTH:	5 feet	15 feet	25 feet	
		SAMPLE DATE:	03/10/92	03/10/92	03/10/92	02/03/92
VOLATILES						
Acetone[3]	mg/kg		1.2	2.0	0.15	ND
Methylene chloride[4]	mg/L		ND	ND	ND	0.012
INORGANICS						
Barium	mg/kg		72	120	730	NT
Lead	mg/kg		12	ND	11	NT
MISCELLANEOUS						
pH	NA		7.8	7.9	7.9	NT

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 2 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	92ASS0RS	92ASO02	92ASO05	92ASO10	92ASO15	92ASO20	92ASO25
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	Surface	2 feet	5 feet	10 feet	15 feet	20 feet	25 feet
		SAMPLE DATE:	03/17/92	03/09/92	03/09/92	03/09/92	03/09/92	03/09/92	03/09/92
VOLATILES									
Acetone[3]	mg/kg		0.16	ND	9.2	ND	0.12	0.67	ND
INORGANICS									
Arsenic	mg/kg		ND	ND	ND	12	ND	ND	ND
Barium	mg/kg		25	100	160	77	62	140	37
Cadmium	mg/kg		ND	ND	ND	ND	ND	0.65	ND
Lead	mg/kg		11	9.7	9.6	7.7	12	15	5.4
MISCELLANEOUS									
pH	NA		8.0	8.3	8.4	8.2	7.8	7.7	8.6

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 3 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	92AS030	92BSSORS	92BSO02	92BSO02B	92BSO05	92BSO10	92BSO15
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	30 feet	Surface	2 feet	2 feet	5 feet	10 feet	15 feet
		SAMPLE DATE:	03/09/92	03/17/92	03/04/92	03/04/92	03/04/92	03/04/92	03/04/92
VOLATILES									
Acetone[3]	mg/kg		0.19	0.24	0.48	0.35	ND	ND	0.11
Methylene chloride[4]	mg/kg		ND	0.023	ND	ND	ND	ND	ND
EXTRACTABLES									
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	0.94	0.82	0.38	0.52	ND
Di-n-butylphthalate	mg/kg		ND	0.56	ND	ND	ND	ND	ND
INORGANICS									
Arsenic	mg/kg		ND	ND	ND	ND	ND	ND	16
Barium	mg/kg		63	ND	51	160	240	430	170
Lead	mg/kg		ND	5.1	ND	ND	ND	ND	12
Silver	mg/kg		5.7	37	48	28	ND	ND	ND
MISCELLANEOUS									
pH	NA		8.7	5.6	5.1	4.5	8.2	6.5	7.5

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 4 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	92BS020	92BSO25	92BSO30	93SSORS	93SO02	93SO05	93SO10
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	20 feet	25 feet	30 feet	Surface	2 feet	5 feet	10 feet
		SAMPLE DATE:	03/09/92	03/04/92	03/04/92	03/17/92	03/09/92	03/09/92	03/09/92
VOLATILES									
Acetone[3]	mg/kg		ND	0.13	ND	0.11	5.8	0.96	0.83
EXTRACTABLES									
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	1.7	ND	ND	ND	ND
Di-n-butylphthalate	mg/kg		ND	ND	ND	0.37	ND	ND	ND
INORGANICS									
Arsenic	mg/kg		ND	11	ND	ND	ND	ND	ND
Barium	mg/kg		56	39	32	28	26	27	100
Lead	mg/kg		5.9	15	ND	12	8.2	8.5	9.4
MISCELLANEOUS									
pH	NA		8.0	8.0	8.1	7.6	8.0	8.6	8.5

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 5 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	93SO15	93SO20	93SO25	93SO30	94SSORS	94SO02RS	94SO05RS
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	15 feet	20 feet	25 feet	30 feet	Surface	2 feet	5 feet
		SAMPLE DATE:	03/09/92	03/10/92	03/09/92	03/09/92	03/17/92	03/11/92	03/1/92
VOLATILES									
Acetone[3]	mg/kg		0.38	ND	ND	0.12	ND	ND	21
EXTRACTABLES									
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	ND	ND	0.76[6]	ND	ND
Benzidine	mg/kg		ND	ND	ND	ND	3.3[6]	ND	ND
N-nitrosodimethylamine	mg/kg		ND	ND	ND	ND	0.67[6]	ND	ND
INORGANICS									
Arsenic	mg/kg		ND	ND	ND	13	ND	ND	ND
Barium	mg/kg		ND	ND	38	81	32	34	49
Cadmium	mg/kg		ND	ND	ND	ND	ND	0.65	ND
Lead	mg/kg		ND	ND	8.4	13	13	27	11
MISCELLANEOUS									
pH	NA		8.5	8.4	8.1	7.9	6.5	5.3	7.3

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 6 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	94SO10RS	94SO15RS	94SO15BRS	94SO20RS	94SO25RS	94SO30RS	95SSORS
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	10 feet	15 feet	15 feet	20 feet	25 feet	30 feet	Surface
		SAMPLE DATE:	03/11/92	03/11/92	03/11/92	03/11/92	03/11/92	03/11/92	03/17/92
VOLATILES									
Acetone[3]	mg/kg		1.7	0.45	0.28	0.11	19[4]	5.8	0.15
EXTRACTABLES									
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	ND	ND	0.35	ND	ND
Di-n-butylphthalate	mg/kg		ND	ND	ND	ND	ND	ND	0.70
INORGANICS									
Arsenic	mg/kg		ND	12	ND	ND	ND	ND	ND
Barium	mg/kg		92	130	99	75	70	69	22
Lead	mg/kg		11	19	9.9	ND	5.8	6.3	11
MISCELLANEOUS									
pH	NA		7.9	7.9	7.9	8.3	8.4	8.5	7.9

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 7 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	95SO02	95SO02B	95SO05	95SO10	95SO15	95SO20	95SO25
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	2 feet	2 feet	5 Feet	10 feet	15 feet	20 feet	25 feet
		SAMPLE DATE:	03/05/92	03/05/92	03/05/92	03/05/92	03/05/92	03/05/92	03/05/92
VOLATILES									
Acetone[3]	mg/kg		ND	ND	0.30	34[4]	10	0.42	10
2-Butanone	mg/kg		ND	ND	ND	0.13	ND	ND	ND
Ethanol[3]	mg/kg		ND	ND	ND	45	3.4	ND	ND
INORGANICS									
Arsenic	mg/kg		ND	ND	ND	22	18	ND	ND
Barium	mg/kg		19	29	30	110	44	100	87
Cadmium	mg/kg		ND	ND	ND	ND	0.55	ND	ND
Lead	mg/kg		6.5	9.4	11	21	16	15	8.4
MISCELLANEOUS									
pH	NA		7.2	7.8	4.1	6.9	7.6	7.7	7.8

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 8 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	95SO30	96SSORS	96SO02	96SO05	96SO10	96SO15	96SO20
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	30 feet	Surface	2 feet	5 feet	10 feet	15 feet	20 feet
		SAMPLE DATE:	03/05/92	03/17/92	03/10/92	03/10/92	03/10/92	03/10/92	03/10/92
VOLATILES									
Acetone[3]	mg/kg		0.65	ND	3.9	0.74	30	1.2	ND
EXTRACTABLES									
Bis(2-ethylhexyl)phthalate	mg/kg		ND	0.45	ND	ND	0.86	ND	ND
Di-n-butylphthalate	mg/kg		ND	0.51	ND	ND	ND	ND	ND
INORGANICS									
Arsenic	mg/kg		ND	ND	ND	ND	11	ND	ND
Barium	mg/kg		49	27	22	51	69	1,600	ND
Lead	mg/kg		5.4	14	9.5	11	13	ND	13
MISCELLANEOUS									
pH	NA		8.0	7.4	8.3	6.9	7.5	8.3	8.0

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 9 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	96SO25 Soil 25 feet 03/10/92	96SO30 Soil 30 feet 03/10/92	97SSORS Soil Surface 03/17/92	97SO02 Soil 2 feet 03/07/92	97SO02B Soil 2 feet 03/07/92	97SO05 Soil 5 feet 03/07/92	97SO10 Soil 10 feet 03/07/92
VOLATILES									
Acetone[3]	mg/kg		ND	0.26	ND	0.99	0.79	0.10	0.76
INORGANICS									
Arsenic	mg/kg		22	ND	ND	ND	ND	ND	ND
Barium	mg/kg		110	170	24	27	25	41	270
Cadmium	mg/kg		ND	1.0	ND	ND	ND	ND	ND
Lead	mg/kg		18	10	6.9	7.2	8.1	11	11
MISCELLANEOUS									
pH	NA		7.8	7.7	7.6	8.3	8.2	5.3	8.0

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 10 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	97SO15	97SO20	97SO25	97S030	98SSORS	98SO02	98SO02B
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	15 feet	20 feet	25 feet	30 feet	Surface	2 feet	2 feet
		SAMPLE DATE:	03/07/92	03/07/92	03/07/92	03/07/92	03/17/92	03/05/92	03/05/92
VOLATILES									
Acetone[3]	mg/kg		ND	ND	0.45	0.34	ND	ND	ND
EXTRACTABLES									
bis(2-ethylhexyl)phthalate	mg/kg		0.91	ND	0.43	ND	ND	ND	ND
INORGANICS									
Barium	mg/kg		130	ND	52	29	23	ND	20
Lead	mg/kg		10	ND	8.0	ND	8.8	6.4	7.5
MISCELLANEOUS									
pH	NA		8.6	8.6	8.0	8.9	7.8	8.2	8.2

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 11 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	98SO05	98SO10	98SO15	98SO20	98SO25	98SO30	99SSORS
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	5 feet	10 feet	15 feet	20 feet	25 feet	30 feet	Surface
		SAMPLE DATE:	03/05/92	03/05/92	03/05/92	03/05/92	03/05/92	03/05/92	03/17/92
VOLATILES									
Acetone[3]	mg/kg		ND	2.8	0.13	0.57	0.19	0.32	ND
INORGANICS									
Barium	mg/kg		65	300	64	65	58	120	ND
Lead	mg/kg		7.0	7.1	ND	10	6.6	6.6	6.8
MISCELLANEOUS									
pH	NA		8.0	7.6	7.8	8.5	8.1	7.6	9.3

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 12 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	99SO2RS Soil 2 feet 03/11/92	99SO02BRS Soil 2 feet 03/11/92	99SO05RS Soil 5 feet 03/11/92	99SO10RS Soil 10 feet 03/11/92	99SO15RS Soil 15 feet 03/11/92	99SO20RS Soil 20 feet 03/11/92	99SO25RS Soil 25 feet 03/11/92
VOLATILES									
Acetone[3]	mg/kg		0.21	ND	ND	ND	0.15	ND	ND
INORGANICS									
Barium	mg/kg		ND	ND	44	ND	150	31	29
Lead	mg/kg		ND	ND	35	ND	23	8.6	6.3
MISCELLANEOUS									
pH	NA		5.6	5.7	6.5	6.6	6.9	7.3	7.5

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 13 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	99SO30RS	100SSORS	100SO02	100SO02B	100SO05	100SO10
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	30 feet	Surface	2 feet	2 feet	5 feet	10 feet
		SAMPLE DATE:	03/11/92	03/17/92	03/07/92	03/07/92	03/07/92	03/07/92
VOLATILES								
Acetone[3]	mg/kg		ND	ND	0.21	ND	11	ND
EXTRACTABLES								
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	ND	ND	3.4	1.2
INORGANICS								
Barium	mg/kg		57	29	23	22	110	56
Lead	mg/kg		6.4	15	7.1	5.8	ND	7.6
MISCELLANEOUS								
pH	NA		7.7	7.9	8.0	7.8	8.3	8.9

TABLE 2-12
SOIL ANALYTICAL RESULTS
SWMUs 92-100 (Page 14 of 14)
LPSA EVAPORATION/NEUTRALIZATION PITS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	100SO15 Soil 15 feet 03/07/92	100SO20 Soil 20 feet 03/07/92	100SO25 Soil 25 feet 03/07/92	100SO30 Soil 30 feet 03/07/92
VOLATILES						
Acetone[3]	mg/kg		ND	ND	~1.9	510
INORGANICS						
Arsenic	mg/kg		ND	ND	ND	16
Barium	mg/kg		47	27	60	210
Lead	mg/kg		6.9	7.4	6.5	22
MISCELLANEOUS						
pH	NA		8.6	8.4	8.3	8.0

NOTES:
(1) Sample identification nomenclature is described in Section 3.1.1 of this report.
(2) Only samples with constituent concentrations above the detection limit are noted.
(3) This compound was introduced to the sample during collection.
(4) Probable laboratory contaminant.
(5) This compound was possibly introduced during sampling.
(6) Sample was reprepped outside of holding time to achieve this value.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NA = Not applicable.
NT = Not tested.

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 1 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121BGSO00 Soil Surface 02/11/92	121BG1SO02 Soil 2 feet 02/11/92	121BG1SO02B Soil 2 feet 02/11/92	121BGSO05 Soil 5 feet 02/11/92	121BGSO10 Soil 10 feet 02/11/92	121B1SO00 Soil Surface 02/11/92
VOLATILES								
Acetone[3]	mg/kg		ND	2.7[4]	1.6[4]	0.13	ND	ND
INORGANICS								
Barium	mg/kg		58	63	76	59	110	85
Sulfide	mg/kg		ND	12	ND	8.0	ND	24
PESTICIDES/PCBs								
Beta-BHC	mg/kg		ND	0.0059	ND	ND	ND	ND
4,4'-DDE	mg/kg		ND	0.022	ND	ND	ND	ND
4,4'-DDT	mg/kg		ND	0.056	ND	ND	ND	ND

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 2 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B1SO02 Soil 2 feet 02/11/92	121B1SO05 Soil 5 feet 02/11/92	121B1SO10 Soil 10 feet 02/11/92	121B2SO00 Soil Surface 02/11/92	121B2SO02 Soil 2 feet 02/11/92	121B2SO05 Soil 5 feet 02/11/92
VOLATILES								
Acetone[3]	mg/kg		ND	2.2	ND	1.9[4]	24[4]	1.6
INORGANICS								
Barium	mg/kg		72	64	47	79	100	89
Lead	mg/kg		7.3	ND	ND	ND	ND	ND
EXTRACTABLES								
Bis(2-ethylhexyl)phthalate	mg/kg		2.7	ND	0.71	ND	ND	ND

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 3 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B2SO10 Soil 10 feet 02/11/92	121B3SO00 Soil Surface 02/12/92	121B3SO02 Soil 2 feet 02/12/92	121B3SO05 Soil 5 feet 02/12/92	121B3SO05B Soil 5 feet 02/12/92	121B3SO10 Soil 10 feet 02/12/92
VOLATILES								
Acetone[3]	mg/kg		0.20[4]	ND	1.2[5]	4.4[6]	1.4	0.12
INORGANICS								
Barium	mg/kg		57	120	110	63	83	30
Lead	mg/kg		4.6	7.1	8.3	5.7	7.6	ND
Sulfide	mg/kg		8.0	ND	ND	ND	ND	ND
Total Cyanide	mg/kg		ND	ND	0.2	ND	ND	ND
EXTRACTABLES								
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	ND	1.0	ND	ND

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 4 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B4SO00 Soil Surface 02/12/92	121B4SO02 Soil 2 feet 02/11/92	121B4SO05 Soil 5 feet 02/12/92	121B4SO10 Soil 10 feet 02/12/92	121B5SO00 Soil Surface 02/12/92	121B5SO02 Soil 2 feet 02/12/92
VOLATILES								
Acetone[3]	mg/kg		3.9[4]	2.7[4]	1.6[4]	2.7[4]	1.2[4]	6.8[4*]
INORGANICS								
Barium	mg/kg		130	68	69	170	80	110
Lead	mg/kg		5.1	ND	6.9	ND	7.0	7.4
PESTICIDES/PCBs								
4,4'-DDE	mg/kg		ND	0.062	ND	ND	ND	ND
4,4'-DDT	mg/kg		ND	0.066	ND	ND	ND	ND
EXTRACTABLES								
Bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	0.33	ND	ND	ND

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 5 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B5SO05 Soil 5 feet 02/12/92	121B5SO10 Soil 10 feet 02/12/92	121B6SO00 Soil Surface 02/12/92	121B6SO02 Soil 2 feet 02/12/92	121B6SO02RS Soil 2 feet 03/08/92
VOLATILES							
Acetone[3]	mg/kg		0.67[4]	0.26[4]	1.7[4]	3.8[4]	0.12
INORGANICS							
Barium	mg/kg		52	140	68	ND	NT
Lead	mg/kg		ND	ND	6.7	ND	NT
Total Cyanide	mg/kg		ND	2.2	ND	ND	NT

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 6 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B6SO05 Soil 5 feet 02/12/92	121B6SO05B Soil 5 feet 02/12/92	121B6SO10 Soil 10 feet 02/12/92	121B6SO10RS Soil 10 feet 02/12/92	121B7SO00 Soil Surface 02/12/92
VOLATILES							
Acetone[3]	mg/kg		0.17[5]	2.8[5]	2.5[5]	0.16	0.48[5]
INORGANICS							
Barium	mg/kg		110	140	70	NT	82
Lead	mg/kg		ND	ND	ND	NT	5.6

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 7 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B7SO02 Soil 2 feet 02/12/92	121B7SO05 Soil 5 feet 02/12/92	121B7SO10 Soil 10 feet 02/12/92	121B8SO00 Soil Surface 02/12/92
VOLATILES						
Acetone[3]	mg/kg		0.26[4]	ND	ND	7.0[4]
EXTRACTABLES						
Di-n-butylphthalate	mg/kg		ND	ND	ND	0.36
INORGANICS						
Barium	mg/kg		41	240	67	70
Lead	mg/kg		ND	ND	ND	5.6

TABLE 2-13
SOIL ANALYTICAL RESULTS
SWMUs 121-123 (Page 8 of 8)
STALLION RANGE CENTER SUBGRADE TANKS
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	121B8SO02 Soil 2 feet 02/11/92	121B8SO05 Soil 5 feet 02/11/92	121B8SO10 Soil 10 feet 02/11/92	121B8SO10B Soil 10 feet 2/12/92
VOLATILES						
Acetone[3]	mg/kg		2.7[4]	4.6[4]	.10[5]	0.03[4]
EXTRACTABLES						
Di-n-butylphthalate	mg/kg		ND	0.44	0.37	0.57
INORGANICS						
Barium	mg/kg		60	31	57	92

NOTES:
(1) Sample identification nomenclature is described in Section 3.1.1 of this report.
(2) Only samples with constituent concentrations above the detection limit are noted.
(3) This compound was introduced to the sample during collection.
(4) Sample was reprepped outside of holding time to achieve this value. Sample flagged with (*) is also estimated.
(5) Sample was analyzed outside of holding times.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NT = Not tested

TABLE 2-16
SLUDGE AND SOIL ANALYTICAL RESULTS
SWMU 137 (Page 1 of 2)
PAINT SHOP SUMP
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	137SL1	137B1SO05	137B1SO10	137B2SO05
		SAMPLE TYPE:	Sludge	Soil	Soil	Soil
		SAMPLE DEPTH:	Surface	5 feet	10 feet	5 feet
		SAMPLE DATE:	04/02/92	04/03/92	04/03/92	04/06/92
EXTRACTABLES						
Di-n-butylphthalate	mg/kg		0.96	0.90	0.89	1.1
Butylbenzylphthalate	mg/kg		0.98	ND	ND	ND
Bis(2-ethylhexyl)phthalate	mg/kg		18	ND	ND	0.4
INORGANICS						
Barium	mg/kg		180	49	33	42
Lead	mg/kg		2000	12	8.9	9.2
Mercury	mg/kg		2.1	ND	ND	ND
TCLP INORGANICS						
Barium	mg/L		1.7	NT	NT	NT
Lead	mg/L		0.49	NT	NT	NT

TABLE 2-16
SLUDGE AND SOIL ANALYTICAL RESULTS
SWMU 137 (Page 2 of 2)
PAINT SHOP SUMP
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	137B2SO05B Soil 5 feet 04/06/92	137B2SO10 Soil 10 feet 04/06/92
EXTRACTABLES				
Di-n-butylphthalate	mg/kg		0.86	ND
INORGANICS				
Barium	mg/kg		57	62
Lead	mg/kg		10	12

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.
NT = Not tested

TABLE 2-8
SURFACE SOIL ANALYTICAL RESULTS
SWMU 61 (Page 1 of 1)
TULA PEAK UXO INCINERATOR
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: / SAMPLE TYPE: / SAMPLE DEPTH: / SAMPLE DATE:	61SO3 / Soil / Surface / 02/20/92
EXTRACTABLES			
Butylbenzylphthalate	mg/kg		0.44

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.

TABLE 2-17
SURFACE WATER ANALYTICAL RESULTS
SWMU 137 (Page 1 of 1)
PAINT SHOP SUMP
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX II AND III SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	137SW1 Water Surface 04/02/92
INORGANICS			
Barium	mg/L		0.21
Lead	mg/L		0.16

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.

TABLE 2-19
SOIL ANALYTICAL RESULTS
SWMU 141 (Page 1 of 3)
EQUIPMENT STORAGE AREA
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	141BG1SO02	141B1SO03	141B1SO03B	141B3SO03
		SAMPLE TYPE:	Soil	Soil	Soil	Soil
		SAMPLE DEPTH:	2 feet	3 feet	3 feet	3 feet
		SAMPLE DATE:	04/30/92	04/30/92	04/30/92	04/30/92
INORGANICS						
Arsenic-Furnace	mg/kg		0.54	1.1	0.81	0.65

TABLE 2-19
SOIL ANALYTICAL RESULTS
SWMU 141 (Page 2 of 3)
EQUIPMENT STORAGE AREA
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	141B4SO03 Soil 3 feet 04/30/92	141B7SO03 Soil 3 feet 05/01/92	141B8SO03 Soil 3 feet 05/01/92	141B9SO03 Soil 3 feet 05/01/92
INORGANICS						
Arsenic-Furnace	mg/kg		1.7	1.7	1.7	1.9
Barium	mg/kg		120	96	92	140
VOLATILES						
Acetone[3]	mg/kg		ND	0.72	0.19	0.42
EXTRACTABLES						
bis(2-ethylhexyl)phthalate	mg/kg		ND	ND	0.40	ND

TABLE 2-19
SOIL ANALYTICAL RESULTS
SWMU 141 (Page 3 of 3)
EQUIPMENT STORAGE AREA
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	141B12SO03	141B13SO04	141B14SO07
		SAMPLE TYPE:	Soil	Soil	Soil
		SAMPLE DEPTH:	3 feet	4 feet	7 feet
		SAMPLE DATE:	05/01/92	05/01/92	05/01/92
INORGANICS					
Arsenic-Furnace	mg/kg		1.8	0.75	0.96
VOLATILES					
Acetone[3]	mg/kg		0.19	0.17	ND

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
[3] This compound was introduced to the sample during collection.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.

TABLE 2-37
SOIL ANALYTICAL RESULTS
SWMU 153 (Page 1 of 3)
VANDAL BURIAL SITE
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	153B1SO05 Soil 5 feet 02/20/92	153B1SO10 Soil 10 feet 02/20/92	153B1SO15 Soil 15 feet 02/20/92	153B1SO20 Soil 20 feet 02/20/92
EXTRACTABLES						
Bis(2-ethylhexyl)phthalate	mg/kg		0.37	ND	ND	0.35
INORGANICS						
Barium	mg/kg		44	50	42	41
Lead	mg/kg		11	11	12	10

TABLE 2-32
GROUNDWATER ANALYTICAL RESULTS
SWMU 149 (Page 1 of 1)
MAINTENANCE BUILDING SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	HMW-14GW	HMW-17GW
		UPGRADIENT/DOWNGRADIENT:	UG	NA[3]
		SAMPLE TYPE:	Water	Water
		SAMPLE DATE:	05/31/91	05/31/91
INORGANICS				
Selenium-Furnace	mg/L		0.33	0.020

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
[3] Well is screened in an isolated unit so groundwater gradient is unknown.

TABLE 2-31
SOIL ANALYTICAL RESULTS
SWMU 149 (Page 1 of 2)
MAINTENANCE BUILDING SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	149BGSO02 Soil 2 feet 04/6/92	HMW17SO05 Soil 5 feet 05/12/92	HMW17SO15 Soil 15 feet 05/12/92	HMW17SO20 Soil 20 feet 05/12/92
INORGANICS						
Arsenic-Furnace	mg/kg		0.60	0.78	1.4	2.7
Barium	mg/kg		ND	ND	77	400
Lead	mg/kg		ND	ND	ND	7.1
VOLATILES						
Acetone[3]	mg/kg		ND	0.37	ND	ND

TABLE 2-31
SOIL ANALYTICAL RESULTS
SWMU 149 (Page 2 of 2)
MAINTENANCE BUILDING SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	HMW17SO20B Soil 20 feet 05/12/92	HMW17SO25 Soil 25 feet 05/12/92	HMW17SO30 Soil 30 feet 05/12/92
INORGANICS					
Arsenic-Furnace	mg/kg		2.0	0.92	2.6
Barium	mg/kg		120	66	ND
Lead	mg/kg		5.6	8.2	9.9

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
[3] This compound was introduced to the sample during collection.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.

TABLE 2-34
SOIL ANALYTICAL RESULTS
SWMU 151 (Page 1 of 2)
TRAILER AREA SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	151BGSO02 Soil 2 feet 04/06/92	151B1SO05 Soil 5 feet 05/13/92	151B1SO10 Soil 10 feet 05/13/92
INORGANICS					
Arsenic - Furnace	mg/kg		0.62	0.94	ND
VOLATILES					
Acetone[3]	mg/kg		ND	ND	1.2

TABLE 2-34
SOIL ANALYTICAL RESULTS
SWMU 151 (Page 2 of 2)
TRAILER AREA SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	151B1SO15B Soil 15 feet 05/13/92	151B1SO20 Soil 20 feet 05/13/92	151B1SO25 Soil 25 feet 05/13/92	151B1SO30 Soil 30 feet 05/13/92
INORGANICS						
Arsenic - Furnace	mg/kg		1.2	2.0	3.2	5.4
Barium	mg/kg		97	93	34	93
Lead	mg/kg		ND	7.0	6.4	5.1

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
[3] This compound was introduced to the sample during collection.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.

TABLE 2-35
SOIL ANALYTICAL RESULTS
SWMU 152 (Page 1 of 1)
PROPERTY AND SUPPLY BUILDING SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	152B1SO10 Soil 10 feet 05/13/92	152B1SO15 Soil 15 feet 05/13/92	152B1SO20 Soil 20 feet 05/13/92	152B1SO25 Soil 25 feet 05/13/92	152B1SO30 Soil 30 feet 05/13/92
INORGANICS							
Arsenic - Furnace	mg/kg		ND	0.80	0.77	7.4	4.1
Barium	mg/kg		ND	99	60	89	76
Cadmium	mg/kg		ND	ND	ND	ND	0.47
Lead	mg/kg		ND	ND	ND	8.6	7.6
VOLATILES							
Acetone[3]	mg/kg		3.9[4]	ND	ND	ND	ND

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
[3] This compound was introduced to the sample during collection.
[4] Sample was reprepped outside of holding time to achieve this value.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.

TABLE 2-36
GROUNDWATER ANALYTICAL RESULTS
SWMU 152 (Page 1 of 1)
PROPERTY AND SUPPLY BUILDING SEPTIC SYSTEM
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	HMW12GW	HMW12GWB
		UPGRADIENT/DOWNGRADIENT:	DG	DG
		SAMPLE TYPE:	Water	Water
		SAMPLE DATE:	6/01/92	6/01/92
INORGANICS				
Selenium - Furnace	mg/L		0.30	0.33

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.

TABLE 2-37
SOIL ANALYTICAL RESULTS
SWMU 153 (Page 2 of 3)
VANDAL BURIAL SITE
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]: SAMPLE TYPE: SAMPLE DEPTH: SAMPLE DATE:	153B1SO20B Soil 20 feet 02/20/92	153B2SO05 Soil 5 feet 02/20/92	153B2SO10 Soil 10 feet 02/20/92	153B2SO15 Soil 15 feet 02/20/92
VOLATILES						
Acetone[3]	mg/kg		0.15	ND	0.23	ND
INORGANICS						
Barium	mg/kg		29	33	27	29
Lead	mg/kg		10	13	6.9	8.0

TABLE 2-37
SOIL ANALYTICAL RESULTS
SWMU 153 (Page 3 of 3)
VANDAL BURIAL SITE
RCRA FACILITY INVESTIGATION (RFI)
APPENDIX IV SITES
WHITE SANDS MISSILE RANGE, NEW MEXICO

CONSTITUENT[2]	UNITS OF MEASURE	SAMPLE ID[1]:	153B2SO20
		SAMPLE TYPE:	Soil
		SAMPLE DEPTH:	20 feet
		SAMPLE DATE:	02/20/92
INORGANICS			
Barium	mg/kg		32
Lead	mg/kg		7.7

NOTES:
[1] Sample identification nomenclature is described in Section 3.1.1 of this report.
[2] Only samples with constituent concentrations above the detection limit are noted.
[3] This compound was introduced to the sample during collection.
ND = Non-detect. Detection limit values are noted in laboratory reports, Appendix G.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Public Affairs Office
U. S. Army White Sands Missile Range
White Sands Missile Range, N. M. 88002-5048

RE: U.S. Army White Sands Missile Range
White Sands Missile Range, New Mexico
EPA I.D. No. NM2750211235

Dear Sir/Madam:

Enclosed is a copy of the Statement of Basis/Final Decision and Response to Comments Summary for the U. S. Army White Sands Missile Range. Please make the enclosed document available to the public for thirty days from receipt of this notice.

Thank you for your assistance in this matter. If anyone has any questions regarding the notice, please have them call me at 214/665-8302.

Sincerely,

James A. Harris, Jr.

James A. Harris, Jr.
RCRA Facility Manager/Geologist
New México and Federal
Facilities Section (6PD-N)

Enclosures

Per James Harris, Region VI EPA 7/7/97
Class III Mod was finalized 12/31/95 NMED
gained authority 1/1/96

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

Received: 7/ 6/00 9:11; 2146657263 -> NRES BLDG 163;
JUL-06-2000 10:21 EPA REGION 6

WSMR Environment & Safety Tech Lib
2 8800 00019367 3

DEPARTMENT OF THE ARMY

U.S. ARMY WHITE SANDS MISSILE RANGE
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-

12 OCT 1993

REPLY TO ATTENTION OF

Office of the Commanding General

Mr. William K. Honker, Chief
RCRA Permits Branch (6H-P)
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202

Dear Mr. Honker:

In response to your letter, dated September 3, 1993, and guidance from follow-on discussions between our staffs, White Sands Missile Range (WSMR) formally requests a Class III Permit Modification for all Solid Waste Management Unit (SWMU) sites, which do not require further investigative action. The 25 SWMU sites for which this request is being made are listed below.

a. Removal of the following 24 SWMU sites listed in the current WSMR Permit from further investigative actions:

SWMU Name	SWMU No.	Appendices
Waste Accumulation Area	18	I
HELSTF Flurspar Tanks	33 & 34	II
Tula Peak UXO Incinerator	61	II
Former Sewage Treatment Plant (STP)	62	I
STP Sludge Beds	79	I
Hazardous Waste Storage Evap. Tank	90	III
Liquid Propellant Storage Area Pits	92A/B-100	III
Stallion Center Subgrade Tanks	121 - 123	III
Paint Shop Sump	137	III
HELSTF Equipment Storage Area	141	IV
Maint. Bldg. Septic System (HELSTF)	149	IV
Vandal Burial Site	153	IV

b. Addition of the Temperature Test Facility (TTF) Methlyene Chloride Spill site into the WSMR Part B Permit, as SWMU site #101, Appendix III in Module VIII, Task IX. WSMR previously notified EPA of this potential SWMU site via letter, dated June 2, 1993.

A significant amount of data has been collected and evaluated by WSMR regarding the TTF site. The results indicate that soil contamination is migrating downward and will likely impact groundwater in the near future. If the TTF site is approved for addition to our Permit, WSMR further requests that it be considered for expedited investigation and remediation activities to avoid probable groundwater contamination at this site.

We believe this Permit Modification is necessary to accurately present the current status of the overall SWMU cleanup process at WSMR. Your staff's assistance regarding our request for a Class III Permit Modification is appreciated. Please contact Mr. Hector Magallanes, Environmental Services Division, at (505) 678-2073, should you or your staff have any questions regarding this request.

Sincerely,

Richard W. Wharton
Brigadier General, U.S. Army
Commanding General

STEWS-ES-E (200-1a) 05 OCT 1993

MEMORANDUM FOR RECORD

SUBJECT: Request for a Class III Permit Modification to the WSMR Part B Permit Regarding Investigation of WSMR Solid Waste Management Unit (SWMU) Sites

1. Purpose: To obtain the Commanding General's approval of the letter to the Environmental Protection Agency (EPA) concerning the subject request (Tab A).

2. Background and Discussion:

a. On 3 Sep 93, WSMR received a letter from the EPA which stated SWMU #92B will require no further investigation activities along with 23 others already identified by EPA (Tab B). The EPA letter also emphasized that WSMR should submit a formal request for a Class III Modification to our Permit prior to taking action on these sites.

b. In the subject modification request, WSMR meets EPA'S requirements but also asks for the inclusion of the Temperature Test Facility (TTF) Methylene Chloride Spill Site, as SWMU #101, into the Permit. The addition of the TTF site as a SWMU will qualify WSMR for Defense Environmental Restoration Account (DERA) funds to finalize the investigation and implement remediation of the TTF site.

3. Point of Contact: The POC for this action is Mr. Hector Magallanes, ES-E, 678-2073.

4. Recommendation. That the Commanding General sign the letter at Tab A.

OFFICIAL SIGNED BY

2 Encls
as

THOMAS A. LADD
Director, Environment and Safety

ES-E Record

?

CONCURRENCES		
ORG.	SIGNATURE	DATE
ESE	[illegible]	9/27/93

Appendix B-3
SWMUs 121 – 123: 2000 EPA Letter Validating the Statement of Basis

WSMR Environment & Safety Tech Lib
2 8800 00019365 7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

April 28, 2000

Mr. Thomas A. Ladd, Director
Environment and Safety Directorate
Department of the Army
U. S. Army White Sands Missile Range
White Sands Missile Range, New Mexico 88002-5048

Dear Mr. Ladd,

On March 27, 2000 the Environmental Protection Agency (EPA) received a request for confirmation that the Class III Permit Modification issued by EPA to White Sands Missile Range in December 1995 removed twenty-four (24) solid waste management units (SWMUs) from the Hazardous and Solid Waste Amendments (HSWA) portion of WSMRs Resource Conservation and Recovery Act (RCRA) Permit.

The notice of decision removing the twenty-four (24) SWMUs from WSMRs HSWA permit was issued on November 29, 1995 and EPA was authorized to implement HSWA at that time. The New Mexico Environment Department (NMED) was authorized to implement HSWA on January 1, 1996. Referencing the Statement of Basis - Final Decision "The final decision will become effective thirty (30) days after service of notice of the decision unless a later date is specified or review is requested under regulation 40 CFR 124.19. If no comments are received to request a change in the final determination, the decision to approve the application will become effective immediately upon issuance." The decision became effective December 29, 1995.

Consequently, the Statement of Basis - Final Decision issued by EPA removed all twenty-four (24) SWMUs from WSMRs HSWA Permit. This action does not preclude NMED from initiating Class III Permit Modification procedures to reinstate the twenty-four (24) SWMUs back into WSMRs HSWA permit should cause exist to do so.

Rec'd
11 MAY 2000
ES

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

If you have any questions or require further assistance regarding EPAs 1995 Class III Permit Modification removing twenty-four (24) SWMUs from WSMRs HSWA permit please contact James Harris of my staff at (214) 665-8302.

Sincerely,

David Neleigh

David Neleigh, Chief
New Mexico and
Federal Facilities Section
(6PD-N)

cc: Jim Bearzi, NMED, HRMB
Phillip Solano, NMED, HRMB

Appendix C-1
SWMU 163: 1994 Trench Sampling Report

COMMISSARY LANDFILL TRENCH SAMPLING

AT

WHITE SANDS MISSILE RANGE
NEW MEXICO

U.S. ARMY

24 October 1994

WSMR Environment and Safety Technical Library
2 8800 00001 3384

WORK ASSIGNMENT ORDER (WAO)
NUMBER 600-11

COMMISSARY LANDFILL TRENCH SAMPLING

AT

WHITE SANDS MISSILE RANGE

CONTRACT DAAD07-90-C-0018
WORK ASSIGNMENT ORDER 600-11

24 October 1994

Submitted to:

U. S. Army
White Sands Missile Range
Director of Contracting
Services Contracting Branch
White Sands Missile Range, New Mexico 88002-5201

Submitted By:

Advanced Sciences, Inc.
555 S Telshor Blvd., Suite 310
Las Cruces, New Mexico 88011

TABLE OF CONTENTS

Section *Page*

1.0 INTRODUCTION 1

2.0 COMMISSARY LANDFILL TRENCH (CLT) SAMPLING 1

3.0 ANALYTICAL RESULTS 6

4.0 CONCLUSIONS AND RECOMMENDATIONS 8

LIST OF APPENDICES

Appendix

APPENDIX A INITIAL WSMR SAMPLING RESULTS
APPENDIX B EPA LETTER DATED 1/13/93
APPENDIX C RCRA SUBPART S PROPOSED REGULATIONS
APPENDIX D EPA REGULATORY GUIDANCE ON LEAD DATED 7/14/94
APPENDIX E HEALTH AND SAFETY PLAN
APPENDIX F ANALYTICAL RESULTS AND CHAIN OF CUSTODY

LIST OF PHOTOS

Photo *Page*

Photo 1. Removal of Landfill Material from Trench 4
Photo 2. Placement of Landfill Material in Roll Off Bins 5

LIST OF TABLES

Table *Page*

TABLE 1. ANALYTICAL RESULTS, ABOVE DETECTION LIMITS, FOR CLT SAMPLING AND REGULATORY ACTION/SCREENING LEVELS 7

LIST OF FIGURES

Figure *Page*

Figure 1. Site of new Commissary 2
Figure 2. Commissary Landfill Trench sampling locations 3

COMMISSARY LANDFILL TRENCH SAMPLING

1.0 INTRODUCTION

During construction activities in early August, 1994, at the site of a new Commissary on WSMR, an old, inactive landfill was discovered (Figure 1). This old landfill was estimated to have been in operation between the periods of 1946 to 1952. The exact contents or quantities of materials placed in this landfill are unknown. Initial sampling results of the landfill material, reported by WSMR (Appendix A), indicated concentrations of lead to be above the RCRA Regulatory limit. In accordance with the Resource Conservation and Recovery Act (RCRA) Regulations, this landfill is to be treated as a Solid Waste Management Unit (SWMU)(Appendix B).

The landfill material is in a location that is needed for completion of the Commissary. The landfill material is non homogeneous and cannot be compacted and stabilized in situ. Therefore WSMR deemed it necessary to remove the "visible" landfill material and obtain samples of the trench after landfill material excavation. The "visible" landfill material was removed with a front-end loader and placed into 82 roll off bins (see Photos 1 and 2). The roll off bins have been located in close proximity to the Commissary Landfill Trench and will be addressed in a separate report. The analytical results of the trench sampling will be compared with proposed RCRA Subpart S regulations (Federal Register, Volume 55, No. 145, Friday, July 27, 1990)(Appendix C) to determine if analytical action levels have been exceeded. Additional regulatory guidance for lead was obtained by WSMR (Appendix D) to determine a lead action ("screening") level.

This report details the sampling techniques and analytical results of the Commissary Landfill Trench (CLT).

2.0 COMMISSARY LANDFILL TRENCH (CLT) SAMPLING

Since the initial sampling of landfill material by WSMR indicated levels of lead above the RCRA regulatory level (Appendix A), a Health and Safety Plan was required prior to entry into the CLT. Appendix E is the approved Health and Safety Plan implemented for the CLT sampling effort. Full face respirators with GMC-H type cartridges, Tyvek coveralls, steel toed safety boots with rubber or Tyvek overboots, nitrile disposal gloves, and a hard hat were used during the CLT sampling.

Sampling of the CLT was performed on September 26, 1994 for CLT-1 thru CLT-3, September 27, 1994 for CLT-4 thru CLT-6S, September 28, 1994 for CLT-7 thru CLT-14S, and September 29, 1994 for CLT-15 thru CLT-22. Figure 2 shows all the sample locations for the CLT. On September 27, 1994, two background samples were obtained. One background sample was obtained south of the CLT (sample identification BG-1S) and one background sample north of the CLT (sample identification BG-2N). All samples were obtained using the above sampling protocol and all CLT sampling locations in the CLT were flagged. The CLT, Commissary and Background samples were accurately located using the Global Positioning System (GPS).

Initial sampling of the CLT was begun on September 26, 1994 as directed by WSMR DES-E. Ms. Robin Brown, New Mexico Environment Department, Hazardous and Radioactive Materials Bureau (NMED-HRMB) was at the CLT to observe the CLT, the sampling procedures and obtain

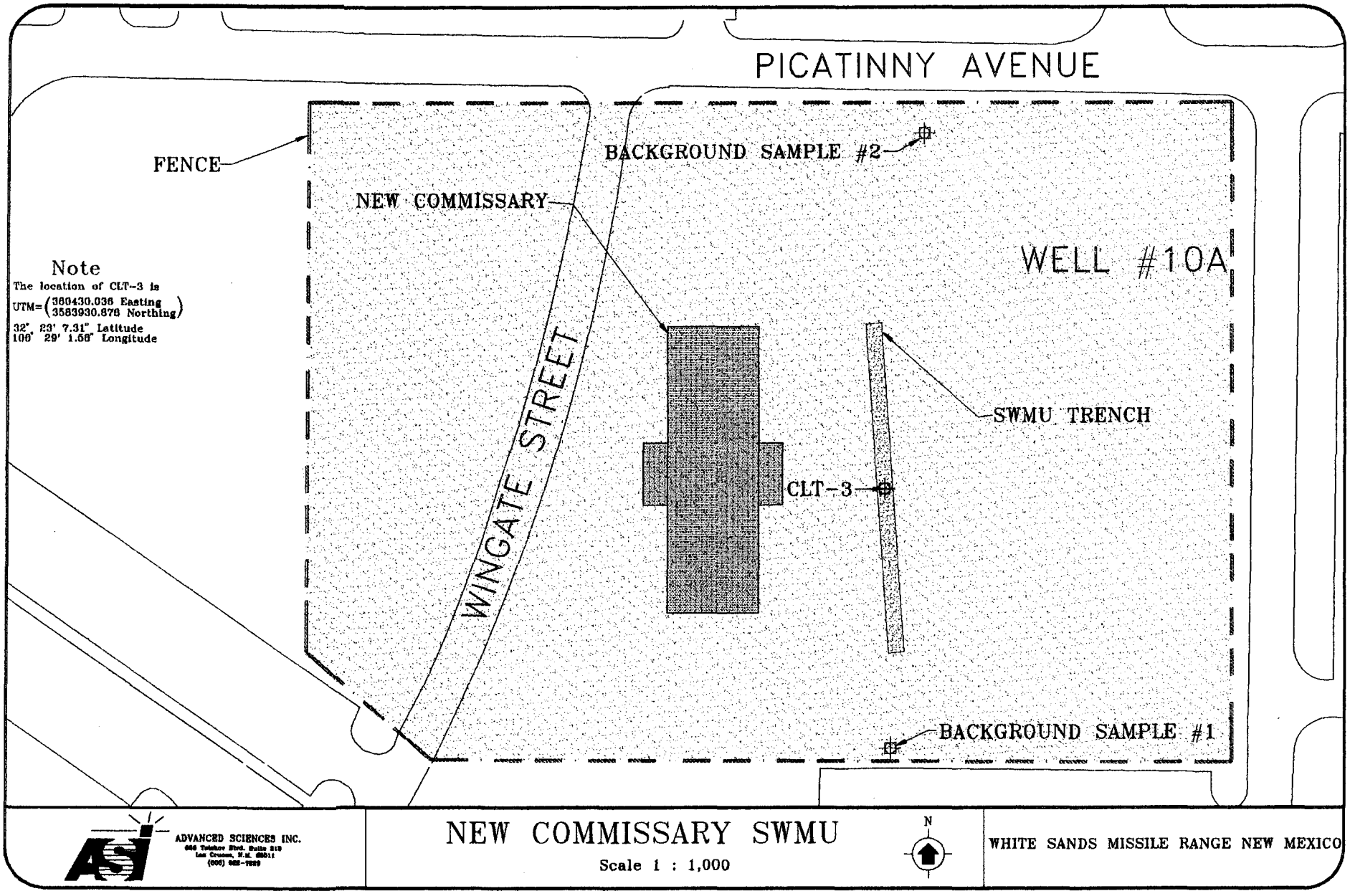

PICATINNY AVENUE
FENCE
BACKGROUND SAMPLE #2
NEW COMMISSARY
WELL #10A
Note
The location of CLT-3 is
UTM= (360430.036 Easting, 3583930.876 Northing)
32° 23' 7.31" Latitude
106° 29' 1.56" Longitude
WINGATE STREET
SWMU TRENCH
CLT-3
BACKGROUND SAMPLE #1
ADVANCED SCIENCES INC.
NEW COMMISSARY SWMU
Scale 1 : 1,000
N
WHITE SANDS MISSILE RANGE NEW MEXICO

Figure 1

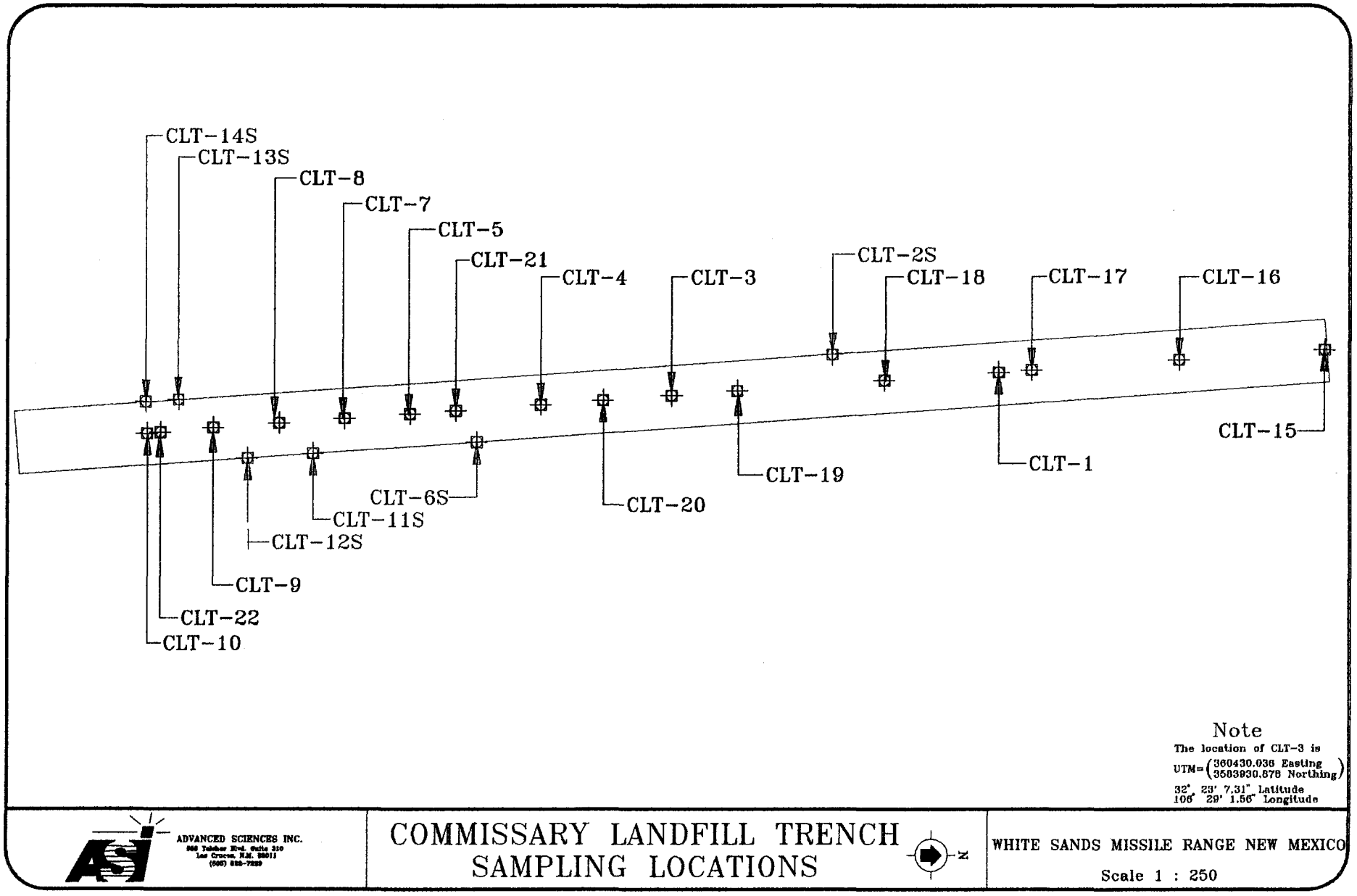

CLT-14S
CLT-13S
CLT-8
CLT-7
CLT-5
CLT-21
CLT-4
CLT-3
CLT-2S
CLT-18
CLT-17
CLT-16
CLT-15
CLT-1
CLT-19
CLT-20
CLT-6S
CLT-11S
CLT-12S
CLT-9
CLT-22
CLT-10
Note
The location of CLT-3 is
UTM= (360430.036 Easting, 3583930.878 Northing)
32° 23' 7.31" Latitude
106° 29' 1.56" Longitude
ADVANCED SCIENCES INC.
COMMISSARY LANDFILL TRENCH
SAMPLING LOCATIONS
N
WHITE SANDS MISSILE RANGE NEW MEXICO
Scale 1 : 250

Figure 2

Photo 1. Removal of Landfill Material from Trench

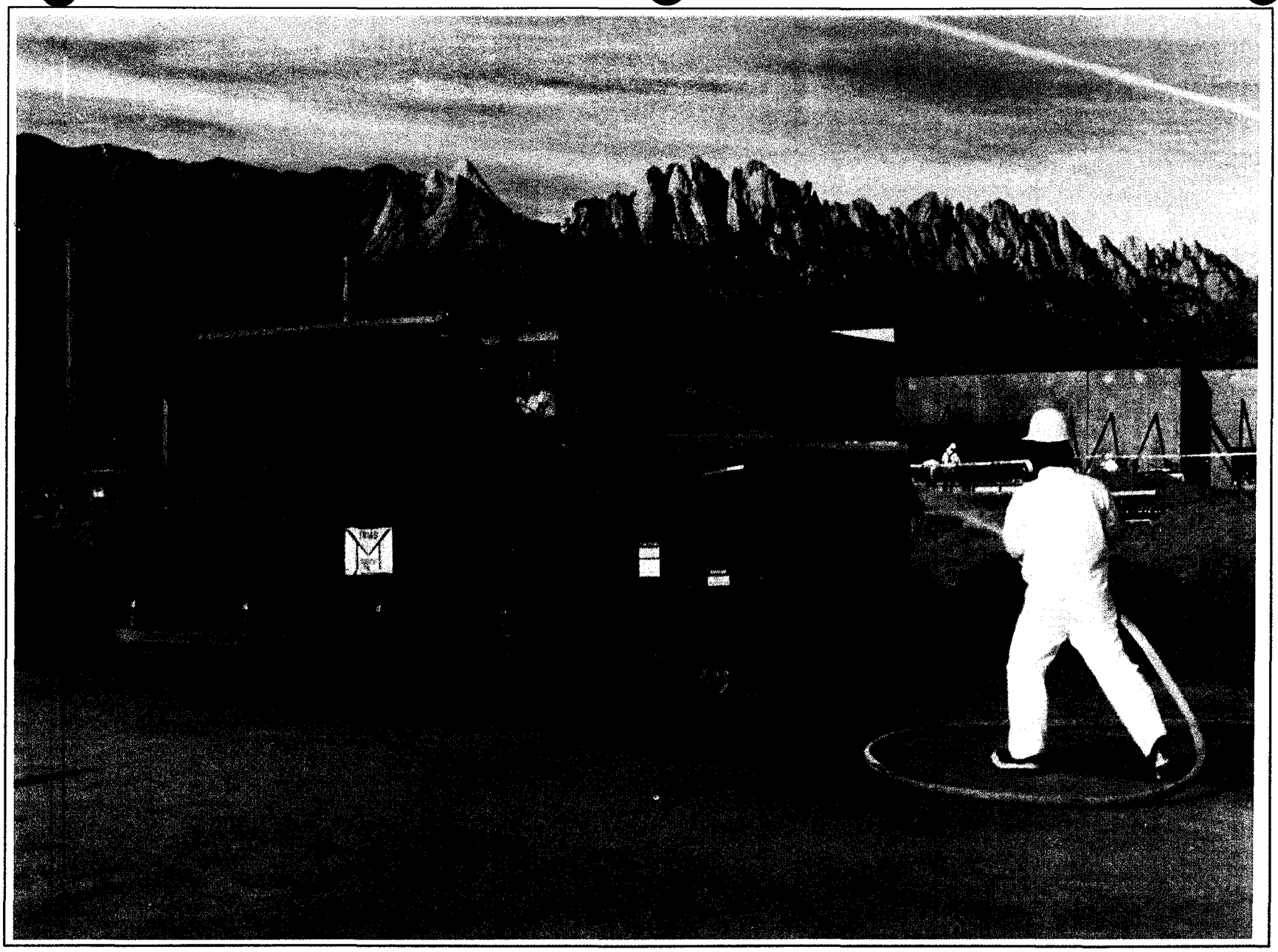


Photo 2. Placement of Landfill Material in Roll Off Bins

split samples. The sampling team consisted of Mr. Gary Jordan, Mr. Joel Giblin and Mr. George Esqueda, all with ASI. The sampling equipment consisted of stainless steel hand auger(s), stainless steel mixing bowl(s) and stainless steel mixing spatula(s), nine ounce glass sample container(s) supplied by the analytical laboratory (Westech Laboratories, Inc.), and a cooler with ice pack(s). After putting on the Personal Protective Equipment (PPE) mentioned above, the sampling team entered the CLT with an HNu organic analyzer to determine the organic content of the atmosphere in which the sampling would take place. The HNu did not detect any level of organics in the atmosphere in the CLT. The sampling team reentered the CLT with the above sampling equipment and sample containers supplied by Ms. Robin Brown, NMED-HRMB, for their split samples. As directed by WSMR DES-E, the first sample was taken 50 feet south of the CLT north highwall and identified as CLT-1 and a split sample was obtained for NMED-HRMB. CLT sample identifications and locations are shown in Figure 2. All samples were obtained at locations directed by WSMR DES-E personnel at a depth of one foot, either from the bottom of the CLT or in the sidewall of the CLT. All sidewall samples were identified with the suffix "S". Samples CLT-2 and CLT-3S were also obtained and split with Ms. Robin Brown, NMED-HRMB. Each sample was obtained with a previously decontaminated (deconned) hand auger and placed in a previously deconned stainless steel mixing bowl. Before handling the next succeeding sample, the nitrile disposable gloves were removed to expose an underlaying uncontaminated pair for each sampling team member. The contaminated pair(s) of gloves were placed in the previous sample mixing bowl for removal from the CLT. Prior to placement of the sample(s) in sampling containers, the sample was mixed with a previously deconned stainless steel mixing spatula. Samples were placed in the sample containers, labeled and placed in a cooler with ice packs. The sample team flagged the location of the first three CLT samples, removed the sampling equipment (in disposable plastic bags), and cooler with samples, from the CLT. Upon exit from the CLT, disposable PPE was removed and placed into disposable bags that were located upon a plastic ground cover. The contaminated sampling equipment and contaminated PPE were taken to a decontamination area where the contaminated PPE was placed into an open top 55-gallon barrel. The sampling equipment was decontaminated with an Alconnox wash and rinsed with distilled water. Samples were labeled, custody sealed, placed into zip-lock bags and placed into a large cooler with ice packs. A Chain of Custody Record was completed. At the end of each sampling session the coolers with Chain of Custody Record(s) were delivered to the South Entrance Gate of WSMR and custody transferred to Westech Laboratories, Inc. for laboratory analysis.

HNu organic readings were obtained from the sample(s) mixing bowl as well as down hole in each sample. All HNu readings were less than 5ppm. The highest reading was from downhole sample CLT-21 which was 5ppm. Because some readings were above the 1ppm level as a cutoff for wearing full face respirators, the sampling was not down graded to a level D effort (Appendix E).

3.0 ANALYTICAL RESULTS

All CLT samples were analyzed for EPA Method 6010 Priority Pollutant Metals plus Barium, EPA Method 8080 Pesticides and PCB's, EPA Method 8150 Chlorinated Herbicides, EPA Method 8260 Volatile Organics and EPA Method 8270 Semi-Volatile Organics. The two Background Samples were analyzed for EPA Method 6010 Priority Pollutant Metals plus Barium only. The results of the analyses on the 22 CLT samples and the two background samples are in Appendix F along with the Chain of Custody Records for the samples.

TABLE 1. ANALYTICAL RESULTS, ABOVE DETECTION LIMITS, FOR CLT SAMPLING AND REGULATORY ACTION/SCREENING LEVELS

	ARSENIC	CADMIUM	CHROMIUM	COPPER	LEAD	NICKEL	SILVER	ZINC	BARIUM
SAMPLE ID.(1)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BG-1S	1.3	LTD	LTD	8.7	16	7.0	LTD	27	51
BG-2N	0.96	LTD	LTD	10	14	8.0	LTD	32	56
CLT-1	0.90	LTD	5.0	12	24	4.0	LTD	50	55
CLT-2S	0.61	LTD	LTD	8	LTD	6.0	LTD	18	61
CLT-3	1.1	LTD	LTD	24	25	7.0	LTD	83	66
CLT-4	0.86	LTD	5.0	19	34	13.0	LTD	89	81
CLT-5	1.2	LTD	LTD	18	22	8.0	LTD	73	53
CLT-6S	0.58	LTD	LTD	8	13	8.0	LTD	30	48
CLT-7	0.77	4.0	LTD	6	15	7.0	LTD	21	51
CLT-8	1.2	5.0	LTD	91	33	8.0	LTD	47	78
CLT-9	0.64	5.0	LTD	6	18	6.0	LTD	27	52
CLT-10	0.74	LTD	LTD	5	17	6.0	LTD	25	41
CLT-11S	0.84	LTD	LTD	7	17	6.0	4.0	29	67
CLT-12S	1.3	LTD	LTD	8.1	20	9.0	LTD	30	98
CLT-13S	1.5	LTD	LTD	8	19	9.0	LTD	31	140
CLT-14S	1.1	LTD	LTD	4	16	7.0	LTD	21	79
CLT-15	1.3	LTD	LTD	11	53	9.0	LTD	34	76
CLT-16	1.4	LTD	LTD	5	19	8.6	LTD	27	79
CLT-17	1.0	LTD	LTD	9	19	8.0	LTD	28	62
CLT-18	1.5	LTD	LTD	31	42	7.0	LTD	68	73
CLT-19	1.1	LTD	LTD	6	29	6.0	LTD	52	70
CLT-20	0.58	LTD	LTD	7	24	6.0	LTD	31	29
CLT-21	0.69	LTD	LTD	5	19	7.0	LTD	54	47
CLT-22	0.59	LTD	LTD	6	19	9.0	LTD	32	63
SP"S" LEVEL(2)	80	40	400	NL	400(3)	200	200	NL	400

FOOTNOTES:
1. SAMPLE LOCATIONS ARE SHOWN IN FIGURE 2
2. PROPOSED SUBPART S ACTION LEVEL (APPENDIX C)
3. REGULATORY GUIDANCE "SCREENING" LEVEL (APPENDIX D)

LTD = LESS THAN ANALYTICAL DETECTION LIMIT (APPENDIX F)
NL = NOT LISTED IN PROPOSED SUBPART S (APPENDIX C)

Table 1 shows that of the 14 Priority Pollutant Metals (EPA Method 6010), only nine were at or above analytical detection limits. Arsenic, Cadmium, Chromium, Nickel, Silver and Zinc are listed in proposed Subpart S to the RCRA regulations (Appendix C). Table 1 also shows the action levels in soils from Subpart S (Appendix C) for the nine metals at or above analytical detection limits. A comparison shows that all CLT samples are less than the Subpart S action levels. There are no Subpart S action levels for Copper or Zinc. For lead, Table 1 shows that all analyses are less than the EPA guidance (screening) level (Appendix D). All sampling results for EPA Method 8080, EPA Method 8150, EPA Method 8260 and EPA Method 8270 were below analytical detection limits.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the analytical results, there are no constituents in the CLT soils that are above the Subpart S action levels. The Lead results are less than the EPA Guidance ("Screening") level (Appendix D). The analytical results in this report support WSMR's request to NMED-HRMB to backfill the CLT with clean fill material so that the Commissary Construction can proceed.

APPENDIX A

INITIAL WSMR SAMPLING RESULTS

STEWS-MTD-AA (70)

MEMORANDUM FOR ES-E, ATTN: Mr. Magallanes

SUBJECT: Soil Analysis

1. Responding to your request, White Sands Missile Range (WSMR) Test Support Division analyzed three soil samples in accordance with the U.S. Environmental Protection Agency (USEPA) Test Method 1311: Toxicity Characteristics Leaching Procedure (TCLP), three soil samples in accordance with USEPA Test Method 6010: Inductively Coupled Plasma Atomic Emission Spectroscopy, and two soils samples for the presence of Halogenated Organics. These analyses were performed to ascertain the presence of hazardous constituents. The samples were collected and delivered to the Chemistry Laboratory by Environmental Services.

2. Sample identification and specific analysis criteria are listed in enclosure 1. The results are listed in enclosures 2-18.

3. All metals analyzed for, with the exception of Lead, are below the TCLP regulatory levels at which waste is considered hazardous. Chemical Log Number 478 is above the listed TCLP regulatory level of 5 milligrams per Liter (mg/L) for Lead. The Lead concentration was 37.3 mg/L. Chemical Log Number's: 480, 482 below the TCLP regulatory level for Lead. A Total Lead level of 1.6 percent by weight was seen for Chemical Log number 478. No halogenated organics were detected for the samples analyzed.

4. Point of contact is Mr. Milton Carter, 678-4733.

18 Encls

ANDRUS GARAY
Chief, Applied Envr Test Branch

SAMPLE IDENTIFICATION

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	ANALYTICAL METHODOLOGY
478	SOIL-COMM I, 9 AUG	TEST METHOD 1311
479	SOIL-COMM II, 9 AUG	TEST METHOD 6010
480	SOIL-COMM III, 9 AUG	TEST METHOD 1311
481	SOIL-COMM IV, 9 AUG	TEST METHOD 6010
482	SOIL-COMM V, 9 AUG	TEST METHOD 1311
483	SOIL-COMM VI, 9 AUG	TEST METHOD 6010
484	SOIL-COMM VII, 9 AUG	HALOGENATED ORGANICS
485	SOIL-COMM VIII, 9 AUG	HALOGENATED ORGANICS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

ARSENIC

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<2
480	SOIL - COMM III	<2
482	SOIL - COMM V	<2

** METHOD DETECTION LIMIT = 2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

BARIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<5
480	SOIL - COMM III	<5
482	SOIL - COMM V	<5

** METHOD DETECTION LIMIT = 5 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

CADMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<1
480	SOIL - COMM III	<1
482	SOIL - COMM V	<1

** METHOD DETECTION LIMIT = 1 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

CHROMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<2
480	SOIL - COMM III	<2
482	SOIL - COMM V	<2

** METHOD DETECTION LIMIT = 2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

LEAD

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	37
480	SOIL - COMM III	<2
482	SOIL - COMM V	2.4

** METHOD DETECTION LIMIT = 2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

MERCURY

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<0.2
480	SOIL - COMM III	<0.2
482	SOIL - COMM V	<0.2

** METHOD DETECTION LIMIT = 0.2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

SELENIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<1
480	SOIL - COMM III	<1
482	SOIL - COMM V	<1

** METHOD DETECTION LIMIT = 1 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

SILVER

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<2
480	SOIL - COMM III	<2
482	SOIL - COMM V	<2

** METHOD DETECTION LIMIT = 2 mg/L

TOTAL ARSENIC

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<2	---
481	SOIL - COMM IV	<2	---
483	SOIL - COMM VI	<2	---

** METHOD DETECTION LIMIT = 2 mg/kg

TOTAL BARIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	131	0.013
481	SOIL - COMM IV	65	0.007
483	SOIL - COMM VI	42	0.004

** METHOD DETECTION LIMIT = 5 mg/kg

TOTAL CADMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<1	---
481	SOIL - COMM IV	<1	---
483	SOIL - COMM VI	<1	---

** METHOD DETECTION LIMIT = 1 mg/kg

TOTAL CHROMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<2	---
481	SOIL - COMM IV	<2	---
483	SOIL - COMM VI	5.7	0.0006

** METHOD DETECTION LIMIT = 2 mg/kg

TOTAL LEAD

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	16200	1.6
481	SOIL - COMM IV	340	0.03
483	SOIL - COMM VI	61	0.006

** METHOD DETECTION LIMIT = 2 mg/kg

TOTAL MERCURY

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<0.2	---
481	SOIL - COMM IV	<0.2	---
483	SOIL - COMM VI	<0.2	---

** METHOD DETECTION LIMIT = 0.2 mg/kg

TOTAL SELENIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<1	---
481	SOIL - COMM IV	<1	---
483	SOIL - COMM VI	<1	---

** METHOD DETECTION LIMIT = 1 mg/kg

TOTAL SILVER

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<2	---
481	SOIL - COMM IV	<2	---
483	SOIL - COMM VI	<2	---

** METHOD DETECTION LIMIT = 2 mg/kg

HALOGENATED ORGANICS

CHEMICAL LOG NUMBER	CONCENTRATION, Parts per Million				
	TFF	DCM	TCA	TCE	PCE
484	<0.05	<0.10	<0.002	<0.004	<0.002
485	<0.05	<0.10	<0.002	<0.004	<0.002
DETECTION LIMIT	0.05	0.10	0.002	0.004	0.002

**TFF = Freon 113
DCM = Methylene Chloride
TCA = 1,1,1 - Trichloroethane
TCE = Trichloroethylene
PCE = Perchloroethylene

APPENDIX B

EPA LETTER DATED 1/13/93

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

January 5, 1993

Certified Mail - return receipt requested

Brigadier General Richard B. Wharton
Commanding General
U. S. Army White Sands Missile Range
White Sands Missile Range, NM 88002-5000

Dear General Wharton:

On November 13, 1992, representatives from EPA Region 6, White Sands Missile Range, the Army Corps of Engineers, and the New Mexico Environment Department met in Dallas to discuss Installation Restoration Program environmental investigations and some related regulatory compliance issues. A great deal of progress has obviously been made in IRP site investigation at White Sands, and we applaud your success. We have three areas of concern, however, that I would like to bring to your attention.

Most importantly, a diesel leak from an underground tank and piping system at the HELSTF area in the mid-1980s remains incompletely investigated and unremediated. This situation persists more than a year after the signing of an agreement between White Sands Missile Range, NMED, and EPA providing for an investigation schedule. Progress has slipped behind the agreed schedule; we understand that Lockheed Engineering and Sciences Company, which had performed what work was done at the site, is no longer involved; and to our knowledge no other contractor has been employed. This situation is a clear violation of the New Mexico Underground Storage Tank Regulations and Water Quality Control Commission Regulations. We will have no recourse except formal dispute resolution under the Defense-State Memorandum of Agreement. and possible enforcement action, if the inattention to this problem cannot be corrected immediately.

Next in importance, an ongoing program of periodic ground water quality monitoring must be implemented at several of the sites investigated under the Installation Restoration Program. Even if this regular monitoring is not explicitly required by EPA as a condition of White Sands' RCRA hazardous waste premit, it is required under New Mexico Water Quality Control Commission regulations. White Sands Missile Range needs either to submit a written proposal for ground water monitoring, or to work out the details of such a program in meetings with NMED staff.

The third point concerns various landfills and dump sites. I understand that some confusion may exist regarding the regulatory

status of landfills and dumps. Any landfill still in use, or that received any use after May 14, 1989, is subject to the New Mexico Solid Waste Mangement Regulations. A Notice of Intent must be on file with the NMED Solid Waste Bureau for each such landfill, active or inactive. In addition, any landfill or dump site on White Sands' property is a Solid Waste Management Unit ("SWMU") as defined by RCRA and must be reported to EPA as required by White Sands' hazardous waste premit. Most, perhaps all, such sites will already be on the list of SWMUs to be investigated. However, if any dumps or landfills are discovered that are not on the existing list, they must be added and investigated. Work required under the terms of the hazardous waste permit can normally be dovetailed with that required under the Solid Waste Management Regulations to avoid duplication of effort.

Your prompt response to our concerns will make a great contribution to the generally cordial and productive working relationship we enjoy with White Sands Missile Range. The HELSTF diesel problem, in particular, needs immediate attention. We must insist on receiving a written, enforceable investigation and remediation schedule within 30 days of your receipt of this letter; and the schedule must include a resumption of active work at the site on or before March 1, 1993. A response to our other concerns by March 1 would be adequate. The appropriate NMED contact person for these and all IRP affairs is David Morgan, in the Ground Water Protection and Remediation Bureau, who can be reached at the address on the previous page or at 827-2754. Thank you for your attention to these matters.

Sincerely,

Ron Curry
Deputy Secretary

c: James Harris, EPA Region 6
Hector Magallanes, WSMR Environmental Office
Kathleen Sisneros, NMED Water and Waste Management Division
David Vackar, NMED Environmental Protection Division
James Bearzi, NMED USTB
Steven Cary, NMED GWPRB
Benito Garcia, NMED HRMB
Gerald Silva, NMED SWB

APPENDIX C

RCRA SUBPART S PROPOSED REGULATIONS

X. Regulatory Impact Analysis

A. Executive Order No. 12291. Regulatory Impact Analysis

1. *Background.* In conjunction with the development of today's proposed rule, EPA performed a regulatory impact analysis (RIA), as mandated by Executive Order 12291. These analyses are required for "major" regulations, defined as those likely to result in annual effects on the economy of $ 100 million or more; a major increase in costs or prices for consumers or individual industries; or significant adverse effects on competition, employment, investment, productivity, innovation, or international trade. The results of the RIA prepared for today's rulemaking demonstrate that this rule is a "major" regulation.

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, the Agency is also required to assess the impact of a proposed or final rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The results of this assessment, which was conducted as part of the RIA, are presented below in section X.B.

The complete regulatory impact analysis document is available in the docket established for this proposed rule. The following is a summary of the analytical methodology used in conducting the RIA, and the results of the analysis.

2. *Summary and Major Conclusions.* The analysis conducted by the Agency indicates that the corrective action rule may result in a wide range of costs, depending on the nature of the remedies selected in site-specific decisionmaking. Given the large, national scope of this rule, and the flexibility provided by the provisions outlined in this proposal, these uncertainties are expressed in the following discussion.

Overall, the analysis found that about 31 percent of facilities are projected to require corrective action for releases to ground water from solid waste management units (Media other than ground water were not analyzed due to data and modeling limitations.) The average annualized per facility costs for non-Federal facilities under today's proposed rule are estimated to range between $1.8 million to $0.4 million. The total present value national cost of the proposed rule, as an increment over the pre-HSWA corrective action program, is likely to range between $7 billion and $42 billion. The costs of cleaning up Federal facilities, presented separately, are much more uncertain and could range between $3 billion to $18 billion.

The above results reflect two of four regulatory alternatives that were analyzed which the Agency believes reflect the flexibility inherent in the proposed rule. These alternatives provide an upper and lower bound to the costs of the proposed rule and reflect the Agency's uncertainty about several of the data and assumptions used in estimating costs, such as the types of remedial measures that will be ultimately implemented. While both regulatory alternatives would require cleanup to health-based levels, the key distinction between them is in the choice of allowable corrective action remedies. The analysis assumed that the lower bound option would be more flexible than the upper bound (e.g., by allowing use of exposure controls in cases where certain remedies were technically infeasible or prohibitively expensive).

3. *Scope and Analytical Approach.* In developing the RIA for today's proposed rule, the Agency analyzed both qualitatively and quantitatively several basic alternatives which could have been adopted in structuring the corrective action rule. The alternatives studied cover a range from a highly conservative "cleanup to background" approach with very little flexibility in adjusting remedies for site-specific conditions, to alternatives which trigger cleanup of releases in only limited circumstances, and would allow, in many cases, contamination to remain within a facility's property and beyond. The analysis indicates that these alternatives have quite different environmental results, as well as impacts on the regulated community.

In developing the RIA, EPA assembled data to estimate the potential scope of the RCRA corrective action program. The data used in generating these estimates was primarily obtained from the Agency's existing database on RCRA facilities (the "Hazardous Waste Data Management System," or HWDMS), and an analysis conducted for the RIA which examined a sample set of 65 RCRA Facility Assessment (RFA) reports. These reports are typically prepared by EPA or the States prior to issuance of RCRA permits, and provide preliminary findings as to what releases have or may have occurred, and what investigations should be conducted to verify and/or characterize the releases. These preliminary RFA findings were extrapolated to provide estimates of the numbers and types of facilities that may require corrective action. Certain data from the reports were also used to support modeling for the quantitative analysis of the RIA. A summary of the RIA esumates as to the size and distribution of RCRA facilities that may need corrective action are presented in the following section of this discussion.

4. *Potential Scope of the Corrective Action Program.* EPA estimates that there are approximately 6500 facilities regulated under RCRA subtitle C that are potentially subject to the corrective action authorities of sections 3004(u) and 3008(h). Based on preliminary survey results from RFA reports, it is estimated that roughly [illegible] solid waste management units exist at these facilities; this number includes some 3,000 land-based hazardous waste management units (e.g., hazardous waste landfills and surface impoundments) that would fall under corrective action provisions of the 1984 HSWA amendments. The number of solid waste management units at individual facilities varies widely, up to as many as 1,300. Federal facilities, because of their large size, typically contain many more solid waste management units—an average of 65 per facility, according to the RFA survey results. The survey indicated that there are an average of 12 solid waste management units (including hazardous waste management units) at non-Federal facilities.

The types of solid waste management units found at facilities are diverse. More than one-third (38 percent) are tanks used for storage or treatment of wastes; Landfills comprise 18 percent, and surface impoundments 15 percent. The remainder are units such as container storage areas; piles; land treatment units, incinerators and other miscellaneous units. The survey also found a wide diversity within unit categories in terms of size, age, general condition, types of wastes managed, and other factors.

The survey revealed that, on average, 62 percent of all facilities have indications of possible releases, based on RFA findings, sufficient to require follow-up remedial investigations (*i.e.*, RFIs). Typically, facilities that have subtitle C land disposal units and incinerators are more likely to require follow-up investigations than are treatment/storage facilities (74 percent, 70 percent and 56 percent, respectively). The Agency's experience with the corrective action program to date (as confirmed by the RFA survey results) indicates that one-half of these facilities (or one-third of the total universe) will require some type of remedial action, based on the confirmation of a release in the RFI.

Potential releases of concern most often noted in RFA findings are releases

to ground water and soil: of all facilities, 30 percent have actual or suspected releases to ground water, 34 percent to soil. Facilities with confirmed or suspected releases to surface water and air are less common—17 percent and 7 percent respectively, based on the RFAs surveyed.

Based on the results of the models used in the quantitative analysis conducted for the RIA, approximately 31 percent (1,700 RCRA facilities) will have ground-water contamination requiring remediation.

5. *Qualitative Analysis:* EPA considered three strategies for implementing corrective action under the HSWA mandate that permits for all treatment, storage, or disposal facilities (TSDFs) address releases from SWMUs to all environmental media. The following is a summary of each alternative strategy.

Strategy 1—Cleanup to background levels as soon as practicable for all facilities. This strategy represented the most stringent and environmentally conservative option of the three. Regulations modeled after this approach would require complete restoration of all contamination back to the unit boundary, as quickly as could be practicably achieved. In order to ensure that solid waste management units would continue to meet what would amount to a "zero release" standard, extensive source controls would be required, perhaps often involving treatment or destruction of all wastes that could cause future contamination.

This strategy would, if implemented, at least theoretically achieve the highest degree of protection to human health and the environment. Realistically, however, current technologies cannot consistently achieve such a cleanup standard. In addition, the economic impacts of such a regulatory approach would obviously be much greater than the other options, and could be expected to cause substantially more owner/operators to become insolvent, thereby placing additional demands on other funding sources, such as State or Federal cleanup funds.

Strategy 2—Cleanup to health-based levels, with flexibility in timing. In broad terms, this strategy would require cleanup of releases to the unit boundary to concentration levels safe for lifetime human exposure. The timing for achieving these levels would vary depending on a number of site-specific factors, such as the extent and nature of the contamination, exposure potential, availability of technologies, and other factors. Source controls would be required in order to prevent further releases above health-based levels.

This strategy would also achieve a conservative level of protection. The economic impacts of this strategy, although substantial, would be considerably smaller than for Strategy 1.

Strategy 3—Cleanup to health-based standards only where actual or imminent exposure exists. Under Strategy 3, corrective actions would be required only if there was evidence of actual or imminent exposure to contaminated media (e.g., contaminated drinking water wells), above health-based standards. The extent of cleanup would be tied to alleviating that exposure: cleanup to the unit boundary would not be required unless exposure were actually of concern at that point. Required source control measures would be less extensive than under Strategy 1 or 2. Protection against future exposure to contamination would rely heavily on institutional controls.

This regulatory approach would achieve a minimum level of protection, as compared to the other two strategies. By allowing contaminated media to remain contaminated based on current exposure patterns, protection against future exposure could not be guaranteed. Thus, Strategy 3 is the least protective strategy. This strategy would, however, be substantially less costly to owner/operators, relative to Strategies 1 and 2.

Today's proposed rule adopts the Strategy 2 approach. The Agency believes that this regulatory strategy provides an optimum balance in ensuring a high degree of protection of human health and the environment, while not placing unnecessary burdens on facility owner/operators.

It should be understood that crafting a comprehensive rulemaking within the broad confines of any of the three alternatives listed above would, of necessity, require addressing a large number of specific policy questions. Thus, a variety of specific regulatory blueprints could be created under any one alternative. In this regard, as noted below, we have developed two alternatives for the purpose of quantitative analysis that we believe reflect the bounds of flexibility of implementation afforded by this rule. This is reflected in the rule proposed today, which is generally patterned after Strategy 2, but also contains certain regulatory requirements that could be considered in line with Strategies 1 and 3.

6. *Description of Options Analyzed Quantitatively.* In developing the quantitative analysis for the RIA, a similar range of regulatory options were assessed as in the qualitative analysis. For comparison purposes, however, the analysis also examined a "baseline" option—in effect, the pre-HSWA corrective action program. In addition, the Agency developed four regulatory options, two of which were generally believed to reflect the flexibility inherent in the proposed rule. It should also be noted that in structuring the modeling logic for this analysis, it was necessary to make certain assumptions and use decision rules that vary slightly from those used in the qualitative analysis; however, the broad regulatory alternatives examined in the qualitative and quantitative analyses are generally the same.

The quantitative analysis examined each of the five regulatory options in terms of the following criteria: cost, protection of human health and the environment, flexibility in implementation, and technical practicability. This analysis evaluates the effects of each alternative only as it would address contamination of ground water.

Detailed information on the data used in this analysis, and how the models were constructed, are presented in the RIA document. The following is a summary of the options modeled, and the general assumptions used in constructing each.

Option 1: Baseline (Pre-HSWA). This option represents requirements under RCRA prior to enactment of the 1984 HSWA corrective action requirements and is used as the basis for comparison of costs and benefits of other options. Only land disposal units that received hazardous waste after July 26, 1982, and thus were regulated under part 264, subpart F, were examined. The corrective action trigger and target concentrations are the same, either the background concentration or a maximum contaminant level. (For modeling purposes, the baseline scenario assumed that cleanup targets would not be established at "alternate concentration limits" under subpart F.) Only onsite cleanup within the facility boundary is addressed. Ground-water removal and treatment, or capping, are the only corrective action remedies considered.

Option 2: Immediate Cleanup to Background. This option is the strictest of those evaluated. All SWMUs, in addition to regulated subtitle C land disposal units, were addressed. Any detectable release to ground water in excess of background levels would trigger corrective action, and both on-site and off-site contamination must be cleaned up to background levels as soon as practical. For purposes of this analysis, we assumed that background

contamination did not exist and, therefore, assumed that cleanup to background was equivalent to cleanup to detection limits. Source controls are required with a bias toward excavation.

Option 3: Immediate Cleanup to Health-Based Standards. This option is similar to the previous one in that all SWMUs are addressed, source control remedies such as excavation are required, and off-site contamination must be addressed as soon as detected. However, corrective action would be triggered only if concentrations were detected above a health-based standard, rather than above background concentrations. This option involves a strong preference towards source control remedies and towards cleanup of contamination as quickly as possible. Use of technical infeasibility waivers is very limited, even if remedies cannot reasonably be expected to achieve the target. In addition, unlike the previous option, cleanup of on-site contamination could be deferred until facility closure, at which point cleanup to health-based levels would be required.

Option 4: Flexible Cleanup to Health-Based Standards. This option also addresses SWMUs, and health-based standards are used as both trigger and target levels. As in the previous option, owners and operators may defer cleanup of on-site releases until facility closure. However, in this alternative owners and operators have considerable flexibility in identifying corrective action remedies. Here, remedies less costly than source control can be chosen if they achieve target within a reasonable time frame. As a decision rule to reflect the fact that the problems of scale and other technical difficulties will preclude certain remedies at complex sites, remedies that failed to achieve cleanup in a reasonable period of time (assumed to be about 130 years for this analysis) or that would be extraordinarily expensive (*i.e.*, over $150 million) were rejected as "impracticable." Instead, exposure controls would be relied on to prevent risk in these cases. It is important to note that this approach is not intended to imply that remedies of this scope would never be undertaken, or to define the limits of technical practicability.

Option 5: Flexible Cleanup Based on Actual Exposure. This option is the least stringent of the five. It is similar to Option 4, except that cleanup of off-site exposure could be deferred if there is no actual human exposure to the release. If there is an off-site exposure, corrective action must address the exposure. Again, under this option, there is a flexible approach towards remedy selection.

The Agency believes that options 3 and 4 provide an upper and lower bound on the range of outcomes that may result during implementation of the proposed rule. This range results from the flexible nature of the proposed rule and the uncertainty about the choice of remediation measures in the field and the performance of the remedies that are selected. EPA expects that the real effects of the rule are likely to lie somewhere between these two options.

7. Results of Quantitative Analysis. The analysis estimated that approximately 31 percent of all RCRA facilities will trigger corrective action in all the post-HSWA options analyzed, as compared to 14 percent that would trigger under the baseline pre-HSWA scenario. This reflects the requirement that all SWMUs, not just land disposal units, are subject to corrective action under post-HSWA options. Note that even in the post-HSWA options, approximately two-thirds of the facilities will not trigger corrective action for ground water.

It is important to note that differences in trigger levels did not result in significant differences in the number of facilities triggering corrective actions. However, differences in target levels for the various regulatory options made a significant difference in how many corrective actions were "successful" in achieving cleanup levels, as is discussed later in this section. In examining the potential benefits of the proposal (Options 3 and 4) as compared to other options, the Agency developed an "effectiveness" test which measures the degree to which a particular option is successful in achieving its cleanup level. The results of the test demonstrate that Options 3 and 4 are the most successful in achieving the cleanup target. This analysis supports the Agency's selection of Options 3 and 4 for the proposed rule. The effectiveness test should not, however, be viewed as a measure of all the potential benefits of remediation of contaminated ground water.

The point when corrective action is triggered was also analyzed. The analysis demonstrates that, for Option 2, in which corrective action must begin immediately, approximately 26 percent of all existing RCRA facilities would initiate corrective action in the first year of the program. In Options 3, 4, and 5, in which on-site corrective action can be deferred, only about 12 percent of all facilities would initiate corrective action in the first year. The ability of a facility to defer on-site corrective actions results in lower economic impacts.

For those facilities that trigger corrective action, the analysis estimated the length of time required for a corrective action to reduce contaminant concentrations below the target levels at all wells within 1,500 meters of the release. Under options requiring cleanup to health-based levels (*i.e.*, options 3, 4, and 5), about 51 to 58 percent of the facilities reach cleanup targets at all well distances within 75 years of the initiation of corrective action. In contrast, under the two options requiring cleanup to background, only about 34 percent of facilities triggering corrective action are projected to achieve targets within 75 years. This further confirms the presumption that achieving cleanup to background concentrations may be difficult or impossible to achieve technically.

As part of the quantitative analysis, the Agency developed estimates of the costs of corrective actions under different regulatory options on a per-facility basis, as well as on a national basis. Typical facility corrective action costs vary significantly depending upon the specific regulatory option. The cost analysis demonstrates that the most stringent post-HSWA regulatory option (*i.e.*, Option 2, or "Immediate Cleanup to Background") is by far the most costly option, with a mean present value cost of over $252 million per facility, and an annualized per facility cost of about $19 million (at a 3 percent discount rate).

The upper bound proposed rule option, "Immediate Cleanup to Health-Based Standards" option (*i.e.*, Option 3), was estimated to have a mean present value per facility cost of $[illegible] million, and annualized per facility costs of $1.8 million. The lower bound regulatory option (*i.e.*, Option 4, or "Flexible Cleanup to Health-Based Standards") was estimated to have a mean present value cost per facility of $8.3 million, and annualized per facility costs of $0.4 million.

The baseline per-facility cost is the lowest of all the options at a mean present value cost of $3.8 million, and an annualized per-facility cost of $0.2 million. The "Flexible Cleanup Based on Actual Exposure" option (*i.e.*, Option 5) was estimated to have a mean present value cost of $4.8 million and annualized per facility costs of $0.3 million.

The total national cost for EPA's corrective action program is influenced by three parameters: The average cost of each action, the number of facilities required to undertake corrective action, and the cost to facility owners and operators of undertaking required investigations. National costs discussed below are presented in incremental

terms (*i.e.*, after subtracting the costs of the baseline scenario).

The "Immediate Cleanup to Background" option is the most expensive, with an incremental total cost above the baseline pre-HSWA scenario of $400 billion. This option was estimated to have an annualized cost of $32.9 billion.

Among the other regulatory options, the differences in costs are primarily a result of differences in timing of cleanup and in the flexibility afforded in terms of choosing corrective action remedies. Option 3 (*i. e.*, "Immediate Cleanup to Health-Based Standards") was estimated at a total cost of $41.8 billion, with an annualized cost of $2.8 billion. This option is relatively costly, due in part to modeling assumptions as to the types of remedial technologies that would be employed to meet these standards.

Option 4 (*i.e.*, "Flexible Cleanup to Health-Based Standards") was among the least costly, with a total cost of $7.4 billion and an annualized cost of $0.5 billion. The costs are lower because, in general, less expensive technologies are assumed and, for many facilities, final cleanup of contaminated ground water would be deferred for a number of years, thus reducing the present value costs.

Option 5 (*i.e.*, "Flexible Cleanup Based on Actual Exposure"), where both on-site and off-site cleanup of contamination could be deferred until closure if there was no actual exposure, was somewhat less expensive than the above option. This option had a total cost of $6.0 billion, an annualized cost of $0.3 billion.

Today's proposed regulation is most similar to Option 3 (*i.e.*, "Immediate Cleanup to Health-Based Levels") and Option 4 (*i.e.*, "Flexible Cleanup to Health-Based Standards"). These results illustrate that the total national costs of this rule are likely to range between $7 and $42 billion. The relatively wide range reflects the uncertainty in a number of areas, such as the timing of corrective action, the types of remedial measures that will be considered, and the nature and difficulty of remedial measures that are selected. Overall, the Agency believes that this range represents a reasonable bound of the potential effects of the rule, and that in all likelihood, the actual effects will fall somewhere within this range.

The Agency is committed to trying to refine these costs estimates before promulgation of the final rule. To help in this effort, the Agency requests that commenters provide any data or information relevant to the analysis described in the preamble or in the accompanying Regulatory Impact Analysis.

8. *Economic Impacts.* With the cost information developed from the quantitative analysis, the RIA estimated the financial impacts of the proposed rule on affected firms. The results are expressed in terms of predictions of total costs that facility owners and operators would not be able to cover due to insolvency. The results provide an indication of the magnitude of costs that could ultimately be faced by entities other than the immediate owner or operator of the facility. Alternate funding sources might include the Superfund (provided that the facility would be eligible for Superfund funding), State remedial action funds, corporate parents of facility owners and operators, or, through price increases, the customers of the firm owning or operating the facility. The results of this analysis are presented in "undiscounted" numbers, since Superfund monies are generally described in undiscounted terms. For scenarios other than baseline, costs are presented on an incremental basis relative to the baseline.

Under the baseline scenario, it was estimated that 9 percent of all firms owning RCRA facilities would be adversely affected, creating total unfunded costs of $97 million (undiscounted) over the next 50 years.

The "Immediate Cleanup to Background" scenario generated by far the highest level of unfunded costs, totaling $74 billion over the next 50 years. The "Immediate Cleanup to Health-Based Standards" option results in unfunded costs of over $5.1 billion over the next 50 years. The "Flexible Cleanup to Health-Based Standards" option results in unfunded costs of over $0.5 billion over the next 50 years. The "Flexible Cleanup Based on Actual Exposure" option resulted in a total of $0.2 billion unfunded costs, undiscounted, over the next 50 years.

Based on the RIA analysis, EPA anticipates that the ability to fund corrective action costs will vary between industries. Industries that may have a relatively low ability to pay for corrective actions include sanitary services; coating, engraving, and allied services; and miscellaneous wood products. These industries have relatively low net income levels. Industries that show a particularly high ability to pay include petroleum refining, motor vehicles and motor vehicle equipment, and aircraft and aircraft parts.

9. *Federal Facilities.* The RIA discusses Federal facilities as a separate entity because, although they only constitute 6 percent of the total RCRA facility universe, they contain many more SWMUs per facility (on average, 55 per site) and therefore, may incur higher corrective action costs. These costs must be funded by public money.

Based on the RIA analysis, it is estimated that of the 352 Federal RCRA facilities, between 61 percent and 100 percent are likely to require ground-water corrective action under the proposed rule, compared to between 17 percent and 23 percent under the baseline. A rough approximation of the costs for these corrective actions per facility ranges from $17 million under the baseline scenario to $1.2 billion under the "Immediate Cleanup to Background" option. For the options most similar to the proposed rule (*i.e.*, "Immediate Cleanup to Health-Based Standards" and "Flexible Cleanup to Health-Based Standards") the mean per facility cost is estimated to range from $[illegible] million or in annualized costs from about $6 to $3 million per facility.

The total Federal facility costs, incremental to the baseline, for the options most similar to the proposal range from $5 to $18 billion; the annualized costs range from $0.3 to $1.1 billion. Again, this range reflects the likely bounds on the ways in which the RCRA corrective action program will ultimately be implemented for Federal facilities. Incremental Federal facility costs for other regulatory approaches could be $200 billion for the "Immediate Cleanup to Background" option, or $2 billion for the "Flexible Cleanup Based on Actual Exposure" option. Baseline costs are estimated to be $1 billion.

This analysis thus concludes that, although Federal facilities only comprise 6 percent of the population affected by the corrective action program, they could incur roughly 30 percent of the total cost of the rule.

10. *Further Regulatory Impact Analyses.* Given the scope and potential impacts of this rulemaking, EPA recognizes the need to continue to refine its estimates of the costs and benefits of the rule. The Agency intends to collect additional data and will conduct substantial new analyses prior to finalizing today's rule. In conducting these studies, the Agency believes that it will be of particular value to examine the experience gained in recent years in remediating Federal facilities. Large volumes of information and extensive technical experience have been accumulated specifically by the Department of Defense and the Department of Energy. EPA intends to form an interagency working group to

develop and conduct these further Regulatory Impact Analyses.

The new analyses will be conducted in accordance with the existing Agency guidance on Regulatory Impact Analysis and the draft Regulatory Impact Analysis Guidance published in the 1988 Regulatory Program of the United States. The analyses will explicitly examine the costs, health and environmental benefits, and technological limitations for the key regulatory requirements contained in the proposal—especially for the several alternative approaches to ground water remediation outlined in the proposed rule. This analysis will also estimate the aggregate impacts identified above, for sites eligible for remediation under this rule and for those sites which are listed on the NPL, and will, therefore, look to this rule as an ARAR, under the provisions of CERCLA. Upon completion of the revised analyses, EPA will solicit comment on the results of the analyses and the methodology used to derive them. The Agency will then assess these comments, along with comments which will have been received previously on the proposed rule. Through these actions EPA will ensure that the net social benefits (including environmental and health benefits) of the rule proposed today are maximized, taking into account costs; technological limitations, risks, and realistic assessments of both actual and reasonably expected uses of each site. If the revised RIA, together with the comments received, demonstrate that the rule proposed today does not achieve this outcome, the Agency will make appropriate modifications to the final rule, or if necessary, will repropose the rule.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act requires Federal agencies to fully analyze the economic effects of regulations on small entities. The Agency analyzed the economic impacts for the regulatory options that are most similar to today's proposed rule (*i.e.*, "Immediate Cleanup to Health-Based Standards" and "Flexible Cleanup to Health-Based Standards").

The RIA assumes that a small business is significantly impacted if its excess of cash flow over ten percent of its total liabilities is insufficient to meet corrective action costs, or if its net income is insufficient to meet its corrective action costs.

For the alternative analyzed, it was found that small firms encounter more severe impacts from the corrective action requirements than large firms. The options most similar to the proposed rule result in incremental impacts (*i.e.*, relative to the baseline) on approximately 9 to 11 percent of small businesses owning RCRA facilities.

Based on the Agency's guidelines for implementing the Regulatory Feasibility Act, the results of the analysis as summarized above, suggest that the proposed rule does not impose significant impacts on small entities.

C. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Reporting and recordkeeping burden on the public for this collection is estimated at 42,687 hours for the 874 respondents, with an average of 1.151 hours per response. (Burden estimates should include all aspects of the collection effort and may include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information, etc.).

If you wish to submit comments regarding any aspect of the collection of information, including suggestions for reducing the burden, or if you would like a copy of the information collection request (please reference ICR [illegible]), contact Rick Westlund, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460 (202-382-2745); and Tim Hunt, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503. The Agency will respond to any OMB or public comments on the information collection requirements contained in this proposal.

List of Subjects in 40 CFR Parts 260, 264, 270, and 271

Administrative practice and procedure, Corrective action, Hazardous waste, Insurance, Reporting and recordkeeping requirements.

Dated: July 5, 1990.

William Reilly,

Administrator.

XI. Supplementary Documents

APPENDIX A.—EXAMPLES OF CONCENTRATIONS MEETING CRITERIA FOR ACTION LEVELS

[Section 264.521(a)(2)(i-iv)]

Constituent name	Class	Air(ug/m^3)	Water (mg/L)	Soils (mg/kg)
Acetone	D		4E−03	8E+03
Acetonitrile	D		2E−01	8E+02
Acetophenone	D	2E−01	4E−03	8E+03
Acrylamide	B2	8E−04	8E−09	2E−01
Acrylonitrile	B1	1E−02	6E−09	1E−00
Aldicarb	D		5E−03	1E+02
Aldrin	B2	2E−04	2E−08	4E−02
Allyl alcohol	D		2E−01	4E+02
Aluminum phosphide	D		1E−02	3E+01
Aniline	B2		6E−03	1E+02
Antimony	D		1E−02	3E+01
Arsenic	A	7E−05	(1)	8E+01
Asbestos (2)	A	2E−02		
Barium cyanide	D		2E−03	6E+03
Barium, ionic	D	4E−01	(1)	4E+03
Benzidine	A	2E−05	2E−07	3E−03
Beryllium	B2	4E−04	8E−09	2E−01
Bis(2-ethylhexyl)phthalate	B2		3E−09	8E+01
Bis(chloroethyl)ether	B2	3E−03	3E−08	6E−01
Bromodichloromethane (3)	B2		3E−08	5E−01
Bromoform (3)	D		7E−01	2E+03
Bromomethane	D	3E+01	5E−02	1E+02
Butyl benzyl phthalate	C		7E−00	2E+04

APPENDIX A.—EXAMPLES OF CONCENTRATIONS MEETING CRITERIA FOR ACTION LEVELS—Continued

[Section 264.8210(a)(2)(i-iv)]

Constituent name	Class	Air(µg/m³)	Water (mg/L)	Soils (mg/kg)
Cadmium	B1	6E−04	(1)	4E+01
Calcium cyanide	D		1E−00	3E+00
Carbon disulfide	D		4E−07	8E+00
Carbon tetrachloride	B2	3E−02	3E−04	8E−00
Chlorat	D		7E−02	2E+02
Chlordane	B2	3E−00	3E−05	8E−01
Chlorine cyanide	D		2E−00	4E+00
Chlorobenzene	D	2E+01	7E−01	2E+00
Chloroform (3)	B2	4E−02	6E−00	1E+02
2-Chlorophenol	D		2E−01	4E+02
Chromium (VI)	A	8E−00	(1)	[illegible]
Copper cyanide	D		2E−01	4E+00
m-Cresol	D		2E−00	4E+00
o-Cresol	D		[illegible]	[illegible]
p-Cresol	D		2E−07	4E+00
Cyanide	D		7E−01	2E+00
Cyanogen	D		1E−00	3E+00
Cyanogen bromide	D		3E−00	7E+00
DDD	B2		1E−04	3E−00
DDE	B2		1E−04	3E−00
DDT	B2	1E−02	1E−04	[illegible]
Dibutyl phthalate	D		4E−00	[illegible]
Dibutylnitrosamine	B2	6E−04	6E−00	1E−01
3,3'-Dichlorobenzidine	B2		6E−05	[illegible]
Dichlorodifluoromethane	D	3E+02	7E−00	2E+04
1,2-Dichloroethane	B2	4E−02	(1)	[illegible]
1,1-Dichloroethylene	C	3E−02	(1)	1E+01
2,4-Dichlorophenol	D		1E−01	[illegible]
2,4-Dichlorophenoxyacetic acid	D		4E−01	8E+00
1,3-Dichloropropene	B2		1E−02	3E+01
Dieldrin	B2	2E−04	2E−00	4E−02
Diethyl phthalate	D		3E+01	[illegible]
Diethylnitrosamine	B2	3E−05	2E−07	[illegible]
Dimetrosa	D		7E−01	2E+00
Dimethylnitrosamine	B2	7E−05	7E−07	1E−01
m-Dinitrobenzene	D		4E−02	8E−00
2,4-Dinitrophenol	D		7E−02	2E+02
2,3-Dinitrotoluene (and 2,6-, mixture)	B2		8E−05	1E+00
1,4-Dioxane	B2		3E−00	6E+01
Diphenylamine	D		8E−01	2E+00
1,2-Diphenylhydrazine	B2	4E−03	4E−05	8E−01
Disulfoton	D		1E−03	3E−00
Endosulfan	D		2E−00	4E−00
Endothall	D		7E−01	2E+00
Endrin	D		(1)	2E+01
Epichlorohydrin	B2	8E−01	4E−03	7E+01
Ethylbenzene	D		4E-00	8E+00
Ethylene dibromide	B2	5E−03	4E−07	8E−03
Formaldehyde	B1	8E−02		
Formic acid	D		7E+01	2E+05
Glycidylaldehyde	D		1E−02	3E+01
Heptachlor	B2	8E−04	8E−00	2E−01
Heptachlor epoxide	B2	4E−04	4E−00	8E−02
Hexachlorobenzene-p-dioxin	B2	8E−07	1E−00	1E−04
Hexachlorobutadiene	C	4E−01	4E−03	8E+01
alpha-Hexachlorocyclohexane	B2	6E−04	6E−00	1E−01
beta-Hexachlorocyclohexane	C	2E−02	2E−04	4E−00
Hexachlorocyclopentadiene	D	7E−02	2E−01	6E+02
Hexachloroethane	C	3E−00	3E−02	8E+01
Hexachlorophene	D		1E−02	2E+01
Hydrazine	B2	2E−04	1E−05	2E−01
Hydrogen cyanide	D		7E−01	2E+00
Hydrogen sulfide	D		1E−01	2E+02
Isobutyl alcohol	D		1E+01	2E+04
Isophorone	C		8E−02	2E+00
Lead	B2		(1)	
Lindane (gamma-hexachlorocyclohexane)	B2/C		(1)	8E−01
m-Phenylenediamine	D		2E−01	6E+02
Maleic anhydride	D		4E−00	8E+00
Maleic hydrazide	D		2E+01	4E+04
Mercury (inorganic)	D		(1)	2E+01
Methacrylonitrile	D	7E−01	4E−00	8E+00
Methomyl	D		8E−01	2E+00
Methyl chlorocarbonate	D			
Methyl ethyl ketone	D	3E+02	8E−00	4E+00
Methyl isobutyl ketone	D	7E+01	2E−00	4E+00
Methyl parathion	D		8E−00	2E+01

APPENDIX A.—EXAMPLES OF CONCENTRATIONS MEETING CRITERIA FOR ACTION LEVELS—Continued

[Section 264.521(a)(2)(iv)]

Constituent name	Class	Air(ug/m^3)	Water (mg/L)	Soils (mg/kg)
Methylene chloride	B	3E−01	5E−03	8E+01
n-Nitroso-di-n-butylamine	B2	6E−04	6E−08	1E−01
n-Nitroso-n-ethylurea	B			
n-Nitroso-n-methylethylamine	B2		2E−08	3E−02
n-Nitrosodi-n-propylamine	B2		5E−08	1E−01
n-Nitrosodiethanolamine	B2		1E−08	3E−01
n-Nitrosodiethylamine	B2		7E−08	1E+02
n-Nitrosopyrrolidine	B2	2E−03	2E−08	3E−01
Nickel	D		7E−01	2E+03
Nickel refinery dust	A	4E−03		
Nitric oxide	D		4E−03	6E+03
Nitrobenzene	D	2E−00	2E−02	4E+01
Nitrogen dioxide	D		4E+01	8E+04
Osmium tetroxide	D		4E−03	8E−01
Parathion	C		3E−01	5E+02
Pentachlorobenzene	D		3E−02	6E+01
Pentachloronitrobenzene	C	1E−01	1E−04	2E+02
Pentachlorophenol	D		1E−03	2E+03
Phenol	D		2E−00	4E+04
Phenyl mercury acetate	D		3E−00	6E+00
Phosphine	D		1E−01	2E+01
Phthalic anhydride	D		7E−01	1E+05
Polychlorinated biphenyls	B2		5E−08	9E−02
Potassium cyanide	D		3E−03	4E+03
Potassium silver cyanide	D		7E−03	2E+04
Propanil	D		3E−03	6E+03
Pyridine	D		4E−02	8E+01
Selenious acid	D		1E−00	2E+02
Selenourea	D		3E−00	4E+02
Silver	D		(1)	2E+02
Silver cyanide	D		4E−00	8E+02
Sodium cyanide	D		1E−00	2E+03
Stoddard solvent	D		1E−00	2E+01
Styrene	C		7E−03	2E+04
1,1,1,2-Tetrachloroethane	C	1E−00	1E−00	2E+02
1,2,4,5-Tetrachlorobenzene	D		1E−02	2E+01
1,1,1,2-Tetrachloroethane	C	1E−00	1E−02	2E+02
1,1,2,2-Tetrachloroethane	C	2E−01	2E−02	4E+01
Tetrachloroethylene	B2	1E−00	7E−04	1E+01
2,3,4,6-Tetrachlorophenol	D		1E−00	2E+03
Tetraethyl lead	D		4E−05	8E−03
Tetraethylthiopyrophosphate	D		2E−00	4E+01
Thallic oxide	D		2E−03	6E−00
Thallium acetate	D		3E−03	7E−00
Thallium carbonate	D		3E−03	6E−00
Thallium chloride	D		3E−03	6E−00
Thallium nitrate	D		3E−03	7E−00
Thallium sulfate	D		3E−03	6E−00
Thiosemicarbazide	D		2E−01	5E+02
Thiram	D		2E−01	4E+02
Toluene	D	7E+03	1E+01	2E+04
Toxaphene	B2	3E−03	(1)	6E−01
1,2,4-Trichlorobenzene	D	1E+01	7E−01	2E+03
1,1,1-Trichloroethane	D	1E+03	3E−00	7E+03
1,1,2-Trichloroethane	C	6E−01	6E−03	1E+02
Trichloroethylene	B2		(1)	6E+01
Trichlorofluoromethane	D	7E+02	1E+01	2E+04
2,4,5-Trichlorophenol	D		4E−00	8E+03
2,4,6-Trichlorophenol	B2	2E−01	2E−03	4E+01
2,4,5-Trichlorophenoxyacetic acid	D		(1)	8E+02
1,2,3-Trichloropropane	D		2E−01	5E+02
Vanadium pentoxide	D		3E−01	7E+02
Xylenes	D	1E+03	7E+01	2E+05
Zinc cyanide	D		2E−00	4E+03
Zinc phosphide	D		1E−02	2E+01

(1) MCL available see appendix B.

(2) The air action level for asbestos is measured in units of fibers/milliliters.

(3) There is an MCL for total trihalomethanes, which includes four constituents: bromoform, bromodichloromethane, chloroform, and dibromochloromethane. Concentration derived using dispersion assumptions in appendix D and reference doses for systemic toxicants and verified risk-specific doses at 10−6 for Class A and B carcinogens and 10−5 for Class C carcinogens (see section VI.F.2.5 for further discussion).

A, B and C represents class A, B and C carcinogens, respectively; D represents a systemic toxicant.

Appendix B—Maximum Contaminant Levels

Constituent	MCL (ppm)
Arsenic	0.05
Barium	1
Benzene	0.005
Cadmium	0.010
Carbon tetrachloride	0.005
Chromium VI	0.05
p-Dichlorobenzene	0.075
1,2-Dichloroethane	0.005
1,1-Dichloroethylene	0.007

Appendix B—Maximum Contaminant Levels—Continued

Constituent	MCL (ppm)
2,4-D	0.1
2,4,5-TP Silvex	0.01
Endrin	0.0002
Fluoride	4.0
Lead	0.05
Lindane	0.004
Mercury	0.002
Methoxychlor	0.1
Nitrate	10

Appendix B—Maximum Contaminant Levels—Continued

Constituent	MCL (ppm)
Selenium	0.01
Silver	0.05
Toxaphene	0.005
1,1,1-Trichloroethane	0.2
Trichloroethylene	0.005
Trihalomethanes total[1]	0.10
Vinyl chloride	0.002

[1] Including chloroform, bromoform, bromodichloromethane and dibromochloromethane.

Appendix C—Range of Concentrations for Establishing Media Protection Standards for Carcinogens

Constituent name	Class	Max/Air (ug/m 3)	Min/Air (ug/m 3)	Max/Water (mg/L)	Min/Water (mg/L)	Max/Soil (mg/kg)	Min/Soil (mg/kg)
Acetone	D						
Acetonitrile	D						
Acetophenone	D						
Acrylamide	B2	6E-02	6E-04	6E-04	6E-06	2E+00	2E-01
Acrylonitrile	B1	1E-00	1E-02	6E-03	6E-05	1E+00	1E-00
Aldicarb	D						
Aldrin	B2	2E-02	2E-04	2E-04	2E-06	4E-00	4E-02
Allyl alcohol	D						
Aluminum phosphide	D						
Aniline	B2			6E-01	6E-03	1E+04	1E+02
Antimony	D						
Arsenic	A	7E-05	7E-06				
Asbestos (f)	A	2E-00	2E-02				
Barium cyanide	D						
Barium, ionic	D						
Benzidine	A	2E-03	2E-05	2E-05	2E-07	3E-01	3E-03
Beryllium	B2	4E-02	4E-04	6E-04	6E-06	2E+01	2E-01
Bis(2-ethylhexyl)phthalate	B2			3E-01	3E-03	6E+03	6E+01
Bis(chloromethyl)ether	B2	3E-01	3E-03	3E-03	3E-05	6E+01	6E-01
Bromodichloromethane	B2			3E-03	3E-05	6E+01	6E-01
Bromoform	D						
Bromomethane	D						
Butyl benzyl phthalate	C						
Cadmium	B1	6E-02	6E-04				
Calcium cyanide	D						
Carbon disulfide	D						
Carbon tetrachloride	B2	3E-00	3E-02	3E-02	3E-04	5E+02	5E-00
Chlorat	D						
Chlordane	B2	3E-01	3E-03	3E-03	3E-05	5E+01	5E-01
Chlorine cyanide	D						
Chlorobenzene	D						
Chloroform	B2	4E-00	4E-02	6E-01	6E-03	1E+04	1E+02
2-Chlorophenol	D						
Chromium (VI)	A	8E-03	8E-05				
Copper cyanide	D						
m-Cresol	D						
o-Cresol	D						
p-Cresol	D						
Cyanide	D						
Cyanogen	D						
Cyanogen bromide	D						
DDD	B2			1E-02	1E-04	3E+02	3E-00
DDE	B2			1E-02	1E-04	2E+02	2E-00
DDT	B2	1E-00	1E-02	1E-02	1E-04	2E+02	2E-00
Dibutyl phthalate	D						
Dibutylnitrosamine	B2	6E-02	6E-04	6E-04	6E-06	1E+01	1E-01
3,3'-Dichlorobenzidine	B2			6E-03	6E-05	2E+02	2E-00
Dichlorodifluoromethane	D						
1,2-Dichloroethane	B2	4E-00	4E-02	4E-02	4E-04	6E+02	6E-00
1,1-Dichloroethylene	C	3E-01	3E-03	6E-03	6E-05	1E+02	1E-00
2,4-Dichlorophenol	D						
2,4-Dichlorophenoxyacetic acid	D						
1,3-Dichloropropene	B2						
Dieldrin	B2	2E-02	2E-04	2E-04	2E-06	4E-00	4E-02
Diethyl phthalate	D						

APPENDIX C—RANGE OF CONCENTRATIONS FOR ESTABLISHING MEDIA PROTECTION STANDARDS FOR CARCINOGENS—Continued

Constituent name	Class	MaxAir (ug/m 3)	MinAir (ug/m 3)	Max-Water (mg/L)	MinWater (mg/L)	MaxSoil (mg/kg)	MinSoil (mg/kg)
Diethylnitrosamine	B2	2E-03	2E-05	2E-05	2E-07	5E-01	5E-03
Dieldrin	D						
Dimethylnitrosamine	B2	7E-03	7E-05	7E-05	7E-07	1E-00	1E-02
m-Dinitrobenzene	D						
2,4-Dinitrophenol	D						
2,3-Dinitrotoluene (and 2,5-, mixture)	B2			5E-03	5E-05	1E-00	1E-00
1,4-Dioxane	B2			3E-01	3E-03	[illegible]	6E+01
Diphenylamine	D						
1,2-Diphenylhydrazine	B2	4E-01	4E-03	4E-03	4E-05	[illegible]	9E-01
Disulfoton	D						
Endosulfan	D						
Endothall	D						
Endrin	D						
Epichlorohydrin	B2	9E+01	9E-01	4E-01	4E-03	[illegible]	7E+01
Ethylbenzene	D						
Ethylene dibromide	B2	5E-01	5E-03	4E-05	4E-07	[illegible]	9E-03
Formaldehyde	B1	6E-00	6E-02				
Formic acid	D						
Glycidylaldehyde	D						
Heptachlor	B2	8E-02	8E-04	8E-04	8E-06	[illegible]	2E-01
Heptachlor epoxide	B2	4E-02	4E-04	4E-04	4E-06	[illegible]	8E-02
Hexachlorobenzene	B2	6E-05	6E-07	6E-07	1E-08	[illegible]	1E-04
Hexachlorobutadiene	C	4E-00	4E-02	4E-02	4E-04	[illegible]	9E-00
alpha-Hexachlorocyclohexane	B2	6E-02	6E-04	6E-04	6E+00	[illegible]	1E-01
beta-Hexachlorocyclohexane	C	2E-01	2E-03	2E-03	2E-05	[illegible]	4E-01
Hexachlorocyclopentadiene	D						
Hexachloroethane	C	3E+01	3E-01	3E-01	3E-03	[illegible]	6E+01
Hexachlorophene	D						
Hydrazine	B2	2E-02	2E-04	1E-03	1E-05	[illegible]	2E-01
Hydrogen cyanide	D						
Hydrogen sulfide	D						
Isobutyl alcohol	D						
Isophorone	C			9E-01	9E-03	2E+04	2E+02
Lead	B2						
Lindane (gamma-hexachlorocyclohexane)	B2/C			3E-03	3E-05	6E+01	6E-01
m-Phenylenediamine	D						
Maleic anhydride	D						
Maleic hydrazide	D						
Mercury (inorganic)	D						
Methacrylonitrile	D						
Methanol	D						
Methyl chlorocarbonate	D						
Methyl ethyl ketone	D						
Methyl isobutyl ketone	D						
Methyl parathion	D						
Methylene chloride	B	3E+01	3E-01	5E-01	5E-03	9E+03	9E+01
n-Nitroso-di-n-butylamine	B2	6E-02	6E-04	6E-04	6E+00	1E-03	1E-01
n-Nitroso-n-ethylurea	B						
n-Nitroso-n-methylethylamine	B2			2E-04	2E-06	3E-03	3E-02
n-Nitroso-n-propylamine	B2			5E-04	5E-06	[illegible]	1E-01
n-Nitrosodiethylamine	B2			1E-03	1E-05	[illegible]	3E-01
n-Nitrosodiphenylamine	B2			7E-01	7E-03	[illegible]	1E+02
n-Nitrosopyrrolidine	B2	2E-01	2E-03	2E-03	2E-05	[illegible]	3E-01
Nickel	D						
Nickel refinery dust	A	4E-01	4E-03				
Nickel oxide	D						
Nitrobenzene	D						
Nitrogen dioxide	D						
Osmium tetroxide	D						
Paraldehyde	C						
Pentachlorobenzene	D						
Pentachloronitrobenzene	C	1E-00	1E-02				
Pentachlorophenol	D						
Phenol	D						
Phenyl mercuric acetate	D						
Phosphine	D						
Phthalic anhydride	D						
Polychlorinated biphenyls	B2			5E-04	5E-06	9E-03	9E-02
Potassium cyanide	D						
Potassium silver cyanide	D						
Pronamide	D						
Pyridine	D						
Selenious acid	D						
Selenourea	D						
Silver	D						
Silver cyanide	D						
Sodium cyanide	D						
Strychnine	D						

APPENDIX C—RANGE OF CONCENTRATIONS FOR ESTABLISHING MEDIA PROTECTION STANDARDS FOR CARCINOGENS—Continued

Constituent name	Class	MaxAir (ug/m 3)	MinAir (ug/m 3)	Max-Water (mg/L)	MinWater (mg/L)	MaxSoil (mg/kg)	MinSoil (mg/kg)
Styrene	C						
1,1,1,2-Tetrachloroethane	C	1E+01	1E-01	1E-01	3E+03	3E+03	3E+01
1,2,4,5-Tetrachlorobenzene	D						
1,1,1,2-Tetrachloroethane	C	1E+01	1E-01	1E-01	1E-03	3E+03	3E+01
1,1,2,2-Tetrachloroethane	C	2E-03	2E-02	2E-02	2E-04	4E+02	4E-03
Tetrachloroethylene	B2	1E+02	1E-00	7E-02	7E-04	1E+03	1E+01
2,3,4,6-Tetrachlorophenol	D						
Tetraethyl lead	D						
Tetraethylthiopyrophosphate	D						
Thallic oxide	D						
Thallium acetate	D						
Thallium carbonate	D						
Thallium chloride	D						
Thallium nitrate	D						
Thallium sulfate	D						
Thiosemicarbazide	D						
Thiram	D						
Toluene	D						
Toxaphene	B2	3E-01	3E-03	3E-03	3E-05	6E+01	6E-01
1,2,4-Trichlorobenzene	D						
1,1,1,Trichloroethane	D						
1,1,2-Trichloroethane	C	6E-00	6E-02	6E-02	6E-04	1E+03	1E+01
Trichloroethylene	B2			3E-01	3E-03	6E+03	6E+01
Trichloromonofluoromethane	D						
2,4,5-Trichlorophenol	D						
2,4,6-Trichlorophenol	B2	2E+01	2E-01	2E-01	2E-03	4E+03	4E+01
2,4,5-Trichlorophenoxyacetic acid	D						
1,2,3-Trichloropropane	D						
Vanadium pentoxide	D						
Xylenes	D						
Zinc cyanide	D						
Zinc phosphide	D						

Appendix D: Recommended Exposure Assumptions for Use in Deriving Action Levels

(Sections 264.521 (a)(2); (b); (c)(3); and (d))

1. In deriving action levels for hazardous constituents in ground-water, assume a water intake of 2 liters/day for 70 kg adult/70 year lifetime exposure period.

2. In deriving action levels for hazardous constituents in air, assume air intake of 20 cubic meters/day for 70 kg adult/70 year lifetime exposure period.

3. In deriving action levels for hazardous constituents in soil, which are known or suspected to be carcinogens, assume soil intake of 0.1 gram/day for 70 kg adult/70 year lifetime exposure period.

4. In deriving action levels for hazardous constituents in soil, other than those which are known or suspected to be carcinogens, assume soil intake of 0.2 gram/day for 16 kg child/5 year exposure period (age 1–6).*

5. In deriving action levels for hazardous constituents in surface water designated by the State for use as a drinking water source, assume a water intake of 2 liters/day for 70 kg adult/70 year lifetime exposure period, unless intake of aquatic organisms is also of concern.

* Not to be averaged over a 70-year lifetime.

Appendix E: Examples of Calculations of Action Levels

I. Governing Equations for Calculating Action Levels

A. *Systemic Toxicants*

$C_m = [RfD*W]/[I*A]$

where:

C_m = action level in medium (units are medium-dependent);

RfD = reference dose (mg/kg/day);

W = body weight (kg);

I = intake assumption (units are medium-dependent); and

A = absorption factor [1] (dimensionless).

B. *Carcinogenic Constituents*

$C_m = [R*W*LT]/[CSF*I*A*ED]$

where:

C_m = action level in medium (units are medium-dependent);

R = assumed risk level (dimensionless) (10^{-6} for class A & B; 10^{-5} for class C carcinogens);

W = body weight (kg);

LT = assumed lifetime (years);

CSF = carcinogenic slope factor $(mg/kg/day)^{-1}$;

I = intake assumption (units are medium-dependent);

A = absorption factor (dimensionless); and

ED = exposure duration (years).

[1] Assumed to be 1 for this appendix, based upon the assumption that the human absorption rate will be the same as the rate in the study upon which the RfD or CPF was developed.

II. Example Calculations for Hazardous Constituents in Air

A. *Systemic Toxicants*

Example calculation for 2,4-dinitrophenol:

$C_a = [0.002\ (mg/kg/d)*1000\ (\mu g/mg)*70(kg)]/[20\ (m^3/d)*1] = 7.0\ \mu g/m^3$

where:

C_a = action level in air ($\mu g/m^3$)

RfD = 0.002 mg/kg/day

W = 70 kg adult

I = 20 m^3/day

A = 1

B. *Carcinogenic Constituents*

Example calculation for 1,1,2,2-tetrachloroethane:

$C_a = [10^{-5}*1000\ (\mu g/mg)*70\ (yrs)*70\ (kg)]/[0.20\ (mg/kg/day)^{-1}*20\ (m^3/day)*1*70\ (yrs)] = .175\ \mu g/m$

where:

C_a = action level in air ($\mu g/m^3$)

R = 10^{-5} (1,1,2,2-Tetrachloroethane is a Class C carcinogen)

W = 70 kg adult

LT = 70 year lifetime

CSF = 0.20 $(mg/kg/day)^{-1}$

I = 20 m^3/day

A = 1

ED = 70 year exposure duration

III. Sample Calculation for Hazardous Constituents in Water

A. *Systemic Toxicants*

Sample calculation for toluene:

$C_w = [0.30\ (mg/kg/day)*70\ (kg)]/[2\ (L/day)*1] = 10.5\ mg/L$

where:

C_w = action level in water (mg/L)

RfD = 0.30 mg/kg/day for toluene
W = 70 kg adult
I = 2 L/day
A = 1

B. *Carcinogenic Constituents*

Sample calculation for 1,1,2,2-tetrachloroethane:

$C_w = \{10^{-6} * 70\ (kg) * 70\ (yr)\} / [0.20\ (mg/kg/day)^{-1} * 2\ (L/day) * 1 * 70\ (yr)] = 1.75E-03$ mg/L

where:
C_w = action level in water (mg/L)
R = 10^{-6} (1,1,2,2-Tetrachloroethane is a Class C carcinogen)
W = 70 kg adult
LT = 70 year lifetime
CSF = 0.20 $(mg/kg/day)^{-1}$
I = 2 L/day
A = 1
ED = 70 year exposure duration

IV. Sample Calculations for Hazardous Constituents in Soils

A. *Systemic Toxicants*

Example calculations for toluene:

$C_s = \{0.30\ (mg/kg/day) * 16\ (kg)\} / [0.2\ (g/day) * 1 * 0.001\ (kg/g)] = 24{,}000$ mg/kg

where:
C_s = action level in soil (mg/kg)
RfD = 0.30 mg/kg/day for toluene
W = 16 kg (6 year old child)
I = 0.2 g/day
A = 1

B. *Carcinogenic Constituents*

Sample calculation for 1,1,2,2-tetrachloroethane:

$C_s = \{10^{-6} * 70\ (kg) * 70\ (yrs)\} / [0.20\ (mg/kg/day)^{-1} * 0.1\ (g/day) * 0.002\ (kg/g) * 1 * 70\ (yrs)] = 35.0$ mg/kg

where:
C_s = action level in soil (mg/kg)
R = 10^{-6} (1,1,2,2-tetrachloroethane is a Class C carcinogen)
W = 70 kg adult
LT = 70 year lifetime
CSF = 0.20 $(mg/kg/day)^{-1}$
I = 0.1 g/day
A = 1
ED = 70 year exposure duration

APPENDIX F—LIST OF CONSTITUENTS SHOWING ACTION LEVEL SOURCE DATA

Constituent name	Class	Noncarcinogenic effects: Oral RfD (mg/kg/d)	Noncarcinogenic effects: Inhalation RfD (mg/kg/d)	Carcinogenic effects: Oral slope factor (mg/kg/d)	Carcinogenic effects: Inhalation slope factor (mg/kg/d) [1]
Acetone	D	1.0E−01			
Acetonitrile	D	6.0E−03			
Acetophenone	D	1.0E−01	5.0E−05		
Acrylamide	B2	2.0E−04		4.5E−01	4.5E−00
Acrylonitrile	B1			5.4E−01	2.4E−01
Aldicarb	D	1.3E−03			
Aldrin	B2	3.0E−05		1.7E+01	1.7E+01
Allyl alcohol	D	5.0E−03			
Aluminum phosphide	D	4.0E−04			
Aniline	B2			5.7E−03	
Antimony	D	4.0E−04			
Arsenic	A	1.0E−03			5.0E+01
Asbestos (f)	A				2.3E−01
Barium cyanide	D	7.0E−02			
Barium, ions	D	5.0E−02	1.0E−04		
Benzidine	A	3.0E−03		2.3E+02	2.3E+02
Beryllium	B2	5.0E−03		4.3E−00	8.4E−00
Bis(2-ethylhexyl)phthalate	B2	2.0E−02		1.4E−02	
Bis(chloromethyl)ether	B2			1.1E−00	1.1E−00
Bromodichloromethane	B2	2.0E−02		1.3E−00	
Bromoform	D	2.0E−02			
Bromomethane	D	1.4E−03	8.0E−03		
Butyl benzyl phthalate	C	2.0E−01			
Cadmium	B1	5.0E−04			6.1E−00
Calcium cyanide	D	4.0E−02			
Carbon disulfide	D	1.0E−01			
Carbon tetrachloride	B2	7.0E−04		1.3E−01	1.3E−01
Chlorat	D	2.0E−03			
Chlordane	B2	6.0E−05		1.3E+00	1.3E−00
Chlorine cyanide	D	5.0E−02			
Chloroacetone	D	2.0E−02	5.0E−03		
Chloroform	B2	1.0E−02		6.1E−03	8.1E−02
2-Chlorophenol	D	5.0E−03			
Chromium (VI)	A	5.0E−03			4.1E+01
Copper cyanide	D	5.0E−03			
m-Cresol	D	5.0E−02			
o-Cresol	D	5.0E−02			
p-Cresol	D	5.0E−02			
Cyanide	D	2.0E−02			
Cyanogen	D	4.0E−02			
Cyanogen bromide	D	9.0E−02			
DDD	B2			2.4E−01	
DDE	B2			3.4E−01	
DDT	B2	5.0E−04		3.4E−01	3.4E−01
Dibutyl phthalate	D	1.0E−01			
Dibutylnitrosamine	B2			5.4E−00	5.4E−00
3,3'-Dichlorobenzidine	B2			4.5E−01	
Dichlorodifluoromethane	D	2.0E−01	5.0E−02		
1,2-Dichloroethane	B2			9.1E−02	9.1E−02
1,1-Dichloroethylene	C	9.0E−03		6.0E−01	1.2E−00
2,4-Dichlorophenol	D	3.0E−03			
2,4-Dichlorophenoxyacetic acid	D	1.0E−02			
1,3-Dichloropropene	B2	3.0E−04			
Dieldrin	B2	5.0E−05		1.6E+01	1.6E+01
Diethyl phthalate	D	8.0E−01			
Diethylnitrosamine	B2			1.5E+02	1.5E+02

APPENDIX F—LIST OF CONSTITUENTS SHOWING ACTION LEVEL SOURCE DATA—Continued

Constituent name	Class	Noncarcinogenic effects		Carcinogenic effects	
		Oral RfD (mg/kg/d)	Inhalation RfD (mg/kg/d)	Oral slope factor (mg/kg/d)-1	Inhalation slope factor (mg/kg/d)-1
Dimethoate	D	2.0E-02			
Dimethylnitrosamine	B2			5.1E+01	5.1E+01
m-Dinitrobenzene	D	1.0E-04			
2,4-Dinitrophenol	D	2.0E-03			
2,3-Dinitrotoluene (and 2,6-, mixture)	B2			6.8E-01	
1,4-Dioxane	B2			1.1E-02	
Diphenylamine	D	2.5E-02			
1,2-Diphenylhydrazine	B2			8.0E-01	8.0E-01
Disulfoton	D	4.0E-05			
Endosulfan	D	5.0E-03			
Endothall	D	2.0E-02			
Endrin	D	3.0E-04			
Epichlorohydrin	B2	2.0E-03		9.9E-03	4.9E-03
Ethylbenzene	D	1.0E-01			
Ethylene dibromide	B2			8.5E+01	7.9E-01
Formaldehyde	B1				4.5E-02
Formic acid	D	2.0E-01			
Glycidylaldehyde	D	4.0E-04			
Heptachlor	B2	5.0E-04		4.5E-03	4.5E-03
Heptachlor epoxide	B2	1.3E-05		9.1E-03	9.1E-03
Hexachlorobenzene-p-dioxin	B2			6.2E+03	6.2E+03
Hexachlorobutadiene	C	2.0E-03		7.8E-02	7.8E-02
alpha-Hexachlorocyclohexane	B2			6.3E-03	6.3E-03
beta-Hexachlorocyclohexane	C			1.8E-03	1.8E-03
Hexachlorocyclopentadiene	D	7.0E-03	2.0E-05		
Hexachloroethane	C	1.0E-03		1.4E-02	1.4E-02
Hexachlorophene	D	3.0E-04			
Hydrazine	B2			3.0E-03	1.7E+01
Hydrogen cyanide	D	2.0E-02			
Hydrogen sulfide	D	3.0E-03			
Isobutyl alcohol	D	3.0E-01			
Isophorone	C	2.0E-01		4.1E-03	
Lead	B2				
Lindane (gamma-hexachlorocyclohexane)	B2/C	3.0E-04		1.3E-03	
m-Phenylenediamine	D	6.0E-03			
Maleic anhydride	D	1.0E-01			
Maleic hydrazide	D	5.0E-01			
Mercury (inorganic)	D	3.0E-04			
Methacrylonitrile	D	1.0E-04	2.0E-04		
Methomyl	D	2.5E-02			
Methyl chlorocarbonate	D				
Methyl ethyl ketone	D	5.0E-02	9.0E-02		
Methyl isobutyl ketone	D	5.0E-02	2.0E-02		
Methyl parathion	D	2.5E-04			
Methylene chloride	B	6.0E-02		7.5E-03	1.4E-02
n-Nitroso-di-n-butylamine	B2			5.4E-03	5.4E-03
n-Nitroso-n-dinitrous	B				
n-Nitroso-n-methylethylamine	B2			2.2E+01	
n-Nitroso-n-propylamine	B2			7.0E-03	
n-Nitrosodiethanolamine	B2			2.9E-03	
n-Nitrosodiphenylamine	B2			4.9E-03	
n-Nitrosopyrrolidine	B2			2.1E-03	2.1E-03
Nickel	D	2.0E-02			
Nickel refinery dust	A				8.4E-01
Nitric oxide	D	1.0E-01			
Nitrobenzene	D	5.0E-04	6.0E-04		
Nitrogen dioxide	D	1.0E-00			
Osmium tetroxide	D	1.0E-05			
Parathion	C	6.0E-03			
Pentachlorobenzene	D	8.0E-04			
Pentachloronitrobenzene	C	3.0E-03			2.6E-01
Pentachlorophenol	D	3.0E-02			
Phenol	D	6.0E-01			
Phenyl mercuric acetate	D	8.0E-05			
Phosphine	D	3.0E-04			
Phthalic anhydride	D	2.0E-00			
Polychlorinated biphenyls	B2			7.7E-03	
Potassium cyanide	D	5.0E-02			
Potassium silver cyanide	D	2.0E-01			
Promanide	D	7.5E-02			
Pyridine	D	1.0E-03			
Selenious acid	D	3.0E-03			
Selenourea	D	5.0E-03			
Silver	D	3.0E-03			
Silver cyanide	D	1.0E-01			
Sodium cyanide	D	4.0E-02			

APPENDIX F—LIST OF CONSTITUENTS SHOWING ACTION LEVEL SOURCE DATA—Continued

Constituent name	Class	Noncarcinogens effective		Carcinogens effective	
		Oral RfD (mg/kg/d)	Inhalation RfD (mg/kg/d)	Oral slope factor (mg/kg/d)$^{-1}$	Inhalation slope factor (mg/kg/d)$^{-1}$
Strychnine	D	3.0E−04			
Styrene	C	2.0E−01			
1,1,1,2-Tetrachloroethane	C	3.0E−02		[illegible]	2.0E−02
1,2,4,5-Tetrachlorobenzene	D	3.0E−04			
1,1,1,2-Tetrachloroethane	C	3.0E−02		[illegible]	[illegible]
1,1,2,2-Tetrachloroethane	C			[illegible]	[illegible]
Tetrachloroethylene	B2	1.0E−02		[illegible]	[illegible]
2,3,4,6-Tetrachlorophenol	D	3.0E−02			
Tetraethyl lead	D	1.0E−07			
Tetraethylthiopyrophosphate	D	5.0E−04			
Thallic oxide	D	7.0E−05			
Thallium carbonate	D	9.0E−05			
Thallium carbonate	D	8.0E−05			
Thallium chloride	D	8.0E−05			
Thallium nitrate	D	9.0E−05			
Thallium sulfate	D	8.0E−05			
Thiosemicarbazide	D	8.0E−03			
Thiram	D	5.0E−03			
Toluene	D	3.0E−01	2.0E−00		
Toxaphene	B2			[illegible]	[illegible]
1,2,4-Trichlorobenzene	D	[illegible]	[illegible]		
1,1,1-Trichloroethane	D	[illegible]	[illegible]		
1,1,2-Trichloroethane	C	4.0E−03		[illegible]	[illegible]
Trichloroethylene	B2			[illegible]	
Trichloromonofluoromethane	D	3.0E−01	2.0E−01		
2,4,5-Trichlorophenol	D	1.0E−01			
2,4,6-Trichlorophenol	B2			[illegible]	[illegible]
2,4,5-Trichlorophenoxyacetic acid	D	1.0E−02			
1,2,3-Trichloropropane	D	6.0E−03			
Vanadium pentoxide	D	9.0E−03			
Xylenes	D	2.0E−00	3.0E−01		
Zinc cyanide	D	5.0E−02			
Zinc phosphide	D	3.0E−04			

For the reasons set out in the preamble, 40 CFR parts 264, 265, 270, and 271 are proposed to be amended as follows:

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

1. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

2. Section 264.1 is amended by revising paragraphs (d) and (g) introductory text to read as follows:

§ 264.1 Purpose, scope and applicability.

* * * * *

(d) The requirements of this part apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection control (UIC) program approved or promulgated under the Safe Drinking Water Act only to the extent they are required by § 144.14 of this chapter and to the extent they are included in a RCRA permit by rule granted to such a person under part 270 of this chapter.

* * * * *

(g) Except as required under subpart S of this part governing releases from solid waste management units, the requirements of this part do not apply to:

* * * * *

§ 264.101 [Removed]

3. In 40 CFR part 264, subpart F, it is proposed to remove § 264.101.

4. In 40 CFR part 264, subpart G, it is proposed to amend § 264.113 by redesignating paragraphs (a)(1)(ii) as (a)(1)(iii) and (b)(1)(ii) as (b)(1)(iii), and by adding new paragraphs (a)(1)(ii) and (b)(1)(ii) to read as follows:

§ 264.113 Closure time allowed for closure.

* * * * *

(a) * * *

(1) * * *

(ii) Corrective action required at the unit or the facility under subpart S will delay the completion of partial or final closure; or

* * * * *

(b) * * *

(1) * * *

(ii) Corrective action required at the unit or the facility under subpart S will delay the completion of partial or final closure; or

* * * * *

5. 40 CFR part 264 is amended by adding subpart S to read as follows:

Subpart S—Corrective Action for Solid Waste Management Units

264.500 Purpose and applicability.
264.501 Definitions.
264.502–264.509 [Reserved]
264.510 Requirement to perform remedial investigations.
264.511 Scope of remedial investigations.
264.512 Plans for remedial investigations.
264.513 Reports of remedial investigations.
264.514 Determination of no further action.
264.515–264.519 [Reserved]
264.520 Requirement to perform corrective measure study.
264.521 Action levels.
264.522 Scope of corrective measure studies.
264.523 Plans for corrective measure studies.
264.524 Reports of corrective measure studies.
264.525 Selection of remedy.
264.526 Permit modification for remedy.
264.527 Remedy design.
264.528 Progress reports.
264.529 Review of remedy implementation.
264.530 Completion of remedies.

264.531 Determination of technical impracticability.
264.532–264.539 [Reserved]
264.540 Interim measures.
264.541–264.549 [Reserved]
264.550 Management of wastes.
264.551 Management of hazardous wastes.
264.552 Management of non-hazardous solid wastes.
264.553–264.559 [Reserved]
264.560 Required notices.

Subpart S—Corrective Action for Solid Waste Management Units

§ 264.500 Purpose and applicability.

(a) The provisions of this subpart establish requirements for investigation and corrective action for releases of hazardous waste, including hazardous constituents, from solid waste management units.

(b) The owner or operator of a facility seeking a permit under subtitle C of RCRA must institute investigations and/or corrective action as necessary to protect human health and the environment for all releases of hazardous waste, including hazardous constituents, from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

(c) Requirements for investigations and/or corrective action will be specified in the permit. The permit will contain schedules of compliance for such investigations and/or corrective action (where such cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.

(d) The owner or operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the Regional Administrator that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. The owner or operator is not relieved of responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for completing such corrective action must be provided.

(e) For protection of ground water from landfills, surface impoundments, land treatment units, and waste piles that received listed or identified hazardous waste after July 26, 1982, the provisions of this subpart apply only as specifically provided herein.

(f) The provisions of this subpart do not apply to:

(1) Permits for land treatment demonstrations using field test or laboratory analyses (see § 270.63).

(2) Emergency permits (see § 270.61).

(3) Permits by rule for ocean disposal barges or vessels (see § 270.60(a)).

(4) Research, development, and demonstration permits (see § 270.65).

§ 264.501 Definitions.

For the purpose of complying with the requirements of this subpart, the following definitions apply:

Corrective Action Management Unit means a contiguous area within a facility as designated by the Regional Administrator for the purpose of implementing corrective action requirements of this subpart, which is contaminated by hazardous wastes (including hazardous constituents), and which may contain discrete, engineered land-based sub-units.

Facility means all contiguous property under the control of the owner or operator seeking a permit under subtitle C of RCRA.

Hazardous Constituent means any constituent identified in appendix VIII of 40 CFR part 261, or any constituent identified in appendix IX of 40 CFR part 264.

Hazardous Waste means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical chemical, or infectious characteristics may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. The term hazardous waste includes hazardous constituent as defined above.

Release means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

Solid Waste Management Unit means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

§§ 264.502–264.509 [Reserved]

§ 264.510 Requirement to perform remedial investigations.

If the Regional Administrator determines that hazardous waste (including hazardous constituents) have been, are likely to have been, or, based on site-specific circumstances, are likely to be released into the environment from a solid waste management unit at the facility, the Regional Administrator may specify in the permit schedule of compliance that the permittee investigate and characterize solid waste management units and releases from solid waste management units at the facility.

§ 264.511 Scope of remedial investigations.

(a) Investigations required under § 264.510 shall characterize the nature, extent, direction, rate, movement, and concentration of releases, as required by the Regional Administrator. In addition, such investigations may include, but are not limited to, the following:

(1) Characterizations of the environmental setting at the facility, including:

(i) Hydrogeological conditions;

(ii) Climatological conditions;

(iii) Soil characteristics;

(iv) Surface water and sediment quality and other characteristics; or

(v) Air quality and meteorological conditions.

(2) Characterization of solid waste management units from which releases have been or may be occurring, including unit and waste characteristics.

(3) Descriptions of humans and environmental systems which are, may have been, or, based on site-specific circumstances, may be exposed to release(s).

(4) Information that will assist the Regional Administrator in assessing risks to human health and the environment from releases from solid waste management units.

(5) Extrapolations of future movement, degradation and fate of contaminants.

(6) Laboratory, bench-scale or pilot-scale tests or studies to determine the feasibility or effectiveness of treatment technologies or other technologies that may be appropriate in implementing remedies at the facility.

(7) Statistical analyses to aid in the interpretation of data required under § 264.510, in accordance with statistical methods approved by the Regional Administrator.

(b) Samples of ground water, surface water, soils, or air which are collected as part of remedial investigations

required under § 264.510 shall be analyzed for those constituents and parameters determined to be necessary by the Regional Administrator to accurately and adequately characterize the presence of hazardous waste (including hazardous constituents) in the samples.

§ 264.512 Plans for remedial investigations.

(a) The Regional Administrator may require the permittee to develop and submit a plan(s) for conducting any remedial investigations required under § 264.510 of this subpart. Such plans shall be subject to review and approval or modification by the Regional Administrator, and shall be developed and submitted according to a schedule specified in the schedule of compliance. Such plans may include, but are not limited to, the following:

(1) Overall [illegible] objectives, [illegible] qualifications of personnel [illegible] objectives;

(2) Technical [illegible] approach and methods for the investigations;

(3) Quality assurance procedures, including:

(i) Data collection strategy;

(ii) Sampling; chain of custody procedures; and

(iii) Methods of sample analysis.

(4) Data management procedures, including formats for documenting analytical results and tracking sample custody, and other results of investigations.

(b) Upon approval or modification of the plan by the Regional Administrator, the plan shall be incorporated expressly or by reference as a part of the permit schedule of compliance. The permittee shall conduct the studies and investigations in accordance with the plan and any other requirements specified in the permit schedule of compliance.

§ 264.513 Reports of remedial investigations.

(a) The Regional Administrator may require periodic reports to be submitted by the permittee during remedial investigations required under § 264.510, and may, based on information from the investigations, or other information, require new or modified investigations. Such modifications will, if necessary, be specified by modifying the permit schedule of compliance.

(b) Upon conclusion of the remedial investigations, the permittee shall submit to the Regional Administrator for approval:

(1) A final report describing the procedures, methods, and results of the remedial investigations, in such format and containing such information as specified by the Regional Administrator; and

(2) A summary of the report.

(c) If, upon receipt of the final report and summary, the Regional Administrator determines that the final report and summary do not fully satisfy the requirements for the report and summary specified in the permit schedule of compliance, or otherwise do not provide a full and accurate summary and description of the remedial investigations, the Regional Administrator may require the permittee to submit a revised report.

(d) Upon approval of the summary, the permittee shall mail it to all individuals on the facility mailing list (required under § 124.10(c)(1)(viii)).

(e) All raw data, such as laboratory reports, drilling logs, and other supporting information generated from investigations required under § 264.510 shall be made available at a location (or other location approved by the Regional Administrator) designated in the permit, including any interim or permit.

§ 264.514 Determination of no further action.

(a)(1) Based on the results of investigations required under § 264.510 or other relevant information, the permittee may submit an application to the Regional Administrator for a permit modification to terminate the schedule of compliance for corrective action, according to the procedures for Class III permit modifications under § 270.42.

(2) The permit modification application must contain information demonstrating that there are no releases of hazardous waste (including hazardous constituents) from solid waste management units at the facility that may pose a threat to human health or the environment.

(b) If the Regional Administrator, upon review of the request for a permit modification, reports submitted under § 264.513, or other information, determines that there is no such threat to human health and the environment from releases from solid waste management units at the facility. The Regional Administrator shall grant the permit modification according to the procedures of § 270.42.

(c) Any determination made pursuant to § 264.514(b) will not affect the authority or responsibility of the Regional Administrator to:

(1) Modify the permit at a later date to require the permittee to perform such investigations and studies as may be necessary to comply with the requirements of this Subpart, if new information or subsequent analysis indicates that there may [illegible] likely to be, releases from solid [illegible] management units at the facility that may pose a threat to human health or the environment; or

(2) Require continued [illegible] monitoring under the [illegible] permit if the Regional Administrator determines [illegible] circumstances that [illegible] likely to occur.

§§ 264.515-264.519 [illegible]

§ 264.520 Requirements [illegible] corrective measures.

(a) If at any time [illegible] Administrator determines [illegible] concentration of hazardous constituents in groundwater, soil, or other media, equipment, [illegible] § 264.520(a).

(b) If the Regional Administrator determines that a release [illegible] in a concentration [illegible] level (as defined under § 264.521) may pose a threat to human health [illegible] environment, given the [illegible] exposure conditions, [illegible] to believe that the constituent(s) has been released from a solid waste management unit at the facility, the Regional Administrator may require a corrective measure study according to the requirements of § 264.520.

(c) If an action level has been exceeded (as provided under § 264.520(a)), but the Regional Administrator determines that the release(s) may nevertheless not pose a threat to human health and the environment, the Regional Administrator may allow the permittee to apply for a determination of no further action, according to § 264.514.

(d) The Regional Administrator shall notify the permittee in writing of the requirement to conduct a corrective measure study. This notice shall identify the hazardous constituent(s) which exceed action levels defined under § 264.521, as well as any hazardous constituent(s) identified pursuant to § 264.520(b).

(e) For purposes of §§ 264.520, 264.521, 264.525 (d) and (e), the term "constituent" refers to hazardous

constituents, as defined in § 264.501, as well as other hazardous wastes (as defined in § 264.501) that are single chemical constituents.

§ 264.521 Action levels.

Action levels are defined as follows:

(a) Action levels for constituents in ground water in an aquifer which the Regional Administrator has reason to believe may have been released from a solid waste management unit at the facility shall be concentration levels specified as:

(1) Maximum contaminant levels (MCLs) promulgated under § 141.2 of the Safe Drinking Water Act (40 CFR part 141 subpart B); or

(2) For constituents for which MCLs have not been promulgated, a concentration which satisfies the following criteria, assuming exposure through consumption of the water contaminated with the constituent:

(i) Is derived in a manner consistent with Agency guidelines for assessing the health risks of environmental pollutants (51 FR 33992; 34006; 34014, 34028); and

(ii) Is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act (TSCA) Good Laboratory Practice Standards (40 CFR part 792), or equivalent; and

(iii) For carcinogens, represents a concentration associated with an excess upper bound lifetime cancer risk of $1x10^{-6}$ due to continuous constant lifetime exposure, and considers the overall weight of evidence for carcinogenicity; and

(iv) For systemic toxicants, represents a concentration to which the human population (including sensitive subgroups) could be exposed on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime.

(b) Action levels for constituents in air which the Regional Administrator has reason to believe may have been released from a solid waste management unit at the facility shall be defined as concentrations which meet the criteria specified in § 264.521(a)(2)(i)–(iv), assuming exposure through inhalation of the air contaminated with the constituent, as measured or estimated at the facility boundary, or another location closer to the unit if necessary to protect human health and the environment.

(c) Action levels for constituents in surface water which the Regional Administrator has reason to believe may have been released from a solid waste management unit at the facility shall be specified as:

(1) Water Quality Standards established pursuant to section 303(c) of the Clean Water Act (40 CFR part 131) by the State in which the facility is located, where such standards are expressed as numeric values; or

(2) Numeric interpretations of State narrative water quality standards, if appropriate, where water quality standards expressed as numeric values have not been established by the State; or

(3) MCLs promulgated under the Safe Drinking Water Act for constituents in surface waters designated by the State for drinking water supply, where numeric values or numeric interpretations, described in paragraphs (1) and (2), are not available; or

(4) For constituents in surface waters designated by the State for drinking water supply for which numeric values, numeric interpretations or MCLs (as described in paragraphs 1–3 above) are not available, a concentration which meets the criteria specified in § 264.521(a)(2)(i)–(iv), assuming exposure through consumption of the water contaminated with the constituent; or

(5) For constituents in surface waters designated for a use or uses other than drinking water supply and for which numeric values or numeric interpretations (as described in paragraphs (1) and (2) above) have not been established, a concentration established by the Regional Administrator which meets the criteria specified in § 264.521(a)(2)(i)–(iv), considering the use or uses of the receiving waters.

(d) Action levels for constituents in soils that the Regional Administrator has reason to believe may have been released from a solid waste management unit at the facility shall be defined as concentrations which meet the criteria specified in § 264.521(a)(2)(i)–(iv), assuming exposure through consumption of the soil contaminated with the constituent.

(e) If, for a constituent(s) detected in ground water in an aquifer, air, surface water or soils, a concentration level that meets the criteria of § 264.521(a)–(d) is not available, the Regional Administrator may establish an action level for the constituent as:

(1) A level that is an indicator for protection of human health and the environment, using the exposure assumptions for the medium specified under § 264.521(a)–(d); or

(2) The background concentration of the constituent.

§ 264.522 Scope of corrective measure studies.

(a) As determined by the Regional Administrator, corrective measure studies required under § 264.520 may include, but are not limited to, the following:

(1) Evaluation of performance, reliability, ease of implementation, and potential impacts of the remedy, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

(2) Assessment of the effectiveness of potential remedies in achieving adequate control of source(s) and cleanup of the hazardous waste (including hazardous constituents) released from solid waste management units;

(3) Assessment of the time required to begin and complete the remedy;

(4) Estimation of the costs of remedy implementation;

(5) Assessment of institutional requirements, such as State or local permit requirements, or other environmental or public health requirements which may substantially affect implementation of the remedy(s).

(b) The Regional Administrator may require the permittee to evaluate as part of the corrective measure study one or more specific potential remedies. These remedies may include a specific technology or combination of technologies that, in the Regional Administrator's judgment, achieves or may achieve the standards for remedies specified in § 264.525(a) given appropriate consideration of the factors specified in § 264.525(b).

§ 264.523 Plans for corrective measure studies.

(a) The Regional Administrator may require the permittee to develop and submit a plan(s) for conducting a corrective measure study required under § 264.520. The plan shall be subject to review and approval or modification by the Regional Administrator, and shall be developed and submitted according to a schedule specified in the permit schedule of compliance. Such plans may include, but are not limited to, the following:

(1) Description of the general approach to investigating and evaluating potential remedies;

(2) Definition of the overall objectives of the study;

(3) Description of the specific remedy(s) which will be studied;

(4) Plans for evaluating remedies to ensure compliance with the standards for remedies specified in § 264.525(a);

(5) Schedules for conducting the study; and

(6) Proposed format for information presentation.

(b) Upon approval or modification of the corrective measure study plan by the Regional Administrator, the plan shall be incorporated expressly or by reference as part of the permit schedule of compliance. The permittee shall conduct the studies and investigations in accordance with the plan and any other requirements as specified in the permit schedule of compliance.

§ 264.524 Reports of corrective measure studies.

(a) The Regional Administrator may require periodic reports during the conduct of the corrective measure study; and may, based on information from these reports or other information, require the permittee to modify the corrective measure study. Such modifications will, if necessary, be specified by modifying the permit schedule of compliance.

(b) Upon completion of the corrective measure study, the permittee shall submit a report summarizing the results of the study. This report must include a detailed description of the remedies assessed pursuant to § 264.522 or § 264.524(a). The report shall describe how any proposed remedy(s) meets the standards for remedies as specified in § 264.525(a).

(c) Upon review of the corrective measure study report, the Regional Administrator may require the permittee to evaluate further and report upon, one or more additional remedies, or develop particular elements of one or more proposed remedies. Such further requirements will, if necessary, be specified by modifying the permit schedule of compliance.

§ 264.525 Selection of remedy.

Based on the results of the corrective measure study, and any further evaluations conducted under § 264.524(c), the Regional Administrator shall, except as otherwise provided under paragraph (f) of this section, select a remedy that, at a minimum, meets the standards listed in paragraph (a) of this section.

(a) *Standards for remedies.* Remedies must:

(1) Be protective of human health and the environment;

(2) Attain media cleanup standards as specified pursuant to paragraphs (d) and (e) of this section;

(3) Control the source(s) of releases so as to reduce or eliminate, to the extent practicable, further releases of hazardous wastes (including hazardous constituents) that may pose a threat to human health and the environment; and

(4) Comply with standards for management of wastes as specified in §§ 264.550–264.559 of this subpart.

(b) *Remedy selection factors.* In selecting a remedy which meets the standards of § 264.525(a), the Regional Administrator shall consider the following evaluation factors as appropriate:

(1) *Long-term reliability and effectiveness.* Any potential remedy(s) may be assessed for the long-term reliability and effectiveness it affords, along with the degree of certainty that the remedy will prove successful. Factors that shall be considered in this evaluation include:

(i) Magnitude of residual risks in terms of amounts and concentrations of waste remaining following implementation of a remedy, considering the persistence, toxicity, mobility and propensity to bioaccumulate of such hazardous wastes (including hazardous constituents);

(ii) The type and degree of long-term management required, including monitoring and operation and maintenance;

(iii) Potential for exposure of humans and environmental receptors to remaining wastes;

(iv) Long-term reliability of the engineering and institutional controls, including uncertainties associated with land disposal of untreated wastes and residuals; and

(v) Potential need for replacement of the remedy.

(2) *Reduction of toxicity, mobility or volume.* A potential remedy(s) may be assessed as to the degree to which it employs treatment that reduces toxicity, mobility or volume of hazardous wastes (including hazardous constituents). Factors that shall be considered in such assessments include:

(i) The treatment processes the remedy(s) employs and materials it would treat;

(ii) The amount of hazardous wastes (including hazardous constituents) that would be destroyed or treated;

(iii) The degree to which the treatment is irreversible;

(iv) The residuals that will remain following treatment, considering the persistence, toxicity, mobility and propensity to bioaccumulate of such hazardous wastes (including hazardous constituents).

(3) The short-term effectiveness of a potential remedy(s) may be assessed considering the following:

(i) Magnitude of reduction of existing risks;

(ii) Short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavations, transportation and redisposal or containment;

(iii) Time until full protection is achieved;

(4) *Implementability.* The ease or difficulty of implementing a potential remedy(s) may be determined by considering the following types of factors:

(i) Degree of difficulty associated with constructing the technology;

(ii) Expected operational reliability of the technologies;

(iii) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(iv) Availability of necessary equipment and specialists;

(v) Available capacity and location of needed treatment, storage and disposal services;

(5) *Cost.* The types of costs that may be assessed include the following:

(i) Capital costs;

(ii) Operation and maintenance costs;

(iii) Net present value of capital and operation and maintenance costs;

(iv) Potential future remediation costs.

(c) *Schedule for remedy.* The Regional Administrator shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. The Regional Administrator will consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination;

(2) Practical capabilities of remedial technologies in achieving compliance with media cleanup standards and other objectives of the remedy;

(3) Availability of treatment or disposal capacity for wastes managed during implementation of the remedy;

(4) Desirability of utilizing technologies which are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;

(5) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

(6) Other relevant factors.

(d) *Media Cleanup Standards.* Except as otherwise provided by § 264.525(d)(2), the Regional Administrator shall specify in the selected remedy requirements for remediation of contaminated media as follows:

(1) Regional Administrator shall specify concentration levels of hazardous constituents in ground water, surface water, air or soils that the remedy must achieve, as necessary to protect human health and the environment. Such media cleanup standards will be established by the Regional Administrator as follows:

(i) The cleanup standard(s) shall be concentration levels in the affected media which protect human health and the environment.

(ii) Unless a lower concentration level is deemed necessary to protect environmental receptors, cleanup standards shall be established as follows:

(A) For known or suspected carcinogens, cleanup standards shall be established at concentration levels which represent an excess upperbound lifetime risk to an individual of between 1×10^{-4} and 1×10^{-6}. The Regional Administrator shall use the 1×10^{-4} risk level as the point of departure in establishing such concentration levels.

(B) For systemic toxicants, cleanup standards shall represent concentration levels to which the human population (including sensitive subgroups) could be exposed on a daily basis without appreciable risk of deleterious effect during a lifetime.

(iii) In establishing media cleanup standards which meet the requirements of § 264.525(d)(1) (i) and (ii), above, the Regional Administrator may consider the following:

(A) Multiple contaminants in the medium;

(B) Exposure threats to sensitive environmental receptors;

(C) Other site-specific exposure or potential exposure to contaminated media;

(D) The reliability, effectiveness, practicability, or other relevant features of the remedy.

(iv) For ground water and surface water that is a current or potential source of drinking water, the Regional Administrator shall consider maximum contaminant levels promulgated under section 141.2 of the Safe Drinking Water Act (40 CFR part 141 subpart B) in establishing media cleanup standards.

(v) If the permittee can demonstrate to the satisfaction of the Regional Administrator that a specific concentration of a constituent in a medium at the facility is naturally occurring or from a source other than a solid waste management unit at the facility, the cleanup level established under this Subpart for the constituent in the medium shall not be below that specific concentration, unless the Regional Administrator establishes that:

(A) Remediation to levels below that specified concentration is necessary to protect human health and the environment; and

(B) Such remediation is in connection with an areawide cleanup under RCRA or other authorities.

(2) The Regional Administrator may determine that remediation of a release of a constituent from a solid waste management unit to a media cleanup standard established pursuant to § 264.525(d)(1) is not necessary if the permittee demonstrates to the Regional Administrator's satisfaction that:

(i) The affected medium is also contaminated by substances that are naturally occurring or have originated from a source other than a solid waste managment unit at the facility, and those substances are present in concentrations such that remediation of the release from the solid waste management unit would provide no significant reduction in risks to actual or potential receptors; or

(ii) The constituent(s) is present in ground water that:

(A) Is not a current or potential source of drinking water, and

(B) Is not hydraulically connected with waters to which the hazardous constituents are migrating or are likely to migrate in a concentration(s) greater than an action level(s) specified according to § 264.522; or

(iii) Remediation of the release(s) to media cleanup standards is technically impracticable.

(3) If a determination is made pursuant to paragraph (d)(2) of this section the Regional Administrator may require any alternative measure(s) or standards he or she determines are necessary to protect human health and the environment, including the control of further releases.

(e) *Compliance with media cleanup standards.* The Regional Administrator shall specify in the remedy requirements for achieving compliance with the media cleanup standards established under § 264.525(d) (or alternative levels under § 264.525(d)(1)(v) or (d)(3)), as follows:

(1) The Regional Administrator shall specify where compliance with such standards or levels must be achieved, as follows:

(i) For ground water, the cleanup standard(s) or levels shall be achieved throughout the contaminated ground water, or, at the Regional Administrator's discretion, when waste is left in place, up to the boundary of a waste management area encompassing the original source(s) of release.

The Regional Administrator shall specify the locations at which ground-water monitoring wells must be located for purposes of:

(A) Monitoring the effectiveness of the ground-water remediation program; and

(B) Demonstrating compliance with the ground-water cleanup standard(s) or level(s).

(ii) For air, the cleanup standard(s) or level(s) shall be achieved at the location of the most exposed individual, or other specified point(s) of exposure closer to the source of the release, if determined by the Regional Administrator to be necessary to protect human health and the environment. The Regional Administrator shall specify locations where air monitoring devices must be installed, or what emission modeling or testing, atmospheric dispersion models, or other methods must be used to demonstrate that compliance with any air cleanup standard(s) or level(s) has been achieved at the point(s) of exposure.

(iii) For surface water, the cleanup standard(s) or level(s) shall be achieved at the point where the release(s) enters the surface water. For releases that have accumulated in surface water sediments, the Regional Administrator may, as necessary to protect human health and the environment, require that a cleanup standard(s) or level(s) be achieved at designated locations in the sediments. The Regional Administrator will specify the locations where surface water or sediment samples must be taken to monitor surface water quality, and demonstrate that compliance with any surface water cleanup standard(s) or level(s) has been achieved.

(iv) For soils, the cleanup standard(s) shall be achieved at any point where direct contact exposure to the soils may occur. The Regional Administrator will specify the locations, or methods for determining appropriate locations, where soil samples must be taken to demonstrate compliance with the soil cleanup standard(s) or level(s).

(v) If the owner/operator is unable to obtain the necessary permission to undertake corrective action beyond the facility boundary, and can demonstrate to the satisfaction of the Regional Administration that despite the owner/operator's best efforts, she is as a result unable to achieve media cleanup standards or levels beyond the facility boundary, then media cleanup standards or levels must be achieved to the extent practicable, as specified by the Regional Administrator.

(2) The Regional Administrator will specify in the remedy the sampling and analytical methods, any statistical analyses that may be required, and the frequency(s) of sampling or monitoring

that may be required to characterize levels of hazardous constituents in ground water, surface water, air or soils.

(3) The Regional Administrator will specify in the remedy the length of time during which the permittee must, in order to achieve compliance with a media cleanup standard or level, demonstrate that concentrations of hazardous constituents have not exceeded the standard(s). Factors that may be considered by the Regional Administrator in determining these timing requirements include:

(i) Extent and concentration of the release(s);

(ii) Behavior characteristics of the hazardous constituents in the affected medium;

(iii) Accuracy of monitoring or modeling techniques;

(iv) Characteristics of the affected media; and

(v) Seasonal, meteorological, or other environmental variabilities which may affect the accuracy of monitoring or modeling results.

(f) Conditional remedies. (1) If the criteria of § 264.525(f)(2) are met, the Regional Administrator may select a conditional remedy that protects human health and the environment under plausible exposure conditions during the term of the permit.

(2) A conditional remedy must:

(i) Protect human health and the environment; and

(ii) Achieve all media cleanup standards or levels as specified pursuant to paragraphs (d) and (e) of this section beyond the facility boundary as soon as practicable; and

(iii) Prevent further significant environmental degration by implementing, as soon as practicable:

(A) treatment or other necessary engineering controls to control any source(s) of releases; and

(B) engineered measures as necessary to prevent further significant migration of releases within the facility boundary.

(iv) Institute effective institutional or other controls to prevent any significant exposure to hazardous wastes at the facility; and

(v) Continue the monitoring of releases so as to determine whether further significant environmental degradation occurs; and

(vi) Include assurances of financial responsibility for the remedy; and

(vii) Comply with standards for management of wastes as specified in §§ 264.550–264.559 of this subpart.

(3) If at any time during the term of the permit, any condition of paragraph (f)(2) of this section is violated, the Regional Administrator shall modify the permit to:

(i) Require the permittee to perform additional studies or actions, or implement additional controls to achieve compliance with the requirements of paragraph (f)(2) of this section; or

(ii) Require additional studies, actions, or controls as necessary to implement a remedy which meets the standards of § 264.525(a).

(4) The permit shall not be terminated until a remedy which meets the standards of § 264.525(a) has been implemented and certified complete according to § 264.526.

§ 264.526 Permit modification for remedy.

(a) The Regional Administrator shall modify the permit to specify the remedy selected according to § 264.525, according to the procedures for major permit modifications under § 270.41.

(b) The permit modification shall include, at a minimum, the following:

(1) Description of the technical features of the remedy that are necessary for achieving the standards for remedies specified in § 264.525(a) and/or (f);

(2) All media cleanup standards established pursuant to § 264.525(d);

(3) Requirements for achieving compliance with media cleanup standards pursuant to § 264.525(e);

(4) Requirements for complying with the standards for management of wastes pursuant to §§ 264.550–264.559;

(5) Requirements for removal, decontamination, closure or post-closure of units, equipment, devices or structures that will be used to implement the remedy;

(6) A schedule for initiating and completing the major technical features and milestones of the remedy;

(7) Requirements for submission of reports and other information.

(c)(1) The schedule of compliance specified in the permit modification shall include a schedule for the permittee to demonstrate financial assurance for completing the remedy specified according to § 264.526(b). The schedule shall require the demonstration no later than 120 days after the effective date of the permit modification.

(2) If the remedy requires closure of a hazardous waste management unit, and the schedule of compliance for the remedy supplants or modifies the unit's closure or post-closure plan, the Regional Administrator may partially or fully release existing financial assurance for closure, post-closure, and third party liability required under §§ 264.143, 264.145, and 264.147. Such releases shall not be effective until the financial assurance requirements at § 264.526(c)(1) are satisfied.

(d) A remedy specified in a permit modification may be separated into phases. A remedy phase may consist of any set of actions performed over time, or any actions that are concurrent but located at different areas, provided that the actions are consistent with the final remedy.

§ 264.527 Remedy design, [illegible]

(a) The Regional Administrator may require the permittee, upon modification of the permit according to § 264.526, to prepare detailed construction plans and specifications to implement the approved remedy at the facility, unless such plans and specifications have already been specified in the permit modification. Such plans shall be subject to review and approval or modification by the Regional Administrator, and shall be developed and submitted in accordance with the permit schedule of compliance. Upon approval by the Regional Administrator, the plan shall be incorporated expressly or by reference into part of the permit. Schedule of compliance, the plans and specifications must include, but are not limited to, the following:

(1) Designs and specifications for units in which hazardous waste and non-hazardous solid waste will be managed, as specified in the approved remedy;

(2) Implementation and long-term maintenance plans;

(3) Project schedule;

(4) Construction quality assurance program.

(b) Upon approval of the plans and specifications for the remedy, the permittee shall—

(1) Implement the remedy in accordance with the plans and specifications, and consistent with the objectives of the remedy specified in the permit;

(2) Place the plans and specifications in the information repository, if required under § 270.36;

(3) Provide written notice of the availability for inspection of the approved plans and specifications for the remedy to all individuals on the facility mailing list. If an information repository has not been required pursuant to § 270.36, the notice shall specify where the plans and specifications are available for inspection; and

(4) Revise the cost estimate used to demonstrate financial assurance under § 264.526(c), if necessary.

§ 264.528 Progress reports.

(a) The permittee may be required by the Regional Administrator to provide

progress reports during the design, construction, operation and maintenance of any remedy. Frequency and format of reports shall be determined by the Regional Administrator and specified in the permit schedule of compliance. Such reports may include, but are not limited to:

(1) Summaries of progress of remedy implementation, including results of monitoring and sampling activities, progress in meeting media cleanup standards, and description of other remediation activities;

(2) Problems encountered during the reporting period, and actions taken or proposed to resolve the problems;

(3) Changes in personnel conducting or managing the remedial effort;

(4) Project work for next reporting period;

(5) Copies of laboratory reports and field sampling reports;

(6) All raw data such as laboratory reports, drilling logs and other supporting information generated from the remedial activities shall be maintained at the facility (or other location approved by the Regional Administrator) during the life of the permit, including the term of any reissued permits.

§ 264.525 Review of remedy implementation.

The Regional Administrator shall periodically review the progress of the remedy. Based on such review, the Regional Administrator may modify the permit schedule of compliance to require additional remedial measures to ensure prompt completion, safety, effectiveness, protectiveness, or reliability of the remedy.

§ 264.526 Completion of remedies.

(a) Remedies specified pursuant to § 264.526 shall be considered complete when the Regional Administrator determines that:

(1) Compliance with all media cleanup standards (or alternate levels) as specified in the permit have been achieved, according to the requirements of § 264.525(e); and

(2) All actions required to control the source(s) of contamination have been satisfied; and

(3) Procedures specified for removal, decontamination, closure, or post-closure care of units, equipment, devices or structures required to implement the remedy have been complied with.

(b) Upon completion of the remedy, the permittee shall submit to the Regional Administrator, by registered mail, a request for termination of the corrective action schedule of compliance according to the procedures for Class III modifications in § 270.42. The request shall include a certification that the remedy has been completed in accordance with the requirements of § 264.530(a), and that all other terms and conditions specified in the permit pursuant to Subpart S have been satisfied. The certification must be signed by the permittee and by an independent professional(s) skilled in the appropriate technical discipline(s).

(c) When, upon receipt of the certification, and in consideration of public comments and any other relevant information, the Regional Administrator determines that the corrective measure remedy has been completed in accordance with the terms and conditions of the permit and the requirements for remedy completion under § 264.530(a), the Regional Administrator shall:

(1) Modify the permit to terminate the corrective action schedule of compliance, according to the Class III procedures of § 270.42;

(2) Upon modification of the permit, release the permittee from the requirements for financial assurance for corrective action under § 264.500(c) and § 264.90.

(d) If a remedy includes one or more identified phases, the Regional Administrator may:

(1) Require separate certification that the remedy phase has been completed as specified in the permit, to be signed by the permittee and an independent professional(s) skilled in the appropriate technical discipline(s); and

(2) Release the permittee from the requirements for financial assurance for that remedy phase, if the Regional Administrator determines that the remedy phase has been successfully completed.

§ 264.531 Determination of technical impracticability.

(a) The Regional Administrator may determine, based on information developed by the permittee or other information, that compliance with a requirement(s) for the remedy is not technically practicable. In making such determinations, the Regional Administrator shall consider:

(1) The permittee's efforts to achieve compliance with the requirement(s); and

(2) Whether other currently available or new and innovative methods or technologies could practicably achieve compliance with the requirements.

(b) If the Regional Administrator determines that compliance with a remedy requirement is not technically practicable, the Regional Administrator shall modify the permit schedule of compliance to specify as necessary and appropriate:

(1) Further measures that may be required of the permittee to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment; and

(2) Alternate levels or measures for cleaning up contaminated media; controlling the source(s) of contamination; or for removal or decontamination of equipment, units, devices, or structures required to implement the remedy which:

(i) Are technically practicable; and

(ii) Are consistent with the overall objectives of the remedy.

§§ 264.532-264.539 [Reserved]

§ 264.540 Interim measures.

(a) If, at any time the Regional Administrator determines, based on consideration of the factors specified in § 264.540(b), that a release or, based on site-specific circumstances, a threatened release from a solid waste management unit(s) at the facility poses a threat to human health or the environment, the Regional Administrator may specify in the permit interim measures required of the permittee to abate, minimize, stabilize, mitigate, or eliminate the release(s) or threat of release(s).

(b) The following factors may be considered by the Regional Administrator in determining whether an interim measure(s) is required:

(1) Time required to develop and implement a final remedy;

(2) Actual or potential exposure of nearby populations or environmental receptors to hazardous wastes (including hazardous constituents);

(3) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(4) Further degradation of the medium which may occur if remedial action is not initiated expeditiously;

(5) Presence of hazardous wastes (including hazardous constituents) in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

(6) Presence of high levels of hazardous wastes (including hazardous constituents) in soils largely at or near the surface, that may migrate;

(7) Weather conditions that may cause hazardous wastes (including hazardous constituents) to migrate or be released;

(8) Risks of fire or explosion, or potential for exposure to hazardous wastes (including hazardous constituents) as a result of an accident

or failure of a container or handling system;

(9) Other situations that may pose threats to human health and the environment.

(c) If the Regional Administrator determines that an interim measure is necessary pursuant to § 264.540(a), the Regional Administrator shall notify the permittee of the necessary actions required. Such actions shall be implemented as soon as practicable, in accordance with a schedule as specified by the Regional Administrator. The Regional Administrator shall modify the permit schedule of compliance, if necessary, to require implementation of an interim measure, in accordance with the procedures of § 270.34 or § 270.41, as appropriate.

(d) Interim measures should, to the extent practicable, be consistent with the objectives of, and contribute to the performance of any remedy which may be required pursuant to § 264.525.

§§ 264.544-548 [Reserved]

§ 264.550 Management of wastes.

(a) All solid wastes which are managed pursuant to a remedy required under § 264.525, or an interim measure required under § 264.540, shall be managed in a manner:

(1) That is protective of human health and the environment; and:

(2) That complies with applicable Federal, State and local requirements.

(b) The Regional Administrator shall specify in the permit requirements for units in which wastes will be managed, and other waste management activities, as determined by the Regional Administrator to be necessary for protection of human health and the environment.

§ 264.551 Management of hazardous wastes.

(a) Except as Provided herein and in paragraphs (b) and (c) of this section any treatment, storage or disposal of listed or identified hazardous waste necessary to implement a remedy or an interim measure shall be in accordance with the applicable standards of 40 CFR parts 262, 264, 268 and 268. Requirements for closure contained in subpart G of 40 CFR part 264, except for § 264.111, may be waived by the Regional Administrator for units created for the purpose of managing corrective action wastes.

(b)(1) For temporary units (except for incinerators and other non-tank thermal treatment units) in which hazardous wastes will be stored or treated, the Regional Administrator may determine that a design, operating, or closure standard(s) applicable to such unit(s) solely by regulation may be replaced by alternative requirements which are protective of human health and the environment.

(2) Any temporary unit to which alternative requirements are applied according to paragraph (b)(1) of this section shall:

(i) Be operated for a period not exceeding 180 calendar days, unless the period is extended under § 264.551(b)(3) below; and

(ii) Be located at the facility; and

(iii) Be used only for treatment or storage of hazardous wastes (including hazardous constituents), or other solid wastes that have originated within the boundary of the facility.

(3) The Regional Administrator may grant an extension to the 180-day period of a temporary unit if hazardous wastes must remain in the unit due to unforeseen, temporary, and uncontrollable circumstances. The owner/operator must request this extension as a Class 2 modification, with Director approval, under the procedures of § 270.42.

(4) In establishing standards to be applied to temporary units, the Regional Administrator shall consider the following factors:

(i) The length of time such unit(s) will be in operation.

(ii) Type of unit, and volumes of wastes to be managed.

(iii) Potential for releases from the unit(s).

(iv) Physical and chemical characteristics of the wastes to be managed in the unit(s).

(v) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases.

(vi) Potential for exposure of humans and environmental receptors if releases were to occur from the unit(s).

(5) The Regional Administrator shall specify in the permit the length of time that such units will be allowed to operate, and specific design, operating, and closure requirements for the unit(s).

(c) For the purposes of implementing remedies under this subpart, the Regional Administrator may designate an area of contamination as a corrective action management unit.

(1) Movement or consolidation of wastes within a corrective action management unit will not constitute placement of hazardous wastes in a hazardous waste management unit.

(2) Consolidation of wastes within the corrective action management unit will not constitute creation of a new, replacement, or lateral expansion of a hazardous waste management unit.

(3) In making determinations as to whether a corrective action management unit is appropriate for implementing a remedy at a facility, and/or the nature and configuration of a corrective action management unit at a facility, the Regional Administrator may consider the following:

(i) The nature, extent and location of surficial contamination at the facility;

(ii) The potential limitations of a corrective action management unit in achieving remedial objectives for the facility, including (but not limited to):

(A) Expediting the planning of remedy implementation; and;

(B) Enhancing the effectiveness, cost-effectiveness, reliability, or protectiveness of the remedy;

(iii) The practicability of alternative remedial approaches;

(iv) Other relevant factors.

(4) The requirements of subpart G of 40 CFR part 264 will apply to corrective action management units. The Regional Administrator will specify in the permit closure requirements for any corrective action management unit, in consideration of the following factors:

(i) Unit characteristics;

(ii) Volume of wastes which will remain after closure;

(iii) Potential for releases from the unit;

(iv) Physical and chemical characteristics of the wastes;

(v) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and;

(vi) Potential for exposure of humans and environmental receptors if releases were to occur from the unit.

(5) Closure requirements specified for corrective action management units under paragraph (c)(3) of this section shall:

(i) Minimize the need for further maintenance; and;

(ii) Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.

(6) The Regional Administrator will specify in the permit post-closure requirements for any corrective action management unit, as necessary to protect human health and the environment, including monitoring and maintenance activities and the frequency with which they will be performed to ensure the integrity of the

cap, final cover, or other containment system.

§ 264.552 Management of non-hazardous solid wastes.

(a) Treatment, storage and disposal of non-hazardous solid wastes pursuant to a remedy or interim measure required under this subpart shall be in accordance with applicable technical standards for solid waste management as specified in regulations promulgated pursuant to RCRA subtitle D.

(b) For any unit in which non-hazardous solid wastes will be managed pursuant to a remedy or interim measure, the Regional Administrator may specify additional design and operating standards for the unit(s), as necessary to protect human health and the environment. In determining appropriate design and operating requirements for such units, the Regional Administrator shall consider the factors specified under § 264.551(b)(2).

§§ 264.553-264.559 [Reserved]

§ 264.560 Required notices.

(a) *Notification of ground-water contamination.* If at any time the permitted discovers that hazardous constituents in ground water that may have been released from a solid waste management unit at the facility have migrated beyond the facility boundary in concentrations that exceed action levels (as defined under § 264.521), the permittee shall, within fifteen days of discovery, provide written notice to the Regional Administrator and any person who owns or resides on the land which overlies the contaminated ground water.

(b) *Notification of air contamination.* If at any time the permittee discovers that hazardous constituents in air that may have been released from a solid waste management unit at the facility have or are migrating to areas beyond the facility boundary in concentrations that exceed action levels (as defined under § 264.521), and that residences or other places at which continuous, long-term exposure to such constituents might occur are located within such areas, the permittee shall, within fifteen days of such discovery:

(1) Provide written notification to the Regional Administrator; and

(2) Initiate any actions that may be necessary to provide notice to all individuals who have or may have been subject to such exposure.

(c) Notification of residual contamination. If hazardous wastes or hazardous constituents in solid waste management units, or which have been released from solid waste management units, will remain in or on the land after the term of the permit has expired, the Regional Administrator may require the permittee to record, in accordance with State law, a notation in the deed to the facility property or in some other instrument which is normally examined during title search that will, in perpetuity, notify any potential purchaser of the property of the types, concentrations and locations of such hazardous wastes or hazardous constituents.

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

6. The authority citation for part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6924, and 6925.

7. In 40 CFR part 265, subpart G, it is proposed to amend § 265.112(b) by adding new paragraph (b)(8), and to amend § 265.113 by redesignating paragraphs (a)(1)(ii) as (a)(1)(iii) and (b)(1)(ii) as (b)(1)(iii), and by adding new paragraphs (a)(1)(ii) and (b)(1)(ii) to read as follows:

§ 265.112 Closure plan, amendment of plan.

* * * * *

(b) * * *

(8) Information which complies with the requirements of 40 CFR 270.14(d) for all solid waste management units at the facility.

* * * * *

§ 265.113 Closure, time allowed for closure.

* * * * *

(a) * * *

(1) * * *

(ii) Corrective action required at the unit or the facility under subpart S will delay the completion of partial or final closure; or

* * * * *

(b) * * *

(1) * * *

(ii) Corrective action required at the unit or the facility under subpart S will delay the completion of partial or final closure; or

* * * * *

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

8. The authority citation for part 270 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912, 6925, 6927, and 6974

9. It is proposed to amend paragraph (c) of § 270.1 by adding the following introductory text immediately before the sentence which begins "The denial of a permit for the active life * * *," as follows:

§ 270.1 Purpose and scope of these regulations.

* * * * *

(c) * * * Owners and operators must also have permits covering any period necessary to comply with the requirements of subpart S of part 264. * * *

* * * * *

10. It is proposed to amend § 270.30(l) by adding new paragraph (l)(12) to read as follows:

§ 270.30 Conditions applicable to all permits.

* * * * *

(l) * * *

(12) *Information pertinent to corrective action requirements.* (i) If the permittee discovers additional solid waste management units or leaks of releases of hazardous wastes (including hazardous constituents) from previously identified or newly discovered solid waste management units at the facility, the permittee shall submit the following information to the Director:

(A) *Identification of additional solid waste management unit(s).* Within thirty days of the receipt of information about a previously unknown and unreported solid waste management unit at the facility (as defined in 40 CFR 264.501), the permittee shall submit the following information to the Director:

(*1*) The location of the unit on the topographic map submitted as part of the part B application in accordance with 40 CFR 270.14(b)(19) or a topographic map of comparable scale which clearly indicates the location of the unit in relation to other solid waste management units at the facility.

(*2*) Designation of type of unit.

(*3*) General dimensions of the unit.

(*4*) When the unit was operated.

(*5*) Specification of all wastes that have been managed in the unit, if available.

(*6*) All available information pertaining to any release of hazardous wastes (including hazardous constituents) from the unit.

(*B*) Sampling and analysis data. The Director may require the permittee to perform sampling and analysis of ground water (which may involve the installation of wells), soils, surface water, or air, as necessary to determine whether a release(s) from such unit(s)

has occurred, is likely to have occurred, or will likely occur.

(C) *Releases of hazardous waste.* If the permittee discovers a release of hazardous wastes (including hazardous constituents) from a solid waste management unit at the facility that may pose a threat to human health and the environment, the permittee shall, within twenty days of the discovery, submit the following information to the Director:

(*1*) Identification of the solid waste management unit(s) from which the release has occurred to include the type of unit, and location of the unit clearly indicated on a facility map; and

(*2*) Any other information currently available concerning the release, including potential exposure pathways, controls already imposed to address the release, and any action planned for further cleanup.

(ii) Based upon information supplied under (A), (B), or (C) above the Director may, as necessary, require further investigation or corrective measures in accordance with the standards for corrective action specified in 40 CFR subpart S. Such additional activities shall, if necessary, be specified by modifying an existing schedule of compliance according to § 270.34(c), or by initiating a permit modification according to § 270.41.

* * * * *

11. Section 270.33 is amended by adding the following sentence at the end of paragraph (a) to read as follows:

§ 270.33 Schedules of Compliance

(a) * * * Schedules of compliance for corrective action are governed solely by § 270.34.

* * * * *

12. * * * It is proposed to amend 40 CFR part 270, subpart C, by adding new § 270.34 to read as follows:

§ 270.34 Schedules of compliance for corrective action.

Schedules of compliance for corrective action are governed by this section and not § 270.33.

(a) The Director may include a schedule of compliance in the permit for purposes of specifying the terms and conditions necessary for the permittee to comply with the requirements of subpart S of part 264. Permit schedules of compliance issued under this section shall contain terms and conditions deemed by the Director to be necessary to protect human health and the environment.

(b) The permittee shall adhere to the schedules specified in the permit. If at any time the permittee determines that schedules cannot be met, the permittee shall, within 15 days of such determination, notify the Director and submit a request for a permit modification under § 270.42, with an explanation of why the current schedule cannot be met.

(c) The Director may modify the permit to include conditions in the schedule of compliance as necessary to comply with the requirements of subpart S of part 264. The following procedures will be followed unless the Director determines instead that it is appropriate to modify the permit pursuant to § 270.41(b)(3)(iii):

(1) The Director will notify the permittee in writing of the proposed modification. Such notice will:

(i) Describe the exact change(s) to be made to the permit conditions;

(ii) Provide an explanation of why the modification is needed; and

(iii) Provide notification of the date by which comments on the proposed modification must be received. Such date will not be less than twenty days from the date the notice of proposed modification is received by the permittee, or after the public notice is published under § 270.24(c)(2);

(iv) Provide notification that supporting documentation or data may be available for inspection at the Regional or State office; and

(v) Include the name and address of an Agency contact to whom comments may be sent.

(2) The Director shall:

(i) Publish a notice of the proposed modification in a newspaper distributed in the locality of the facility, which includes notice of items (1)(i)–(v);

(ii) Mail a notice of the proposed modification to all persons on the facility mailing list maintained according to 40 CFR 124.10(c)(1)(viii). Such notice will include items (1)(i)–(v), and shall be mailed concurrently with notice to the permittee;

(iii) For facilities which have established an information repository pursuant to § 270.38, the Director shall place a notification of the proposed modification, including items (1)(i)–(v), in the information repository concurrently with actions taken under (i)–(ii).

(3) If the Director receives no written comment on the proposed modification, the modification will become effective five days after the close of the comment period; the Director will promptly notify the permittee and individuals on the facility mailing list in writing that the modification has become effective, and will place a copy of the modified permit in the information repository if a repository is maintained for the facility.

(4) If the Director receives written comment on the proposed modification, the Director shall make a final determination concerning the modification within thirty days after the end of the comment period if practicable. The Director shall then:

(i) Notify the permittee in writing of the final decision. Such notification shall:

(A) Indicate the effective date of the modification, which shall be no later than fifteen days after the date of notification of the final modification decision;

(B) Include an explanation of how comments were considered in developing the final modification; and

(C) Provide a copy of the final modification;

(ii) Provide notice of the final modification decision, including paragraphs (c)(2)(i)(iii) and (c)(2)(i)(iv) of this section, in a manner equivalent to distribution in the vicinity of the facility; and

(iii) Place a copy of items (c)(4)(i)(A)–(i)(C) in the information repository for the facility if such a repository is maintained.

(5) Modifications initiated and finalized by the Director using procedures in § 270.41(b)(3)(iii) are not subject to administrative appeals.

* * * * *

B. It is proposed to amend 40 CFR part 270, subpart C, by adding new

§ 270.38 Information repository.

(a) At any time during conduct of investigations or other activities required under part 264, subpart S, the Director may require the permittee to establish and maintain an information repository for the purpose of making accessible to interested parties documents, reports and other public information developed pursuant to investigations and activities required under part 264, subpart S.

(b) The information repository shall contain all documents, reports, data and other information which the Director deems relevant to public understanding of the activities, findings and plans for such corrective action initiatives.

(c) The information repository shall, when feasible, be located within reasonable distance of the facility, or if not feasible, at the facility. The repository shall be accessible to the public during reasonable hours, as required by the Director.

(d) In the permit schedule of compliance, the Director shall specify requirements for informing the public about the information repository. At a minimum, written notice about the information repository shall be given to

all individuals on the facility mailing list.

(e) Information regarding procedures for submission of comments shall be made available at the repository.

* * * * *

14. It is proposed to amend § 270.41 by revising the introductory text and by adding new paragraph (a)(5)(ix) to read as follows:

§ 270.41 Modification or revocation and reissuance of permits.

When the Director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit (see § 270.30), receives a request for modification or revocation and reissuance under § 124.5, or conducts a review of the permit file) he or she may determine whether one or more of the causes listed in paragraphs (a) and (b) of this section for modification, or revocation and reissuance or both exist. If cause exists, the Director may modify or revoke and reissue the permit accordingly, subject to the limitations of paragraph (c) of this section, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. (See 40 CFR 124.5(c)(2).) If cause does not exist under this section, the Director shall not modify or revoke and reissue the permit except on request of the permittee or in accordance with § 270.34(c). If a permit modification is requested by the permittee, the Director shall approve or deny the request according to the procedures of 40 CFR 270.42. The Director may also modify the permit schedule of compliance for corrective action under the procedures of § 270.34(c). Otherwise, a draft permit must be prepared and other procedures in part 124 (or procedures of an approved State program) followed.

(a) * * *

(5) * * *

(ix) The Director determines good cause exists for modification of the permit for the purposes of compliance with subpart S of part 264.

* * * * *

15. It is proposed to revise paragraphs (b)(3)(i) and (c)(2)(vii) of § 270.60 as follows:

§ 270.60 Permits by rule.

* * * * *

(b) * * *

(3) * * *

(i) Complies with 40 CFR subpart S; and

* * * * *

(c) * * *

(3) * * *

(vii) for NPDES permits issued after November 8, 1984, 40 CFR subpart S.

* * * * *

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

16. The authority citation for part 271 continues to read as follows:

Authority: 42 U.S.C. 6926, 6927(a), and 6930.

17. It is proposed to amend § 271.1(j) by adding the following entry in Table 1 in chronological order by date of publication:

§ 271.1 (Amended)

TABLE 1—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Date	Title of Regulation
*	*
July 27, 1990	Corrective Action for Solid Waste Management Units
*	*

[FR Doc. 90-16727 Filed 7-26-90; 8:45 am]

BILLING CODE 6560-50-M

BNA Journal

CONGRESS

Senate Bills And Resolutions Introduced

S 2936, July 30, to amend the Hazardous Materials Transportation Act to authorize appropriations for FY's 1990, 1991, and 1992 (Exon) to Commerce.

S 2892, July 24, to amend the Solid Waste Disposal Act to provide management standards and recycling requirements for spent lead-acid batteries (Wirth and Heinz) to Environment.

House Bills And Resolutions Introduced

HR 5390, July 27, to prevent and control infestations of the coastal inland waters of the United States by zebra mussel and other non-indigenous aquatic nuisance species (Hertel and others) to Merchant Marine.

HR 5363, July 25, to establish an organizational unit within the State Department to develop and implement programs that address health and environmental problems along the border of the United States and Mexico (Coleman and Bustamante) jointly to Energy and Foreign Affairs.

HR 5372, July 25, to amend the Toxic Substances Control Act to reduce the levels of lead in the environment (Luken and Sikorski) to Energy.

HR 5359, July 24, to amend the Solid Waste Disposal Act to provide management standards and recycling requirements for spend lead-acid batteries (Horres and others) to Energy and Commerce.

EXECUTIVE BRANCH

Interior

The Office of Surface Mining announced July 25 the approval of a proposed amendment to the Wyoming permanent regulatory program under the Surface Mining Control and Reclamation Act (55 FR 30221). For further information contact E.E. Filer, Director, OSM Casper Field Office, Federal Building, 100 E. B St., Room 2128, Casper, Wyo. 82601-1918; (307) 261-5776.

APPENDIX D

EPA REGULATORY GUIDANCE ON LEAD DATED 7/14/94

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 14 1994

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive # 9355.4-12

MEMORANDUM

SUBJECT: Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities

FROM: Elliott P. Laws
Assistant Administrator

TO: Regional Administrators I-X

PURPOSE

As part of the Superfund Administrative Improvements Initiative, this interim directive establishes a streamlined approach for determining protective levels for lead in soil at CERCLA sites and RCRA facilities that are subject to corrective action under RCRA section 3004(u) or 3008(h) as follows:

- It recommends screening levels for lead in soil for residential land use (400 ppm);[1]
- It describes how to develop site-specific preliminary remediation goals (PRGs) at CERCLA sites and media cleanup standards (MCSs) at RCRA Corrective Action facilities for residential land use; and,
- It describes a plan for soil lead cleanup at CERCLA sites and RCRA Corrective Action facilities that have multiple sources of lead.

This interim directive replaces all previous directives on soil lead cleanup for CERCLA and RCRA programs (see the Background section, 1989-1991).

KEY MESSAGES

Screening levels are not cleanup goals. Rather, these screening levels may be used as a tool to determine which sites

[1]The residential screening level is the same concept as the action level proposed in the RCRA Corrective Action Subpart S rule (July 27, 1990, 55 *Federal Register* 30798).

or portions of sites do not require further study and to encourage voluntary cleanup. Screening levels are defined as a level of contamination above which there may be enough concern to warrant site-specific study of risks. Levels of contamination above the screening level would NOT automatically require a removal action, nor designate a site as "contaminated."

The residential screening level for lead described in this directive has been calculated with the Agency's new Integrated Exposure Uptake Biokinetic Model (IEUBK) model (Pub. # 9285.7-15-2, PB93-963511), using default parameters. As outlined in the Guidance Manual for the IEUBK Model for Lead in Children (Pub. # 9285.7-15-1, PB93-963510, February 1994), this model was developed to: recognize the multimedia nature of lead exposures; incorporate important absorption and pharmacokinetic information; and allow the risk manager to consider the potential distributions of exposure and risk likely to occur at a site (the model goes beyond providing a single point estimate output). For these reasons, this approach is judged to be superior to the more common method for assessing risks of non-cancer health effects which utilizes the reference dose (RfD) methodology. Both the Guidance Manual and the model are available to Superfund staff through the Superfund Document Center (703-603-8917) and to the public through the National Technical Information Service (703-487-4650).

Residential preliminary remediation goals (PRGs) for CERCLA remediations and media cleanup standards (MCSs) for RCRA corrective actions can be developed using the IEUBK model on a site-specific basis, where site data support modification of model default parameters. At some Superfund sites, using the IEUBK model with site-specific soil and dust characteristics, PRGs of more than twice the screening level have been identified. However, it is important to note that the model alone does not determine the cleanup levels required at a site. After considering other factors such as costs of remedial options, reliability of institutional controls, technical feasibility, and/or community acceptance, still higher cleanup levels may be selected.

The implementation of this guidance is expected to provide for more consistent decisions across the country and improve the use of site-specific information for RCRA and CERCLA sites contaminated with lead. The implementation of this guidance will aid in determining when evaluation with the IEUBK model is appropriate and in assessing the likelihood that environmental lead poses a threat to the public. Use of the IEUBK model in the context of this guidance will allow risk managers to assess the

contribution of different environmental sources of lead to overall blood lead levels (e.g., consideration of the importance of soil lead levels relative to lead from drinking water, paint and household dust). It offers a flexible approach to considering risk reduction options (referred to as the "bubble" concept) that allows for remediation of lead sources that contribute significantly to elevated blood lead. This guidance encourages the risk manager to select, on a site-specific basis, the most appropriate combination of remedial measures needed to address site-specific lead exposure threats. These remedial measures may range widely from intervention to abatement. However, RCRA and CERCLA have very limited authority to address interior exposures from interior paint. For a detailed discussion of the decision logic for addressing lead-contaminated sites, see the Implementation section and Appendix A.

Relationship to lead paint guidance. In addition, this interim directive clarifies the relationship between guidance on Superfund and RCRA Corrective Action cleanups, and EPA's guidance on lead-based paint hazards (discussed further in Appendix C). The paint hazard guidance will be issued to provide information until the Agency issues regulations identifying lead-based paint hazards as directed by Section 403 of the Toxic Substances Control Act (TSCA)[2]. Lead-based paint hazards are those lead levels and conditions of paint, and residential soil and dust that would result in adverse health effects.

The two guidance documents have different purposes and are intended to serve very different audiences. As a result the approaches taken differ to some degree. The lead-based paint hazard guidance is intended for use by any person who may be involved in addressing residential lead exposures (from paint, dust or soil.) It thus relates to a potentially huge number of sites, and serves a very broad potential audience, including private property owners or residents in addition to federal or state regulators. Much residential lead abatement may take place outside any governmental program, and may not involve extensive site-specific study.

This OSWER guidance, on the other hand, deals with a much smaller number of sites, being addressed under close federal regulatory scrutiny, at which extensive site characterization will have been performed before cleanup decisions are made. Thus, the RCRA and CERCLA programs will often have the benefit of much site-specific exposure information. This guidance is intended for use by the relatively small number of agency officials who oversee and direct these cleanups.

---

[2]Title IV of TSCA (including section 403) was added by the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act of 1992).

Both the TSCA Section 403 and OSWER programs use a flexible, tiered approach. The OSWER guidance sets a residential screening level at 400 ppm. As noted above, this is not intended to be a "cleanup level" for CERCLA and RCRA facilities, but only to serve as an indicator that further study is appropriate. The Section 403 guidance indicates that physical exposure-reduction activities may be appropriate at 400 ppm, depending upon site-specific conditions such as use patterns, populations at risk and other factors. Although worded somewhat differently, the guidances are intended to be similar in effect. For neither guidance is 400 ppm to automatically be considered a "cleanup level"; instead, it indicates a need for considering further action, but not necessarily for taking action. Neither is meant to indicate that cleanup is necessarily appropriate at 400 ppm. The greater emphasis in this OSWER guidance on determining the scope of further study reflects the fact that both CERCLA and RCRA cleanups proceed in stages with detailed site characterization preceding response actions in every case.

Above the 400 ppm level, the Section 403 guidance identifies ranges over which various types of responses are appropriate, commensurate with the level of potential risk reduction, and cost incurred to achieve such risk reduction. For example, in the range of 400 to 5000 ppm, limited interim controls are recommended depending, as noted above, on conditions at the site, while above 5000 ppm, soil abatement is recommended. This OSWER guidance does not include comparable numbers above 400 ppm; instead, as discussed above, it recommends the site-specific use of the IEUBK model to set PRGs and MCSs, when necessary. The remedy selection process specified in the National Contingency Plan (NCP) should then be used to decide what type of action is appropriate to achieve those goals.

In general, because the Section 403 guidance was developed for a different purpose and audience, OSWER does not recommend that it be used as a reference in setting PRGs and MCSs or in determining whether action at a particular site is warranted. (To put it another way, it generally should not be treated as a "to be considered" document or "TBC" under CERCLA.) The section 403 guidance is meant to provide generic levels that can be used at thousands of widely varying sites across the nation. The detailed study that goes on at CERCLA or RCRA sites will allow levels to be developed that are more narrowly tailored to the individual site. Nothing in the section 403 guidance discourages setting more site-specific levels for certain situations; in fact, it specifically identifies factors such as bioavailability that may significantly affect the evaluation of risk at some sites.

The IEUBK model. The Agency is further studying both the IEUBK model and analyses of epidemiologic studies in order to better develop the technical basis for rulemaking under TSCA

Section 403. The Agency intends to promulgate regulations under Section 403 setting health-based standards for lead in soil and dust. OSWER intends to issue a final soil lead directive once the TSCA Section 403 regulations are finalized. For additional information on TSCA Section 403 developments, call (202) 260-1866.

However, the Agency believes that risk managers (risk assessors, on-scene coordinators, remedial project managers, and other decision-makers at Superfund and RCRA sites) are currently in need of the best guidance available today. The Agency believes that the IEUBK model is the best available tool currently available for assessing blood lead levels in children. Furthermore, use of the IEUBK provides allows the risk manager to consider site-specific information that can be very important in evaluating remediation options. Therefore, using the latest developments in the IEUBK model and the collective experience of the Superfund, RCRA Corrective Action, and TSCA Section 403 programs, the Agency is offering this guidance and is recommending a residential screening level for Superfund and RCRA sites of 400 ppm.

BACKGROUND

Early OSWER guidance (1989-1991). Four guidance documents on soil lead cleanup were issued by OSWER during the period of 1989 to 1991:

1. September 1989, OSWER Directive #9355.4-02. This guidance recommended a soil lead cleanup level of 500 - 1000 ppm for protection of human health at residential CERCLA sites.

2. May 9, 1990. RCRA Corrective Action program guidance on soil lead cleanup. This guidance described three alternative methods for setting "cleanup levels" (not action levels) for lead in soil at RCRA facilities. One approach was to use levels derived from preliminary results of IEUBK model runs. The other two approaches were to use the range of 500 to 1000 provided in the 1989 directive on CERCLA sites, or to use "background" levels at the facility in question.

3. June 1990, OSWER Directive #9355.4-02A. Supplement to Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites. This memorandum reiterated that the September 1989 directive was guidance and should not be interpreted as regulation.

4. August 29, 1991. This supplemental guidance discussed EPA's efforts to develop a new directive that would

accomplish two objectives: (1) account for the contribution from multiple media to total lead exposure; and, (2) provide a stronger scientific basis for determining a soil lead cleanup level at a specific site.

Development of the IEUBK Model for OSWER use. During the 1989-91 time period, use of the EPA IEUBK model was identified as the best available approach for accomplishing the objectives outlined in the August 1991 guidance. The model integrates exposure from lead in air, water, soil, dust, diet, and paint with pharmacokinetic modeling to predict blood lead levels in children (i.e., children 6 to 84 months old), a particularly sensitive population.

In the spring of 1991, OSWER organized the Lead Technical Review Workgroup to assist Regional risk assessors and site managers in both using the model and making data collection decisions at CERCLA and RCRA sites. The workgroup was composed of scientists and risk assessors from the Regions and Headquarters, including the Office of Research and Development (ORD), and the Office of Pollution Prevention and Toxic Substances (OPPTS).

In November 1991, the EPA Science Advisory Board (SAB) reviewed the scientific merits of using the IEUBK model for assessing total lead exposure and developing soil lead cleanup levels at CERCLA and RCRA sites. In general, the SAB found the model to be an important advance in assessing potential health risks from environmental contaminants. However, the SAB also recommended additional guidance on the proper use of the model.

In response to SAB concern over the potential for incorrect use of the model and selection of inappropriate input values both for default and site-specific applications, OSWER developed a comprehensive "Guidance Manual for the Integrated Exposure Uptake Biokinetic Model for Lead in Children" (referred to in this interim directive as the "Guidance Manual"). This Guidance Manual assists the user in providing inputs to the model to estimate risks from exposures to lead. It discusses the use of model default values or alternative values, and the application of the model to characterize site risks. Use of the Guidance Manual should facilitate consistent use of the IEUBK model and allow the risk assessor to obtain valid and reliable predictions of lead exposure. The Lead Technical Review Workgroup has been collecting data to further validate the model and to update the Guidance Manual as needed.

Relationship to RCRA Corrective Action "Action" Levels. The approach for calculating a screening level for lead (including exposure assumptions), set forth in this Revised Interim Soil Lead Directive, supersedes the guidance provided for calculating

"action" levels set forth in Appendix D of the proposed Subpart S Corrective Action rule. In the July 27, 1990 RCRA proposal (55 *Federal Register* 30798), EPA introduced the concept of "action levels" as trigger levels for further study and subsequent remediation at RCRA facilities. In this respect, the current directive's "screening levels" are analogous to the proposed rule's "action levels." In the proposal, where data were available, action levels were developed for three pathways of human exposure to contaminants: soil ingestion, water ingestion and inhalation of contaminated air. Exposure assumptions used in the calculations were set out in Appendix D of the proposal. For the soil pathway, action levels were calculated two different ways depending on whether the contaminant in the soil was a carcinogen or a systemic toxicant. Although lead was listed in Appendix A of the preamble to the rule as a class B2 carcinogen, no action level had been calculated because neither a carcinogenic slope factor (SF) nor a reference dose (RfD) had been developed by the Agency. Although the guidance in Appendix D of the proposed Corrective Action rule remains in effect with respect to other hazardous constituents, this directive now allows for the development of the lead screening ("action") level using the IEUBK model.

Recent developments (1992-Present). Following discussions among senior Regional and OSWER management, the OSWER Soil Lead Directive Workgroup (composed of Headquarters, Regional and other Federal agency representatives) recommended in the spring of 1992 that a "two step" decision framework be developed for establishing cleanup levels at sites with lead-contaminated soils. This framework would identify a single level of lead in soils that could be used as either the PRG for CERCLA site cleanups or the action level for RCRA Corrective Action sites, but would also allow site managers to establish site-specific cleanup levels (where appropriate) based on site-specific circumstances. The IEUBK model would be an integral part of this framework. OSWER then developed a draft of this directive which it circulated for review on June 4, 1992. The draft set 500 ppm as a PRG and an action level for RCRA facilities in residential settings.

Following development of this draft, OSWER held a meeting on July 31, 1992 to solicit a broad range of views and expertise. A wide range of interests, including environmental groups, citizens and representatives from the lead industry attended. This meeting encouraged OSWER to think more broadly about how the directive would affect urban areas, how lead paint and dust contribute to overall risk, and how blood lead data could be used to assess risk. In subsequent meetings with the Agency for Toxic Substances and Disease Control (ATSDR) and the Centers for Disease Control (CDC), options were discussed on how to use blood lead data and the need to evaluate the contribution of paint. In addition, during these meetings, a "decision tree" approach was

suggested that proposed different threshold levels (primary and secondary) for screening decisions, action decisions and land use patterns.

Findings from the three cities (Baltimore, Boston, and Cincinnati) of the Urban Soil Lead Abatement Demonstration Project (peer review scheduled for completion in late 1994) indicate that dust and paint are major contributors to elevated blood lead levels in children. Furthermore, preliminary findings suggest that any strategy to reduce overall lead risk at a site needs to consider not only soil, but these other sources and their potential exposure pathways. (For further information on this demonstration project, contact Dr. Rob Elias, USEPA/ORD, Environmental Criteria and Assessment Office (ECAO), RTP, (919) 541-4167.)

Finally, in its efforts to develop this interim directive, the OSWER Soil Lead Workgroup has met with other EPA workgroups including the TSCA Section 403, Large Area Lead Sites, and Urban Lead workgroups, as well as other Federal agencies including the Agency for Toxic Substances and Disease Registry, the Centers for Disease Control, and the Department of Housing and Urban Development.

Derivation of Lead Screening Levels. Development of the residential screening level in this interim directive required two important OSWER decisions. 1) OSWER determined that it would seek to achieve a specific level of protectiveness in site cleanups; generally, OSWER will attempt to limit exposure to soil lead levels such that a typical (or hypothetical) child or group of similarly exposed children would have an estimated risk of no more than 5% of exceeding the a 10 μg lead/dl blood lead level. This 10 μg/dl blood lead level is based upon analyses conducted by the Centers for Disease Control and EPA that associate blood lead levels of 10 μg/dl and higher with health effects in children; however, this blood lead level is below a level that would trigger medical intervention. 2) In developing the residential screening level, OSWER has decided to apply the EPA's IEUBK model on a site-specific basis. This model has been designed specifically to evaluate exposures for children in a residential setting. Current research indicates that young children are particularly sensitive to the effects of lead and require specific attention in the development of a soil screening level for lead. A screening level that is protective for young children is expected to be protective for older population subgroups.

In general, the model generates a probability distribution of blood lead levels for a typical child, or group of children, exposed to a particular soil lead concentration and concurrent lead exposures from other sources. The spread of the distribution reflects the observed variability of blood lead

levels in several communities. This variability arises from several sources including behavioral and cultural factors.

The identification of lead exposures from other sources (due to air, water, diet, paint, etc.) is an essential part of characterizing the appropriate blood lead distribution for a specific neighborhood or site. For the purpose of deriving a residential screening level, the background lead exposure inputs to the IEUBK model were determined using national averages, where suitable, or typical values. Thus, the estimated screening level of 400 ppm is associated with an expected "typical" response to these exposures, and should not be taken to indicate that a certain level of risk (e.g., exactly 5% of children exceeding 10 μg/dl blood) will be observed in a specific community, e.g., in a blood lead survey.

Because a child's exposure to lead involves a complex array of variables, because there is population sampling variability, and because there is variability in environmental lead measurements and background levels of lead in food and drinking water, results from the model may differ from results of blood lead screening of children in a community. Extensive field validation is in progress. The model will be evaluated further once these efforts are completed.

OBJECTIVE

With this interim directive, OSWER recommends using 400 ppm soil lead (based on application of the IEUBK model) as a screening level for lead in soil for residential scenarios at CERCLA sites and at RCRA Corrective Action sites. Residential areas with soil lead below 400 ppm generally require no further action. However, in some special situations, further study is warranted below the screening level. For example, agricultural areas, wetlands, areas with ecological risk, and areas of higher than expected human exposure are all situations that could require further study. For further guidance on ecological risks, Superfund risk managers are encouraged to consult their Regional Biological Technical Assistance Groups (BTAGs; see Appendix D).

Generally, the ground water pathway will not pose a significant risk since many lead compounds are generally not highly mobile. However, there are situations where, because of the form of lead, hydrogeology, or the presence of other contaminants at the site, lead may pose a threat to the ground water. In these situations, additional analysis is warranted, and the Superfund Regional Toxics Integration Coordinators (RTICs; see Appendix B) or RCRA hydrogeologists should be consulted.

While recognizing that urban lead is a significant problem, this interim directive is not designed to be applied in addressing the potential threat of lead in urban areas other than at CERCLA or RCRA Corrective Action sites. Guidance and regulations to be developed under TSCA Section 403 will provide an appropriate tool for addressing urban sites of potential concern.

Generally, where the screening level is exceeded, OSWER recommends using the IEUBK model during the Remedial Investigation or the RCRA Facility Investigation for evaluating potential risks to humans from environmental exposures to lead under residential scenarios. Site-specific data need to be collected to determine PRGs or MCSs. At a minimum, this may involve collecting soil and dust samples in appropriate areas of the site. Further guidance on data collection or modification of the non-residential equation can be obtained by contacting the RTICs or RCRA Regional risk assessors, who in turn may consult the Lead Technical Review Workgroup.

The type of site-specific data that should be collected will obviously depend on a number of factors, including the proximity of residences to the contaminated soil, the presence of site access controls, and other factors that would influence the probability of actual human exposure to the soils. At a minimum, when residences are at or near the site, it is expected that using the model will generally involve taking soil and dust samples from appropriate areas of the site. In many cases, it may not be necessary to gather certain types of data for input into the model. For example, when there are no residences nearby, or where there is otherwise no exposure or very limited exposure to lead contamination, it may not be necessary to collect site-specific data (e.g., dust, water, paint, blood-lead, etc.)

In developing a PRG for CERCLA sites or a MCS for RCRA facilities, EPA recommends that a soil lead concentration be determined so that a typical child or group of children exposed to lead at this level would have an estimated risk of no more than 5% of exceeding a blood lead of 10 μg/dl. In applying the IEUBK model for this purpose, appropriate site specific data on model input parameters, including background exposures to lead, would be identified.

When the PRG or MCS is exceeded, remedial action is generally recommended. Such action does not, however, necessarily involve excavating soil. A range of possible actions may be considered, as discussed in greater detail under the Implementation section of this directive: Issues for Both Programs.

IMPLEMENTATION

Superfund

This interim directive applies to all future CERCLA Remedial Investigation/Feasibility Study (RI/FS) work; this interim directive should generally not be applied at sites for which risk assessments have been completed. For removal sites, this interim directive recommends that decisions regarding removal actions be considered first by the Regional Decision Team (RDT). The RDT will then refer sites to the removal program for early action, as appropriate.

The approach in this interim directive helps meet the goals set by the Superfund Accelerated Cleanup Model (SACM) for streamlining remedial decision-making. (This streamlined approach is described in Appendix A, Suggested Decision Logic for CERCLA and RCRA Corrective Action.) This interim directive also recognizes that other methods (e.g., slope studies and others) for evaluating risks at lead sites may also be appropriate and may be used in lieu of, or in conjunction with, the IEUBK model. If an alternate approach to lead risk assessment is to be applied, an EPA scientific review should be obtained. For example, expert statisticians would need to review slope factor calculations for statistical biases before their use could be supported. Recognizing that all assessment methods involve some uncertainties, the Agency, at this time, believes the IEUBK model is the most appropriate and widely applicable tool for Superfund and RCRA sites. Alternatively, EPA may require setting cleanup levels below the screening level if site-specific circumstances warrant (e.g, ecological risk). For further information on the use of the IEUBK model at CERCLA sites, contact the Regional Toxics Integration Coordinators identified in Appendix B.

RCRA Corrective Action

It is expected that the RCRA corrective action program will generally follow an approach similar to CERCLA's (as described above) in using the IEUBK model. In the case of RCRA facilities at which lead contaminated soils are of concern, collection and evaluation of data for the purpose of using the model will be primarily the responsibility of the owner/operator.

Issues for Both Programs

Cleanup of soils vs. other lead sources: OSWER's approach to assessing and managing risks from lead is intended to address the multi-media/multi-source nature of environmental lead exposures because it is expected that people at or near CERCLA and RCRA Corrective Action sites will experience lead exposures from sources in addition to contaminated soil. In some instances, these other exposures may be large (e.g., where there are

children living in houses with high levels of lead d : from deteriorated paint; The presence of various sources of lead exposure may be very important in both the development of site-specific risk assessments and in the consideration of alternative risk management options.

From an assessment perspective, estimating blood lead levels, that might result from exposures at a site, depends on appropriately integrating exposures from all relevant media. Specifically, it is important to consider direct soil exposures and indoor dust exposures (which can include contributions from both soil and lead-based paint) on a site-specific basis, as well as any contributions from drinking water or other local sources of lead exposure. In using the IEUBK model to estimate blood lead levels, it is important to note that the risk attributable to soil lead exposures is dependent upon the existing level of exposures from other sources. That is, the amount by which the total risk would be lowered if all exposures to lead in soil were removed is not a constant, but varies with the level of existing non-soil exposures. This is because the model derives a "distribution" (rather than a simple point estimate) as an output whose shape and size is quite dependent on the predicted variability of exposures from each lead source. As a result, other factors being equal, the risks attributable to soil will generally be higher in the presence of elevated lead exposures from other sources. Therefore, in applying the IEUBK model, the risk attributable to soil lead can be predicted as the difference between the risk estimated when all sources of lead exposure are assessed, and the risk estimated considering only non-soil related exposures. This concept is especially important when evaluating different options for risk reduction at a given site.

From a risk management perspective, achieving a safe environment for populations at CERCLA and RCRA Corrective Action sites may require attention to multiple sources of lead, not all of which may be related to contamination from the source that was the initial concern at the site. Generally, the goal of the Agency, while acting within the constraints of CERCLA and RCRA legal authorities, is to reduce, to the maximum extent feasible, the risk of having significantly elevated blood lead levels. On a site-specific basis this can include remediation approaches that would lead to reduction of exposure from other sources, such as lead-based paint, in conjunction with appropriate soil remediation. Following from the risk assessment discussion in the previous paragraphs, exposures from lead in soils may have a lesser impact in producing high blood lead levels if existing exposures from lead-based paint are reduced.

Abatement vs. Intervention: Remedial measures can be divided into those that remove the source of contamination (abatement) and those that leave the contamination in place but block the

exposure pathway (intervention). These combinations of measures might include but not be limited to:

Abatement - Soil removal or interior and exterior lead paint abatement.

Intervention - Institutional controls, education/public outreach, gardening restrictions, indoor cleaning and dust removal, or additional cover.

Generally, the most appropriate CERCLA or RCRA response action or combination of actions will be based, in part, on the estimated level of threat posed at a given site. However, as mentioned earlier, key decision criteria also include the overall protectiveness of response options, attainment of Applicable or Relevant and Appropriate Requirements (for CERCLA), a preference for permanent remedies, implementability, cost-effectiveness, and public acceptance. Intervention measures may be more appropriate than abatement (e.g., soil excavation) at many sites, especially in areas where soil lead levels fall at or near the site-specific PRG or MCS.

Addressing exposure from other sources of lead may reduce risk to a greater extent and yet be less expensive than directly remediating soil. In some cases, cleaning up the soil to low levels may, by itself, provide limited risk reduction because other significant lead sources are present (e.g., contaminated drinking water or lead-based paint in residential housing). If it is possible to address the other sources, the most cost-effective approach may be to remediate the other sources as well as, or (if exposures to lead in soil are relatively low) instead of full soil lead abatement.

Lead-based paint can be a significant source of lead exposure and needs to be considered when determining the most appropriate response action. Interior paint can contribute to elevated indoor dust lead levels. In addition, exterior paint can be a significant source of recontamination of soil. Appendix A-3 of this document contains more information on how to evaluate and address the contribution of paint.

Certain legal considerations arise in considering remediation of sources other than soil. In particular, interior exposures from interior paint generally are not within the jurisdiction of RCRA or CERCLA. In addition, where other sources are addressed, issues may arise regarding the recoverability of costs expended by the Agency, or the possibility of claims being asserted against the Fund where other parties are ordered to do the work.

As discussed above, in considering whether to address sources other than soil, it is necessary to consider the risk

that would remain from the lead in the soil. In some cases, after risks from other sources have been addressed, unrestricted exposure to soil could be allowed while still being protective (e.g., where the IEUBK model result was heavily affected by the other sources). In other cases, soil risks may still be high enough to require abatement, containment or institutional controls to prevent high levels of exposure. In such cases, before a conclusion is made that the overall remedy will be protective, institutional controls should be carefully studied to make sure that they will be implementable, effective in both the long-term and short-term, and likely to achieve community acceptance.

A potentially useful approach that can be considered in conjunction with other, more active measures in reducing blood lead levels is to develop and promote public education and awareness programs that focus on the causes and prevention of lead poisoning in children. EPA's Office of Pollution Prevention and Toxics (OPPT) provides information on abatement of lead-based paint by the homeowner as well as inexpensive preventive measures the public can take to reduce their exposure to lead. Additional research to evaluate the effectiveness of educational efforts in reducing lead exposures are needed to allow better evaluation of the usefulness of this option. Further, OPPT is assessing the effectiveness of various lead paint abatement options emphasizing low-cost methods. For additional information, contact the National Lead Information Center at 1-800-424-LEAD.

Mining-related sites: Both risk assessors and site managers should be aware that there are a number of factors that affect the relationship between soil lead concentrations and blood lead levels. These factors include the variability in soil lead contribution to house dust levels, or differences in the bioavailability of lead. See discussion in next section, <u>Use of blood lead data</u>, for assessing differences between measured and predicted blood lead levels.

Thus, for mining-related sites without significant past smelting/milling activity, this interim directive encourages further research for characterizing the potential impact of particle size and speciation on soil bioavailability.

Site managers and risk assessors are cautioned that most areas impacted by mining activities are also associated with present or historical smelting or milling operations. Generalizations regarding distinct differences between mining and smelting or milling sites should be avoided until adequate site history and characterization are complete.

Use of blood lead data: In conducting Remedial Investigations (RIs) for CERCLA or RCRA Facility Investigations (RFIs) for RCRA Corrective Action, the interim directive

recommends evaluating available blood lead data. In some cases, it may be appropriate to collect new or additional blood lead samples. In general, data from well-conducted blood lead studies of children on or near a site can provide useful information to both the risk assessor and site manager. However, the design and conduct of such studies, as well as the interpretation of results, are often difficult because of confounding factors such as a small population sample size. Therefore, any available blood lead data should be carefully evaluated by EPA Regional risk assessors to determine their usefulness. The Guidance Manual discusses how to evaluate observed blood lead survey data and blood lead data predicted by the IEUBK model.

The Guidance Manual recommends that blood lead data not be used alone either to assess risk from lead exposure or to develop soil lead cleanup levels. During its review of the IEUBK model, the SAB supported this position by asserting that site residents may temporarily modify their behavior (e.g., wash their children's hands more frequently) whenever public attention is drawn to a site. In such cases, this behavior could mask the true magnitude of potential risk at a site and lead to only temporary reductions in the blood lead levels of children. Thus, blood lead levels below 10 μg/dl are not necessarily evidence that a potential for significant lead exposure does not exist, or that such potential could not occur in the future.

Non-residential (adult) screening level. EPA also believes there is a strong need to develop a non-residential (adult) screening level. The IEUBK model is, however, not appropriate for calculating this screening level since it is designed specifically for evaluating lead exposures in children. At this time, EPA is considering a few options for developing this screening level. Several adult models have recently become available. Developing a screening level by using any of them is likely to require significant additional work by the Agency. This work might include testing, validation, and selection of one of the existing models or development of its own model, both of which would require a considerable amount of time. Consequently this would probably be a long-term option. A short-term option would be to develop a screening level based on a simple approach that approximates the more complicated biokinetics in humans. This can serve in the interim while more sophisticated adult lead exposure assessment tools can be identified or developed.

NOTICE: Users of this directive should bear in mind that the recommendations in this document are intended solely as guidance, and that EPA risk managers may act at variance with any of these recommendations where site-specific conditions warrant, as has been noted above. These recommendations are not intended, and cannot be relied upon, to create any rights, substantive or procedural, enforceable by any party in litigation with the United States, and may change at any time without public notice.

Because this document and the related Guidance Manual are not legally binding either upon EPA or other parties, Agency personnel should keep in mind if they are questioned or challenged in comments on a proposed remedial plan, such comments must be considered and a substantive explanation must be provided for whatever approach is ultimately selected. For example, while the IEUBK model is recommended here, its use is not a regulatory requirement and comments on the model or its use should be fully considered.

APPENDICES

A Suggested Decision Logic for CERCLA and RCRA Corrective Action

A-1 Suggested Decision Logic for Residential Scenarios for CERCLA and RCRA Corrective Action

A-2 Suggested Decision Logic for Lead-based Paint for CERCLA and RCRA Corrective Action

B Regional Toxics Integration Coordinators (RTICS)

C Relationship between the OSWER Soil Lead Directive and TSCA Section 403 Guidance

D Biological Technical Assistance Group Coordinators (BTAGS)

Appendix B

Superfund Regional Toxics Integration Coordinators (RTICs)

	Telephone	FAX
Ann-Marie Burke EPA Region 1 HSS-CAN-7 John F. Kennedy Federal Bldg. Boston, MA 02203	617/223-5528	617/573-9662
Peter Grevatt EPA Region 2 26 Federal Plaza New York, NY 10278	212/264-6323	212/264-6119
Reggie Harris EPA Region 3 (3HW15) 841 Chestnut Street Philadelphia, PA 19107	215/597-6626	215/597-3150
Dr. Elmer Akin EPA Region 4 345 Courtland St, NE EPA 9452 Atlanta, GA 30365	404/347-1586	404/347-0076
Erin Moran EPA Region 5 HSRLT-5J 77 West Jackson Street Chicago, Il 60604	312/353-1420	312/886-0753
Jon Rauscher EPA Region 6 6H-SR 1st Interst. Bank Tower 1445 Ross Ave. Dallas, TX 75202	214/655-8513	214/655-6460
David Crawford (Acting) EPA Region 7 Superfund 726 Minnesota Ave. Kansas City, KS 66101	913/551-7702	913/551-7063
Chris Weis EPA Region 8 8HWM-SR 999 18th St, Suite 500 Denver, CO 80202	303/294-7655	303/293-1230
Dan Stralka EPA Region 9 ORA 75 Hawthorne Street San Francisco, CA 94105	415/744-2310	415/744-1916
Carol Sweeney EPA Region 10 ES-098 1200 6th Avenue Seattle, WA 98101	206/553-6699	206/553-0119

Appendix C

Relationship between the OSWER Soil Lead Directive and TSCA Section 403 Guidance

Since lead exposures occur through all media, a variety of Agency programs address lead under a number of statutes. Lead in soil is addressed under TSCA Section 403, the RCRA Corrective Action program, and CERCLA, each of which differs somewhat in the types of sites that apply and the types of standards that are used. These differences are primarily due to differences in the purposes of the programs and the authority granted by the statutes under which they are developed. Section 403 soil standards will apply only to residential soil and the current TSCA guidance is generic in nature, with the same standards applying on a nationwide basis. Given the wide applicability of Section 403, generic standards are used in the current guidance in order to reduce resource requirements, as compared to site-specific decisions which can involve expensive and time-consuming analyses. Required RCRA and CERCLA activities are determined on a site-specific basis. The agency's recommendations for evaluating RCRA Corrective Action and CERCLA sites are contained in the OSWER Interim Soil Lead Directive.

In all three of these programs, the Agency's approach is to consider soil lead in the context of other lead sources that may be present and contribute to the total risk. For example, TSCA Section 403 specifically requires the Agency to consider the hazards posed by lead-based paint and lead-contaminated interior dust, as well as lead-contaminated soil. Likewise, the OSWER Soil Directive includes evaluation of other lead sources at a site as part of site assessment/investigation procedures. In addition, the primary focus of the three programs is primary prevention -- the prevention of future exposures from the source(s) being remediated.

The fundamental difference between the relatively new TSCA Section 403 program and the RCRA Corrective Action and CERCLA cleanup programs is that, under current guidance the Section 403 program seeks to establish national standards to prioritize responses to lead hazards whereas the other two programs usually develop site-specific cleanup requirements. This is because TSCA Section 403 deals with a potentially huge number of sites, and resources for the investigation needed to accurately identify their risks are typically very limited. Therefore most decisions under Section 403 will be made with little or no regulatory oversight and clear generic guidelines will be more effective. The more established RCRA and CERCLA programs, on the other hand, deal with a much smaller number of sites, at which extensive site characterization will have been performed before cleanup decisions are made. In addition, these programs have well-established funding mechanisms.

Appendix A-2

Suggested Decision Logic for Lead-based Paint for CERCLA and RCRA Corrective Action

(If soil lead levels are below screening levels, lead-based paint could be addressed by authorities other than RCRA or CERCLA.)

If soil lead levels are above screening levels:

Step 1. Examine condition of exterior paint and determine its lead content, if any.

- If paint is deteriorated, assess contribution or potential contribution of paint to elevated soil lead levels through speciation studies, structural equation modelling, or other statistical methods.

Step 2. Evaluate potential for recontamination of soil by exterior paint.

Step 3. Remediate exterior paint only in conjunction with soil.

- Determine appropriate remediation based on risk management factors (e.g., applying the nine criteria), remediating the major contributor first.

Step 4. Examine condition of indoor paint and determine its lead content, if any.

- If indoor dust lead concentration is greater than outdoor soil lead concentration (because of contamination from both interior paint and outdoor soil), remediate indoor dust (e.g., through a removal action, or making HEPA-VACS available to community).

Step 5. Once the risk from indoor paint has been assessed, examine options to abate indoor paint (e.g., PRP, State, local, HUD) and consult TSCA Section 403 program for additional information and/or guidance.

Step 6. While RCRA and CERCLA have very limited authority regarding the cleanup of interior paint, the remedy may take into account the reduction of

total risk that may cccur if interior paint is addressed by other means. Thus, for example, a Record of Decision (ROD) or Statement of Basis (SB) may recognize that interior lead-based paint is being addressed by other means, and narrow the response accordingly (possibly making this contingent on completion of the interior lead-based paint abatement effort.

Appendix A-1

Suggested Decision Logic for Residential Scenarios
for CERCLA and RCRA Corrective Action

Step 1: Determine soil lead concentration at the site.

If soil lead is less than 400 ppm:
STOP, no further action is required, UNLESS special circumstances (such as the presence of wetlands, other areas of ecological risk, agricultural areas, shallow aquifers, or other areas of potentially high exposure) warrant further study.

If soil lead is greater than 400 ppm:
PROCEED to Step 2, UNLESS 400 ppm is selected as a cleanup goal based on consideration of all relevant risk management factors.

Step 2: Evaluate probable land use and develop exposure scenarios.

Step 3: Collect appropriate site-specific data based on selected scenarios.

For example, sampling data may include:

- Soil and dust (at a minimum), paint, water, and air
- For unique site situations, data on speciation and particle size, and behavioral activities may be required.

Available blood lead data:

- If blood lead data are available, consult the Guidance Manual and Regional Risk Assessor.
- If blood lead data are not available, Regional Risk Assessors and site managers should consider the appropriateness of conducting a blood lead study to supplement available data.

Step 4: Run the IEUBK model with site-specific data to estimate risk and evaluate key exposure pathways at the site.

- If blood lead data are available, compare the data to the model results

Step 5: Where risks are significant, evaluate remedial options.

If lead-based exterior or interior paint is the only major contributor to exposure, no Superfund action or RCRA corrective action is warranted.

If soil is the only major contributor to elevated blood lead, a response to soil contamination is warranted, but paint abatement is not.

If both exterior lead-based paint and soil are major contributors to exposure, consider remediating both sources, using alternative options as described in Appendix A-2.

If indoor dust levels are greater than soil levels, consider evaluating the contribution of interior lead-based paint to the dust levels. If interior lead-based paint is a major contributor, consider remediating indoor paint to achieve a greater overall risk reduction at lower cost. (See Appendix A-2.)

NOTE: Available authority to remediate lead-based paint under CERCLA and RCRA is extremely limited.)

Step 6: If the IEUBK model predicts elevated blood leads, rerun the model using the site-specific parameters selected to reflect remedial options in Step 5 to determine site-specific PRGs or MCSs for soil.

Appendix D

Superfund Biological Technical Assistance Group Coordinators (BTAGs)

	Telephone	Fax
David Charters Mark Sprenger ERT USEPA (MS-101) 2890 Woodbridge Ave., Bldg. 18 Edison, NJ 08837-3679	908/906-6826	908/321-6724
Jeffrey Langholz TIB USEPA (5204G) 401 M Street SW Washington, DC 20460	703/603-8783	703/603-9103
Susan Svirsky Waste Management Division USEPA Region 1 (HSS-CAN7) JFK Federal Building Boston, MA 02203	617/573-9649	617/573-9662
Shari Stevens Surveillance Monitoring Branch USEPA Region 2 (MS-220) Woodbridge Avenue Raritan Depot Building 209 Edison, NJ 08837	908/906-6994	908/321-6616
Robert Davis Technical Support Section USEPA Region 3 (3HW15) 841 Chestnut Street Philadelphia, PA 19107	215/597-3155	215/597-9890
Lynn Wellman WSMD/HERAS USEPA Region 4 345 Courtland Street, NE Atlanta, GA 30365	404/347-1586	404/347-0076
Eileen Helmer USEPA Region 5 (HSRLT-5J) 77 West Jackson Boulevard Chicago, IL 60604-1602	312/886-4828	312/886-7160

Appendix D (Continued)

Superfund Biological Technical Assistance Group Coordinators (BTAGs)

Jon Rauscher Susan Swenson Roddy USEPA Region 6 (6H-SR) First Interstate Tower 1445 Ross Avenue Dallas, TX 75202-2733	214/655-8513	214/655-6762
Bob Koke SPFD-REML USEPA Region 7 726 Minnesota Avenue Kansas City, KS 66101	913/551-7468	913/551-7063
Gerry Henningsen USEPA Region 8 Denver Place, Suite 500 999 18th Street Denver, CO 80202-2405	303/294-7656	303/293-1230
Doug Steele USEPA Region 9 75 Hawthorne Street San Francisco, CA 94105	415/744-2309	415/744-1916
Bruce Duncan USEPA Region 10 (ES-098) 1200 6th Avenue Seattle, WA 98101	206/553-8086	206/553-0119

APPENDIX E

HEALTH AND SAFETY PLAN

Approved

HEALTH AND SAFETY PLAN

for the

SAMPLING OF MATERIAL AT THE COMMISSARY' CONSTRUCTION SITE

WHITE SANDS MISSILE RANGE NEW MEXICO

U.S. Army

WAO 600-11 and 600-11 Rev. 1

White Sands Missile Range Environmental Services Division

September 15, 1994

SITE SPECIFIC HEALTH AND SAFETY PLAN

DATE OF WORK: September-October, 1994

SITE PERSONNEL

Site Manager (task supervisor)	Gary Jordan
Site Safety Officer	Joel Giblin
Instrument Operator (Air monitor)	Joel Giblin
First Aid/CPR	George Esqueda
Samplers	George Esqueda Joel Giblin

ASI SUBCONTRACTORS:

Name:	Westech Laboratories
Address:	10737 Gateway West, No. 100
City / State/ Zip	El Paso, Texas 79935
Authorized Representative:	Randy Peck
Telephone:	915-592-3591

ASI APPROVALS:

Health & Safety:	[illegible]	9/13/94
Project Manager:	[illegible]	9/15/94

TABLE OF CONTENTS

section *page*

1.0 SUMMARY OF SITE TASKS, CONTAMINATION SOURCES, AND RELATED INFORMATION 1

2.0 EMERGENCY RESOURCES 5

3.0 SITE DESCRIPTION/HISTORY 8
3.1 Site Description 8
3.2 Proposed Scope of Work 8
3.3 Site Hazards 9

4.0 MONITORING EQUIPMENT 13

5.0 EXPOSURE SYMPTOMS 16

6.0 PERSONAL PROTECTIVE EQUIPMENT (PPE) 17

7.0 EQUIPMENT CHECK LIST 20

8.0 SITE ENTRY 21
8.1 Work Zones 21
8.2 Training Requirements 21
8.3 Medical Monitoring Requirements 24
8.4 First Aid/CPR Training 24
8.5 Buddy System 24

9.0 SITE EGRESS/PERSONNEL AND EQUIPMENT DECONTAMINATION/WASTE DISPOSAL 25
9.1 Personnel Decontamination 25
9.2 Monitoring Equipment Decontamination 25
9.3 Equipment Decontamination 25
9.4 Waste Disposal 25

10.0 MATERIAL HANDLING 26

11.0 MATERIAL SAFETY DATA SHEETS 28

12.0 UNDERSTANDING AND COMPLIANCE STATEMENT 29

ATTACHMENT 1 MATERIAL SAFETY DATA SHEETS 31

ATTACHMENT 2 HEAT STRESS 32

LIST OF FIGURES

figure *page*

Figure 1. WSMR Commissary Landfill Site 3
Figure 2. Emergency egress to McAffee Health Clinic 7

LIST OF APPENDICES

appendix

1 PERSONAL CONTACT REPORTS WITH WSMR

1.0 SUMMARY OF SITE TASKS, CONTAMINATION SOURCES, AND RELATED INFORMATION

SITE TASKS

Sample the new Solid Waste Management Unit (SWMU) landfill at the White Sands Missile Range (WSMR) commissary (Figure 1). The following site Health and Safety Plan is approved for WAO 600-11 and for 600-11 Rev. 1 sampling of material at the Commissary construction site.

Six samples will be collected from the landfill trench. In addition, two background samples will also be collected from the Commissary construction site. ASI personnel will also collect soil samples of excavated soil in "roll-off bins" near the trench site. Sample locations in the bins, will range from 6 inches to 24 inches in depth, the samples will be composited and a single sample will be taken and sent to the laboratory.

Samples will be taken using a stainless steel hand auger. The samplers will be wearing Tyvek suits, gloves, fullface respirator, steel toe boots and hard hats.

SITE DESCRIPTION

During Construction activities, in early August, 1994, at the site of a new Commissary on WSMR, an old inactive landfill was discovered. This old landfill was estimated to have been in operation between the periods of 1946 to 1952. The exact contents or quantities of materials placed in this landfill is unknown. Initial sampling results reported to ASI by WSMR indicate concentrations of TCLP lead above the RCRA Regulatory limit. In accordance with the RCRA Permit issued to WSMR by the NMED/EPA, this landfill is to be treated as a Solid Waste Management Unit (SWMU). ASI will sample the sides and bottom of the trench that remains after removal by WSMR of the "visible contents". ASI will also obtain background samples for a comparison using EPA Method 6010 (total metals). The background sample results will be compared with the sampling results from the trench for total metals. Excavated material have been placed in "roll-away" bins. ASI will also collect samples from the excavated materials in the bins.

POTENTIAL SITE HAZARDS/WORK TO BE ACCOMPLISHED

Since the initial results of analysis from WSMR indicated that the TCLP analytical result for lead was above the RCRA regulatory limit, the commissary landfill site must be treated as a RCRA Hazardous Waste Site. WSMR will remove all the "visible contents" from the landfill prior to work commencing on this WAO. ASI will sample the trench bottom and the trench side as identified by WSMR DES-E. The samples will be discrete samples taken at a depth of twelve inches from the surface(s) of the trench and bins, and sent to the laboratory for analysis of total metals, volatile and semi-volatile organics, pesticides and herbicides and PCB's. The analysis will not be by the TCLP extraction method (EPA Method 1311).

ASI will employ the use of aluminum ladders with plywood secured to the ladder as a sampling platform to sample the "roll-off bins". The ladders will be secured to the "roll-off bins" to prevent slippage. All "roll-off bins" will be sampled in teams of two (Appendix 1).

Two background samples, location to be identified by WSMR personnel, will be obtained at a depth of six inches from the surface. The samples will be obtained with a stainless steel auger which will be decontaminated between samples as explained above. The samples will be discrete samples and be sent to the laboratory for analysis of Total Metals (EPA Method 6010) and not a TCLP extraction method (EPA method 1311). Underground Hazards

No ground penetration is authorized in areas which are known or suspected to have unexploded ordnance (UXO). Special safety plans, special site surveys, and clearance by explosives operations/unexploded ordinance specialists are required if work is to be conducted in areas suspected of containing UXO.

No ground penetration employing heavy equipment is permitted until WSMR utility/facility representatives have determined that underground utilities are not present. "As built" drawings are frequently inadequate for determining utility locations. Cable locators should be used to determine/confirm the locations shown on maps or drawings.

Utilities

- Electricity
- Gas
- Sewer
- Telephone (metallic and fiberoptical cables)
- Water
- Steam

The team leader is responsible for ensuring that the "spotters" are shown the locations of the proposed drilling location(s). The spotter then locates the underground utilities and marks them with flags or paint. The team leader should write the spotter's name, directorate, time and date in his field log book.

Other Underground Hazards

- Fire and explosion hazards are also present if containerized chemicals are present underground (geophysical testing should be performed if there is doubt about the presence or location of underground structures). No sampling is permitted in areas where explosion potential exists: ie. metal masses have been detected using geophysical methods.

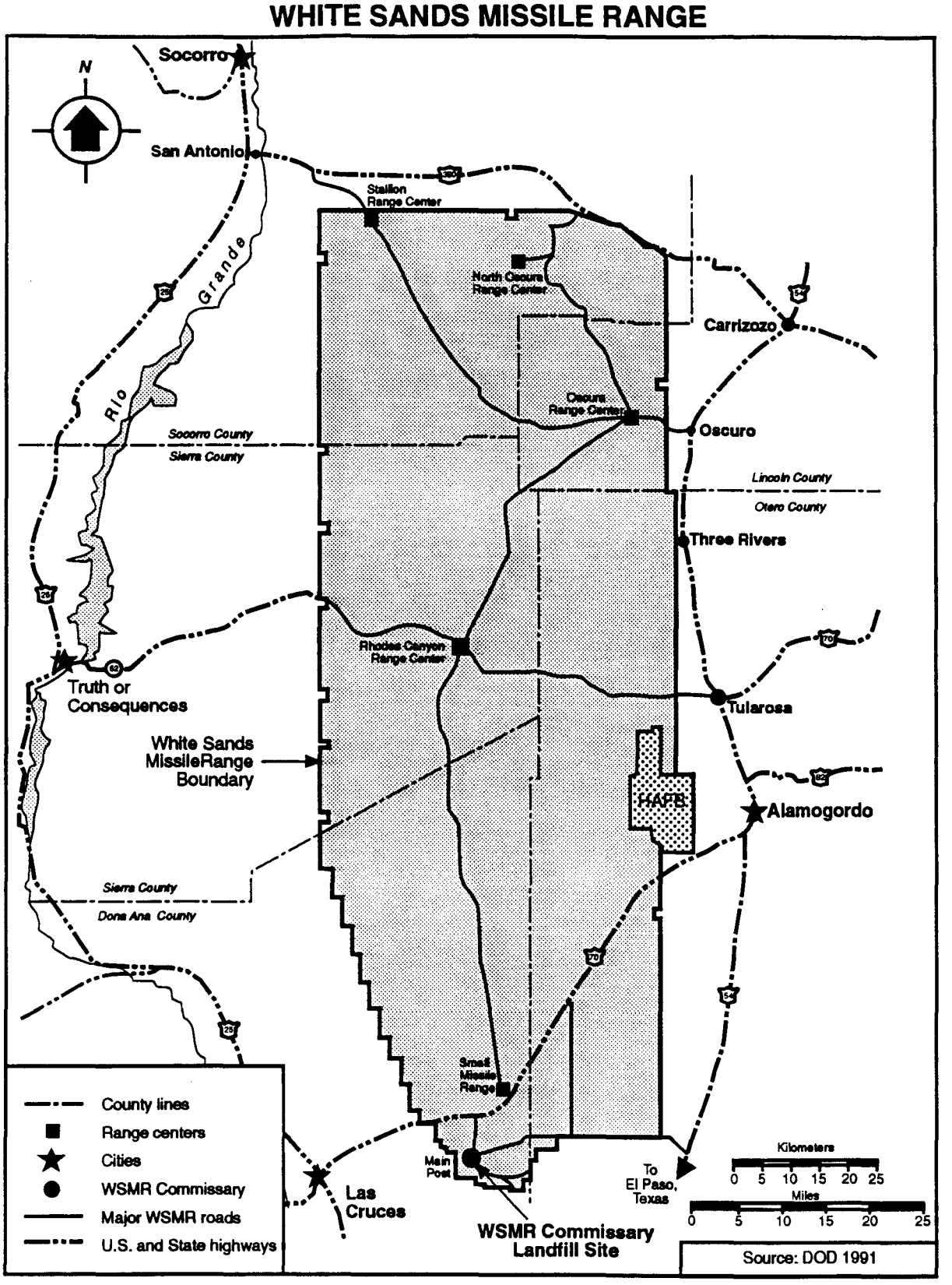


Figure 1. WSMR Commissary Landfill Site

All samples taken will be labeled, packaged and sent to the laboratory in sample shipment containers following EPA protocol. Appropriate chain-of-custody protocol will be followed.

2.0 EMERGENCY RESOURCES

AREA EMERGENCY MEDICAL & FIRE CONTACTS

Ambulance Telephone: (on Post)	116
Hospital Name: McAffee	678-2882
Fire Department Telephone:	117
Nearest Telephone Location:	on site

ASI and AGENCY EMERGENCY CONTACTS

Contact Person, Agency	Office Telephone	Home Telephone
ASI Health & Safety	303-980-0036	
ASI Project Mgr.	505-522-7229	
County Health Dept. (Office of Env. Health)	505-524-6000	
State Environmental Agency	505-524-6300	

All injuries, accidents or releases will be reported to ASI's health and safety department as soon as possible. Many chemical exposures must be assessed by a physician at the end of the work shift.

Ambulance service is less than 30 minutes from the site; ASI team members are currently certified in First Aid and CPR.

First aid measures will be taken to stabilize serious injuries if necessary. Medical attention will be sought and then the injury will be reported. Serious accidents or injuries must be reported within 24-hours.

ROUTE FROM SITE TO HOSPITAL **(See attached map)**

The attached map or sketch of the route to the hospital is legally required before site entry, and has been shown as Figure 2.

__ Completed at time of approval.

X Completed prior to site entry. A copy will be sent to Director of Health and Safety (or designee) upon return from field work.

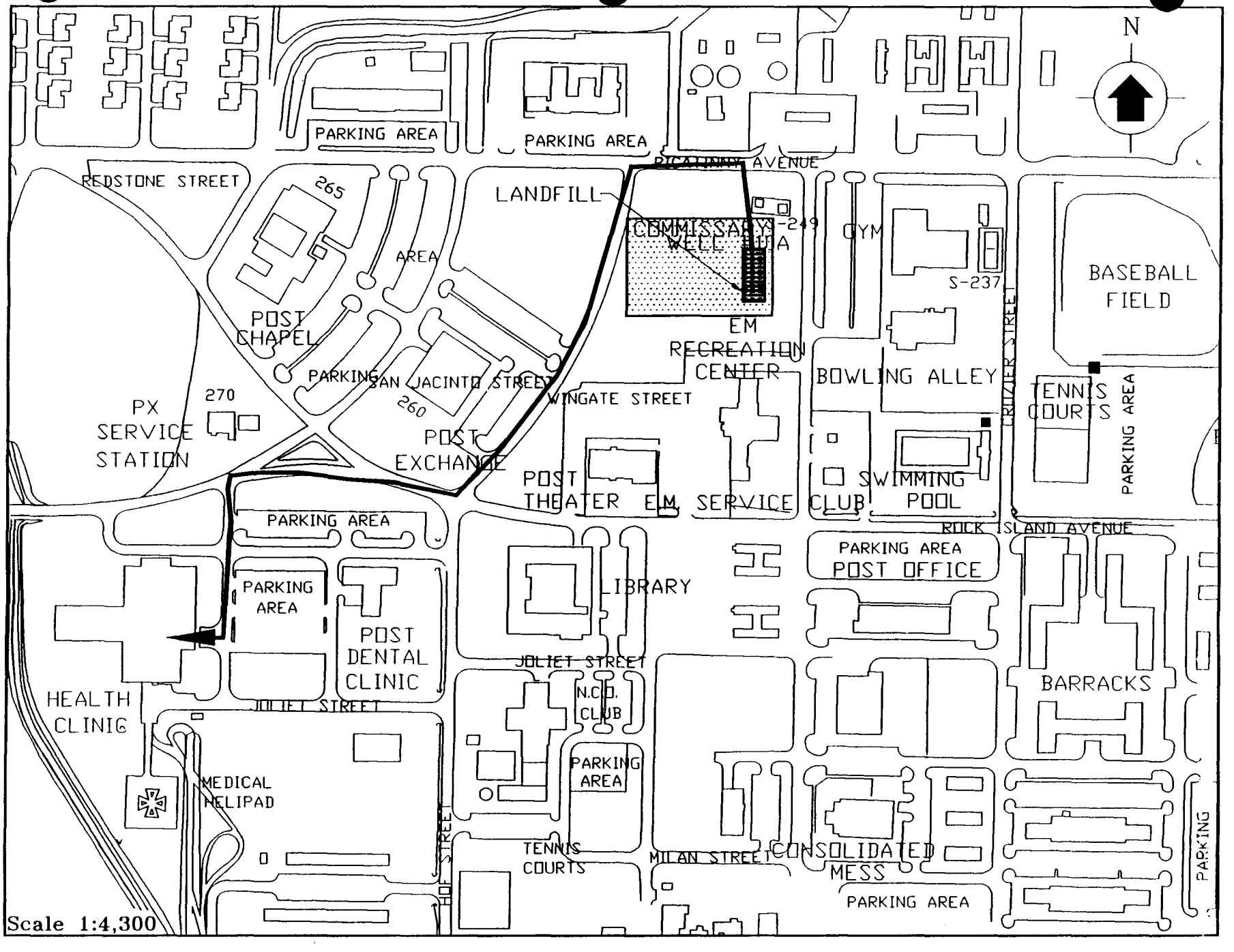


Figure 2. Emergency egress to McAffee Health Clinic

3.0 SITE DESCRIPTION/HISTORY

Site Type:

	Active		Service Station
X	Inactive		Refinery
X	Secured		Tank Farm
	Unsecured		Parking Lot
	Confined Space		
X	Landfill		

Surrounding Population:

	Residential	X	Military Base
X	Rural		VOR
	Industrial		Radar
	Urban		Microwave Link Station

3.1 Site Description (areas of concern, site history)

The SWMU trench commissary landfill is located at the on Main Post White Sands Missile Range, approximately 20 miles east of Las Cruces, NM. During the construction of a new WSMR Commissary, an old inactive landfill was discovered. This old landfill was estimated to have been in operation between the period of 1946 to 1952. Initial sampling by WSMR indicates concentrations of TCLP lead above Regulatory limits.

Soil samples exceed EPA's TCLP standards for lead.

3.2 Proposed Scope of Work

ASI employees will sample the Commissary trench in six different locations. In addition, two samples will be taken on the Commissary construction site as background samples. Each of the samples will be analyzed for totals.

In addition, ASI personnel will collect soil samples of excavated soil in "roll-away" bins near the trench site. Five sample locations that range to 24 inches in depth are anticipated per bin. In excess of 50 bins are anticipated for sampling.

3.3 Site Hazards

PART I. Physical Hazards:

AT SITE?	HAZARD	ACTION/LOGIC
No	Biological Hazards, e.g. medical wastes, sewage treatment facilities, septic fields, bird\pigeon droppings (Histoplasmosis)	No biological hazards are identified at this site.
No	Cold Stress/Hypothermia	Not anticipated for this project. (If "yes", see Cold Stress Attachment.)
No	Confined Space Entry	No confined spaces have been identified at the site.
Yes	Drill Rig Operations	See Drill Rig Operations attachment.
Yes	Direct Contact [Skin] Hazard	Avoid walking through areas of obvious contamination. If entry into contaminated areas is required, skin protection will be worn.
No	Drowning	No ponds, impoundments, abandoned or open water supply wells identified at this site.
No	Electrical	Overhead power lines, downed electrical wires, and buried cables all pose a danger of shock or electrocution if workers contact or sever them during site operations. Lightning is a hazard during outdoor operations, particularly for workers handling metal containers or equipment. Weather conditions should be monitored and work should be suspended during electrical storms.
No	Elevated Work/Fall hazard areas (over 6 feet high)	Work is anticipated over the tops of bins filled with excavated soil. The bins are 4-5 feet high. Work safety precautions for working on these bins will follow applicable protocols from the WSMR safety department. Elevated work areas will be approached with railings, rope, or other barriers or restraining devices as directed by the WSMR safety department.
Yes	Fire/Explosion Hazards	The EOD personnel will perform initial surveillance, and maintain special surveillance as requested by ASI.
Yes	Heat Stress	See the attached Heat Stress Attachment) Monitoring will be performed when temperatures exceed adjusted air temperature of 72.5°F. Personnel will not work if oral temperature exceeds 100 °F or if pulse rate exceeds 110 beats per minute after five minutes of rest.
Yes	Heavy Equipment Operations	There may be some heavy equipment operations in nearby areas. ASI personnel are not authorized by this plan to be in the exclusion zones of heavy equipment operations.
Yes	Inhalation of Toxic Dusts	Maintain distance upwind of stock piles or other ground level work. Upon monitoring of proposed sampling locations and other areas, respiratory protection may be required.
No	Inhalation of Toxic Vapors	Maintain distance upwind of stock piles or other ground level work. Upon monitoring of proposed sampling locations and other areas, respiratory protection may be required.
Yes	Insect/Tick/Snake Bites, Spiders, Ticks (Lymes Disease, Rocky Mountain Spotted Fever)	Wear an insect repellent during "bug season," especially in Lyme Disease prevalent areas. Repellents containing DEET are recommended for repelling ticks. Workers should will wear tight fitting clothes (and tape wrists/ankles) during "tick season" to prevent entry onto body. To avoid snakes, stay away from rocky areas whenever possible. Wear snake-proof leggings. A snake bite kit should be carried in an small first aid kit.

No	Electromagnetic (EM), e.g. Microwave, Radar, Laser	Well and sampling areas are not sufficiently near the radar station or other EM sources to pose an EM hazard.
No	Noise	Hearing protection is required when working around heavy equipment, drill rigs, or otherwise when noise levels exceed 80 dBA continuous or 140 dBA intermittent. Noise exposure is not anticipated for the scope of work herein.
No	Overhead Hazards, including Powerlines	See Drill Rig Operations and/or Heavy Equipment Operations attachment for minimum clearances when working near energized power lines. Where overhead hazards exist, hard hats will be required, for example, in heavy equipment operating areas, including backhoe arm, or drill rig.
No	Poison Ivy/ Oak/ Sumac, Stinging Nettle	Avoid walking through areas with obvious infestation of poisonous plants. If entry into contaminated areas is required, wear Level D coveralls. Wear gloves if contact is anticipated. Take off PPE inside out to avoid cross contamination.
No	Radiological Hazards, e.g. Posted Radiation Areas, Containerized Radiation, Radioactively Contaminated Particles, Radioactive Gases/Vapors,Tritium, X-rays	No radiological hazards identified at the site.
No	Splash Hazards	Splash hazards can occur during purging, bailing, and sampling of the monitoring wells during task operations. Bulk chemical splashes can occur when using chemicals to form monitoring well. Wear full body, hand, foot, eye, and face protection to protect against splashes.
Yes	Sunburn	Sunscreen lotions having a PF of at least 30 should be applied to exposed skin before the start of work each day.
No	Traffic (Roadways, Aircraft runways, off-road vehicles)	Work will occur in a isolated area.
Yes	Trenching/Excavation, Collapse Hazards (Karst areas, mined areas, etc)	Trenching has occurred as part of the excavation of materials from the old landfill. This Plan does not authorize any entry by ASI personnel into excavations over 4 feet deep, or where there is any potential of cave-ins from unstable soil. Any exceptions are to be approved in writing by the ASI Director of Health & Safety.
Yes	Trips/Slips/Falls	Establish predesignated routes. Route selected will avoid holes, tripping hazards and slippery areas. Ladders and scaffolding will be tied off to prevent falls of personnel and equipment from the bins.
Yes	Underground Utilities	No ground penetration with any powered equipment is permitted until public utility/facility authorities have determined that underground utilities are not present within 10 feet of the area being penetrated. A high pressure water line has been identified at the site. Also, buried drums, or other objects should be avoided through initial site histories, and/or geophysical surveys.
Yes	Unexploded Ordnance	No ground penetration is authorized in areas which are known or suspected to have unexploded ordnance (UXO). Special safety plans, special site surveys, and clearance by explosives operations/unexploded ordinance specialists are required if work is to be conducted in areas suspected of containing UXO. Concurrence from the EOD personnel at WSMR will be obtained before sampling begins. Any unusual resistance to sampling equipment during insertion, or observations of unusual or suspicious objects will trigger a "stop work" action and evaluation by EOD personnel.

PART II. Chemical Hazards:

Air monitoring will be conducted. No chemical exposure symptoms are anticipated at low environmental concentrations. The information provided is generally associated with concentrations which exceed PEL concentrations.

Chemical Hazards:

(List Chemicals)	**OCCUPATIONAL EXPOSURE STANDARDS**
Synonyms: Lead White Lead Paint LBP	(Inhalation): PEL is 50 ug/cubic meter, 8-hour TWA. The OSHA Action Limit is 30 ug/cubic meter. ASI respiratory protection limit is 1/2 the PEL, or 25 ug/cubic meter. Field particulate meter responses do not read lead directly. Calculations show that 1.0 mg/cubic meter airborne particulate would have to occur to reach 1/2 the PEL when lead content in paint is 2.5%.

HEALTH EFFECTS:
Due to the non-friable nature of the paint samples, and the short duration of sampling field work, no health effects are expected from LBP. Care should be taken to minimize exposures, such as using a water spray mister on the area to be sampled, and covering the sample area with a plastic bag while sampling.

In the event of overexposure to lead, symptoms may include the following:

Long-term (chronic) overexposure to lead may result in severe damage to blood-forming, nervous, urinary and reproductive systems. Some common symptoms of chronic overexposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia,headache, nervous irritability, muscle and joint pain or soreness, fine tremors, numbness, dizziness, hyperactivity and colic. In lead colic there may be severe abdominal pain. Lead poisoning has caused encephalopathy of the brain, and wrist and ankle drop.

Chronic overexposure to lead impairs the reproductive systems of both men and women. Overexposure to lead may result in decreased sex drive, impotence, sterility, and deformed sperm in men. There is a risk of birth defects, miscarriage and stillbirth in women whose husbands were exposed to lead or who were exposed to lead themselves. Lead exposure also may result in decreased fertility, and abnormal menstrual cycles in women.

Children overexposed to lead may have have birth defects, mental retardation, behavioral disorders.

FIRE AND EXPLOSION HAZARD
Lead is not flammable, but LBP in a fire results in the formation of toxic materials in smoke.

4.0 MONITORING EQUIPMENT

Note: All monitoring results are to be documented in the field log book or separate health and safety log. The original of the results is to be placed in the task file and maintained per OSHA standard 29 CFR 1910.20.

CHECKLIST FOR MONITORING INSTRUMENTS/SUPPLIES			
REQ	HNU probe: _X_ 10.2 eV or ___ 11.7eV		Draeger Kit: Specify Tubes
	OVM Probe: _X_ 10.0 or _____eV		MSA Combustible Gas/Oxygen Meter, or Equivalent LEL/O2 Meter
	OVA	REC	Zero Air for PID
	RAM-4 Radiation Monitor		LEL Standard
REQ	Std. for PID (_O_ isobutylene, _X_ hexane)		Ultrapure Hydrogen
	Thermometer--Air and Oral [or equivalent]		Personal Sampling Pumps
	Pump Calibrator		Adsorption Tubes or Cassette Filters
	pH Paper		pH Meter
REQ	Radiation Survey Meter	REQ	Real-time dust Monitor,e.g. Miniram PDM-3

All monitoring equipment used during the scope of work should be wrapped in plastic to prevent contamination of the instruments and components. A hole will be cut for sample intake and exhaust.

USE AND ACTION PARAMETERS FOR USE OF MONITORING EQUIPMENT:

Monitoring Equipment	Monitoring Frequency	Action Limit	Action/Logic
PID, such as HNU _X__ 10.2 eV probe ___ 11.7eV probe ___ Other:	H	0- 1 ppm > 1 ppm	Level D permitted. Use Air Purifying Respirator, or withdraw.
OVM ___ 10.0 eV probe or ___ ____ eV probe		As above	As above.
Std. for PID or OVM ___ isobutylene std., _X_ hexane std ___Other:	D, or as needed to assure accuracy.	N/A	Calibrate regularly, and assure calibration is accurate before each use. If calibration is not done personally, assure a reliable calibration, and chain-of-custody for the calibration is performed.

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

Draeger Kit Specify Tubes:			
LEL/O_2 Meter __MSA-361, or __Other:		0 - 10% LEL above 10% LEL	Continue Working. Identify source of vapors. Ventilate to reduce vapor concentration in trench. (Intrinsically safe exhaust fan) Have pumper on standby. INERT TANK if necessary. Verify effectiveness. (Be sure that readings are taken at top and bottom of excavations. Vapors will tend to collect at bottom. If the PID or other OVM show >250 ppm, the area should be monitored with the LEL/O_2 Meter. A PID/OVM measurement of 250 ppm conservatively corresponds to 1000 ppm vapors, or roughly 10% of the LEL for gasoline.
		19.5 - 25% O_2	No special requirements.
		less than 19.5%	Ventilate. Personnel are not authorized to enter oxygen deficient atmospheres without an SCBA and specific written authorization.
LEL Calibration Standard Specify Type:	D, or as needed to assure accuracy.		Calibrate regularly, and assure calibration is accurate before each use. If calibration is not done personally, assure a reliable calibration, and chain-of-custody for the calibration is performed.
Radiation Monitor _X_RAM-4, or __Other:	H	Greater than 2x background	Withdraw, and seek services of a radiation control specialist.
Personal Sampling Pumps Specify Type:			
Adsorption Tubes or Cassette Filters Specify Type:			
Pump Calibrator Specify Type:			
Visual			Sunburn generally causes mild skin reddening before it becomes severe. Pain from the sunburn is often delayed for several hours. If reddening occurs, additional clothing should be used to cover skin.
Thermometer	Per Heat Stress Attachment	Initiate monitoring at 72.5°F adjusted air temperature and proceed per Heat Stress Attachment.	Per Heat Stress Attachment.

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

NOTES FOR TABLES: REQ = Required; REC = Recommended; N/R = Not Required.
H = Hourly; D = Daily; C = Continuously.
N/A = Not Applicable.

5.0 EXPOSURE SYMPTOMS

No chemical exposure symptoms are generally anticipated at environmental concentrations. The information provided is generally associated with concentrations which exceed PEL concentrations.

CHEMICAL EXPOSURE

Lead

Route of Entry:	Inhalation, Ingestion, Skin or Eye Contact
Target Organs:	Gastrointestinal Tract, Central Nervous System, Kidneys, Blood, Gingival Tissue
Hazard:	Toxic
8 hr TWA PEL:	0.05 mg/m^3
IDHL:	700 mg/m^3

Inhalation or ingestion may cause headache, weakness, irritability, aching muscles, constipation, anorexia, abdominal pains, anemia, high blood pressure, fine tremors, and decreased hand grip. Exposure over an extended period causes wrist drop, convulsions, coma, kidney damage, infertility in both sexes, fetal damage and anemia. Lead is a cumulative toxic since the half-life of lead in the body is around 27 years.

FIRST AID

Eyes

Flush eyes with isotonic saline or water for 15 minutes. Seek medical attention.

Inhalation

Move victim to fresh air*.

* If unconscious, give artificial respiration or CPR as necessary. Seek medical attention.

Skin

Remove contaminated clothing. Wash contaminated skin with soap and water.

6.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The PPE equipment checklist below identifies the PPE anticipated to be needed for this project. However, work conditions may change requiring changes and additions in PPE. This determination will be made by the Site Safety Officer, the Corporate Health & Safety Manager (or designee).

CHECKLIST FOR RESPIRATORY PROTECTION EQUIPMENT			
	SCBA	REQ	Air Purifying Respirator (APR)
	ESCBA	REQ	Cartridges: GMC-H or GMA-H for MSA respirators
	Spare Air Cylinders	REQ	Respirator Cleaner/Sanitizer
	Cascade System		Air Line
CHECKLIST FOR BODY PROTECTION PPE			
	Apron	REQ	Ear Plugs
	Coveralls, Cotton		Ear Muffs
REQ	Coveralls, Tyvek	REQ	Safety Glasses/Goggles/Face Shields
	Coveralls, Coated:	REQ	Boots, Leather Safety
REC	Gloves, Chemical(Neoprene, nitrile or butyl)	REC	Boots, Chemical Safety
	Gloves, Leather	REQ	Gloves, Surgical
REQ	Hard Hat (for overhead hazards & heavy equipment operations)	REC	Disposable Booties

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

USE AND ACTION PARAMETERS FOR USE OF PPE:

Air Purifying Respirator	Airborne contaminants which meet criteria for APR use. Refer to the Corporate Respiratory Protection Plan for more information.
Cartridges	Site Contaminants: Organic Vapors and dusts. Use combination cartridges with OV, HEPA approvals. R53HE cartridges for AO respirator GMA-H cartridges for MSA respirator. Refer to the Corporate SOP for more information.
Body PPE: Coveralls(Cotton, Tyvek, Coated) & Aprons	Basic Level D protection requires cotton or disposable coveralls. Coated coveralls and/or aprons are required when there is a likely potential of contamination, or when working with very toxic chemical contaminants. Contamination avoidance measure. Refer to the Corporate SOP for further information.
Chemical Safety Boots	Use when there is a likely potential of contamination from oil and grease and other site contaminants in the work area. These boots can be easily decontaminated. Refer to the Corporate SOP for more information.
Leather Safety Boots	Use for protection from physical hazard from heavy equipment and materials handling operations. For minor site contamination, use in conjunction with disposable booties.
Disposable Booties (Latex)	Simplifies decontamination.
Gloves, •Chemical Hazards: (Outer glove) •Physical Hazards: (Leather, canvas, or similar glove)	Minimizes exposure potential. Use when there is a likely potential of contamination from oil and grease and other site contaminants in the work area, including the handling of samples with significant contamination. Leather, canvas, or similar gloves are to be used to protect the hands from sharp edges, points, and surfaces for physical protection of the hands. Refer to the Corporate SOP for more information.
Gloves, Surgical: (Inner Glove)	Minimizes skin contact during decontamination. This is the minimum hand protection when handling samples.

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

Eye Protection: Goggles or Glasses, and Face Shields	Eye hazards include branches, dust, etc., as well as chemical contamination. Required at all times at the work area. Chemical splash goggles and Face Shields are required when there is a potential of chemical splash, including use of bentonite, and other bulk chemicals.
Hard Hat	Required at all times for heavy equipment operations, and for any and all overhead hazards.
Hearing Protection	Ear plugs or muffs are required for continuous noise over 80 dBA. Ear plugs and muffs are required for impulse noise over 140 dBA. Also required when working around any powered and heavy equipment.

NOTES FOR TABLES: REQ = Required, as determined by site conditions, site monitoring, and action/use parameters specified above);
REC = Recommended; N/R = Not Required.
SOP = ASI Corporate Standard Operating Procedure.
H = Hourly; D = Daily; C = Continuously.
N/A = Not Applicable.

7.0 EQUIPMENT CHECK LIST

The checklist below is for the convenience of the ASI Site Manager and ASI project personnel for use in assembling equipment to take on site. Additional requirements and recommendations for health and safety equipment are detailed in other sections of this document.

FIRST AID AND MEDICAL MONITORING			
REQ	First Aid Kit	REQ	Sun Screen
	Bathroom Scale	REQ	Drinking Water
REQ	Thermometer--Air and Oral (or equivalent)	REQ	Eye Wash
REQ	Heat Stress Forms	REC	Tarp for Shade
	Chairs or Bench	REC	Cooler for Food
	Watch with Second Hand		

SITE CONTROL			
REQ	Banner Tape		Traffic Cones
REC	Barricades	REQ	Construction/Hazard Signs
DECONTAMINATION SUPPLIES			
	Brushes, long handled		Steam Cleaner
	Pressure Sprayer		Garden Sprayer
	Drum Liners		Tubs
REQ	Drums/Waste Containers		Alconox
	Bottle Brushes	REQ	Water, deionized
	Solvent: Methanol		
SAMPLING EQUIPMENT			
	Bailers		Plastic bags
REQ	Chain of Custody		Rope
	Drum Liners	REQ	Sample Labels
	Duct Tape		Security Tape
REQ	Ice Chests		Shovel
REQ	Jars	REQ	SS Spoons

NOTES FOR TABLES: REQ = Required, as determined by site conditions, site monitoring, and action/use parameters specified above); REC = Recommended; N/R = Not Required.
SOP = ASI Corporate Standard Operating Procedure.

N/A = Not Applicable.

8.0 SITE ENTRY

8.1 Work Zones

Areas where heavy equipment is operating is in the exclusion zone area. Additional high hazard areas include all areas where respiratory protection is required. Entry into the exclusion zone will be limited to personnel who must be there to perform their duties. THE EXCLUSION ZONE WILL BE CLEARLY MARKED BY THE CONTRACTOR: Only authorized personnel are permitted to enter the exclusion zone.

Personnel working inside the exclusion zone will practice contamination avoidance. Workers will avoid all unnecessary contact with areas suspected to be contaminated. Areas which are visibly stained or downwind of volatile materials are examples of potentially contaminated areas.

Contamination avoidance also includes actions which limit the potential for personnel and equipment to become contaminated. Common actions include use of disposable coverings on instruments(plastic bag) and boots(latex booties).

The CONTAMINATION REDUCTION ZONE (CRZ) or decontamination area is the corridor through which all authorized personnel may enter or exit from the EZ. The CRZ contains decontamination equipment and containers for disposable outerwear, *et cetera*. The CRZ is located on the upwind side of the EZ. Entrances and exits are clearly marked with high visibility items such as traffic cones and/or banner tape.

The SUPPORT ZONE (SZ) is upwind from the CRZ. The SZ is an area in which personnel perform support functions for the physical work. It also contains a break area. Managers, spare equipment, etc. are generally located in the SZ. All personnel exiting the EZ must be screened and if necessary, decontaminated prior to entering the SZ. Heat stress and cold stress monitoring is performed in the SZ.

8.2 Training Requirements

OSHA regulations require that hazardous waste site personnel to have completed the following training before working on a hazardous waste site:

40 hour	Hazardous Waste Operations and Emergency Response training (HAZWOPER)
8 hour	Annual HAZWOPER refresher training
8 hour	Supervisory training (Supervisory Personnel) (Task Supervisor, Safety Officer, Instrument Operator)
Unspecified	Site Specific training (tailgate meeting to discuss site hazards)

An additional 24 hours of supervised "on the job" training is also required before new workers are allowed to work independently.

The equipment operator must be familiar with calibration, and operation of the monitoring instruments being used.

All training sessions, including tailgate training, will be documented with a written records including the signatures of the attendees, training topics, trainer(s) name(s), and date, time and location of the training.

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

DOCUMENTATION FORM FOR HEALTH & SAFETY TRAINING

SITE: Advanced Sciences, Inc.
Las Cruces, NM

PROJECT: SWMU Trench Sampling

DATE OF TRAINING: **TIME OF TRAINING:**

I have received training on the topics listed below, and understand and agree with the information that is set forth in this training.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Name of Trainee	Signature	Date

Conducted By: _____ _____

Trainer Date

8.3 Medical Monitoring Requirements

All hazardous waste site workers must comply with OSHA requirements for medical monitoring. The medical monitoring requirements are:

* Baseline Medical Examination
* Annual Medical Examination
* Exit Medical Examination
* Medical Examinations as appropriate if exposure(s) occur

8.4 First Aid/CPR Training

In addition to the above training requirements, OSHA requires that medical help be readily available or that at least one team member be trained in First Aid/CPR.

__ If the site is more than 30 minutes from the nearest hospital/clinic, one of the team members is required to be currently certified in First Aid and CPR.

__ Site conditions may cause serious injuries. Rotating augers of drill rigs can cause severe injuries.

_X_ Slip, trip and fall hazards. If an injury occurs WSMR Emergency crews will be available to transport the ASI worker to the nearest medical facilities.

8.5 Buddy System

All hazardous waste site work will be performed using the buddy system. No field work at waste sites is permitted unless at least two persons are present.

9.0 SITE EGRESS/PERSONNEL AND EQUIPMENT DECONTAMINATION/WASTE DISPOSAL

Egress from the site will not be obstructed. Personnel who have worked in the contaminated area must decontaminate before exiting the site.

9.1 Personnel Decontamination

Personnel will wash all exposed skin areas with soap and water, and rinse with potable water. Decontamination is required whenever the person exits the exclusion zone.

9.2 Monitoring Equipment Decontamination

Remove and properly dispose of protective plastic from exterior of instruments. Wipe exposed surface with dampened cloth to remove residual contamination.

9.3 Equipment Decontamination

Remove gross material and then wash with soapy solution and rinse with water. The samples will be obtained with a stainless steel hand auger. The auger will be decontaminated (washed) and dried after each sample to prevent cross contamination between samples. The decontamination wash water will be placed in a 55-gallon drum and ASI will assist DES-E in transporting the drum to the WSMR Hazardous Waste Storage Facility for proper disposal.

9.4 Waste Disposal

Excess sampling water/soil will be left at the sampling site, unless otherwise directed by the client. If directed by the client, excess soil will be placed in drums or on plastic sheeting, and properly labeled and stored in a secure place on-site. After analytical results are obtained, the water, PPE, and decon liquid/solutions will either be removed and disposed of as hazardous waste, or disposed of as non-hazardous waste. Disposal will be performed by the client, or per contract specifications.

When the PPE is visibly soiled, it will be bagged and/or drummed, and stored on-site until analytical results are reviewed to determine disposal requirements of the wastes generated from the sampling activities.

10.0 MATERIAL HANDLING

Improper material handling causes most back injuries in the field. To avoid muscle strains and tears, ruptured and displaced discs, and other related injuries, use proper lifting techniques when moving any object or container.

LIFTING TECHNIQUES:

- Lift with your legs, not with your back.
- Keep load near your body when lifting.
- Avoid twisting while lifting.
- Examine loads for items which may shift when lifted.
- Use handles or grip the object to avoid having to reposition the object while lifting.

HEAVY OR BULKY OBJECTS:

- Don't lift unless you have to: use hand trucks, dollies, hoists or other appropriate material handling equipment.
- Request assistance when lifting loads over 50 pounds.
- Even light objects may require assistance if they are bulky, odd shaped, or have uneven weight distribution.
- Store heavy items at or below waist height.

DRUMS:

- Drums filled with soil cuttings may weigh over 1200 pounds.

- Use forklifts or "bobcat" loaders, equipped with drum grapplers or other appropriate devices specifically designed for drum handling should be used when handling loaded drums.
- Never try to "walk" a drum as this action applies torsion stresses to the spine.

11.0 MATERIAL SAFETY DATA SHEETS

(Attach MSDSs at the end of the HASP for all work chemicals and supplies used for this project.)

LIST OF CHEMICAL MATERIALS AND SUPPLIES USED

CHEMICAL OR PRODUCT NAME
Decontamination Soap

12.0 UNDERSTANDING AND COMPLIANCE STATEMENT

NOTICE

Advanced Sciences, Incorporated (ASI) and ASI subcontractors do not guarantee the health and safety of any person entering this work site or area. ASI and its subcontractors have made all reasonable efforts to identify and control the hazards present, but due to the nature of the site and site activities, it is impossible to provide protection from all hazards that may be encountered. Strict adherence to the health and safety guidelines set forth herein will reduce, but not eliminate the potential for injury, accident, or exposure at this site. The health and safety guidelines in this plan were prepared specifically for this site, its assigned tasks, and the personnel named in the plan. The plan should not be used on any other site or tasks, or by other personnel, without proper modification by trained and experienced health and safety specialists and approval by the ASI Corporate Health and Safety Manager.

The undersigned persons, listed below, understand the contents of the entire site specific safety plan including this addendum. They also agree to comply with its provisions.

Name (lettered)	Signature	Affiliation	Date

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

The following persons are not employees of ASI, but are required to comply with the provisions of this safety plan or their own company's health and safety plan, whichever is more stringent.

Name (lettered)	Signature	Affiliation	Date

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

ATTACHMENT 1 MATERIAL SAFETY DATA SHEETS

(Attach MSDS here of chemical materials used.)

ATTACHMENT 2 HEAT STRESS

In its early stages, heat stress can cause rashes, cramps, discomfort and drowsiness, resulting in impaired functional ability that threatens the safety of both the individual and coworkers. Table A-1 below, describes symptoms and treatment of heat stress. Table A-2 provides methods, frequencies, and actions pertaining to heat stress monitoring.

EFFECTS OF PERSONAL PROTECTIVE EQUIPMENT

Heat stress may occur with or without use of personal protective equipment (PPE). PPE normally adds layers of clothing which insulate the wearer from cooling air. Chemical protective clothing generally has a vapor barrier to keep out chemical vapors. The vapor barrier also prevents evaporative cooling of perspiration. In short, PPE increases the heat stress on workers.

Heat stress monitoring must be performed at least once per hour for documentation, even when it is unlikely to affect the worker. This monitoring should be initiated when the temperature in the work area is above 72.5°F adjusted temperature (adjusted temperature = air temperature + [13 x % sunshine]). Heat stress monitoring is particularly important for workers wearing semipermeable or impermeable PPE. As the adjusted temperature increases, or the worker starts to show signs of heat stress, the monitoring frequency should be increased accordingly per Table A-3. Figure A-1 is a form that should be used to document heat stress monitoring.

TABLE A-1

Heat Stress Symptoms and Treatment

Condition	Common Symptoms	Treatment
Slightly Elevated Body Temperature	Temp: 100 - 101 °F Headache	Drink cool fluids Rest in cool place until temperature and pulse are below 100 and 110 respectively.
Heat Rash	Rash mainly on back	Shower at the end of the shift.
Heat Cramps	Muscle Cramps or twitching often starting in abdominal area. Pain in hands, feet and abdominal areas.	Remove from field work. Take off PPE. Encourage consumption of cool fluids designed to replenish electrolytes (e.g. Gatorade). No field work for 24-48 hours.
Heat Exhaustion *	Temp 99-102 °F Elevated Pulse Profuse Sweating Pale Skin Cool Wet/Clammy Skin Lethargic Nausea Dizziness	Remove from field work. Take off PPE Drink cool fluids. Rest in cool place No field work for at least 48 hours.
Heat Stroke *	Temp >102 Hot, Dry Skin Flushed Skin Light or no sweating Rapid Pulse	LIFE THREATENING Remove PPE Remove from field work. Flush with cool, not cold water. Transport to medical center. A written release from a doctor is required to return to work.

* If in doubt about whether the condition is heat exhaustion or heat stroke, seek medical attention. Health care specialists have additional training to interpret pupillary response to light, blood pressure and other factors. For Rocky Flats, contact the medical center through x2911.

SITE NAME: White Sands Missile Range
SITE LOCATION: SWMU Trench Commissary Sampling
ASI PROJECT #: 9967.600.11
DATE PREPARED: September 14, 1994

TABLE A-2

Heat Stress Monitoring

Methods	Temperature	Action
Oral Thermometer, or equivalent body temperature monitor	98.6 - 99.6	Continue Work, and continue monitoring per attached table. Drink cool fluids.
	99.7 - 100	Reduce work load, or reduce work cycle by on-third to maintain body control of temperature. Increase intake of cool fluids. Look for visible signs of heat stress.
	>100	Stop field work. Remove PPE. Rest in cool area and drink cool fluids. Monitor temperature and pulse. Field work is not permitted to resume until oral temperature is below 100.
	100 - 102	Treat for Heat Exhaustion. Remove PPE, rest in cool location, drink cool fluids. Do not permit worker to resume work for 24 hours.
	>102	LIFE THREATENING! Treat for Heat Stroke. Remove PPE, Cool worker using cool water, monitor body temperature, transport to medical facility. Worker needs written permission from attending physician to resume field work.
	Pulse	Action
Heart Rate	50 - 80	Normal heart rate. Heart rate increases as ambient temperature increases and the heart works harder to cool the body.
	100 - 109	Reduce work load and increase fluid intake to keep heart rate low.

	>110	Measured after 5 minutes of rest. No field work permitted. Rest in cool location. Drink cool fluids.
Weight Loss	>1.5% loss of total body weight after an 8 hour work shift in heat stress conditions.	Encourage fluid intake. Increase fluid intake during the work shift to overcome the dehydrated condition.

TABLE A-3 Suggested Frequency of Physiological Monitoring for Fit and Acclimatized Workers[a]

Adjusted Temperature[b]	Normal Work Ensemble[c]	Impermeable Ensemble
90 F (32.2 C) or above	After each 45 minutes of work	After each 15 minutes of work
87.5 -90 F (30.8 -32.2 C)	After each 60 minutes of work	After each 30 minutes of work
82.5 -87.5 F (28.1 -30.8 C)	After each 90 minutes of work	After each 60 minutes of work
77.5 -82.5 F (25.3 -28.1 C)	After each 120 minutes of work	After each 90 minutes of work
72.5 -77.5 F (22.5 -25.3 C)	After each 150 minutes of work	After each 120 minutes of work

Source: Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities. NIOSH/OSHA/USCG/EPA.DHHS (NIOSH) Publication No. 85-115. October 1985. p. 8-22.
[a]For work levels of 250 kilocalories/hour.

[b]Calculate the adjusted air temperature (ta adj) by using this equation: ta adj F = ta°F + (13 x % sunshine). Measure air temperature (ta) with a standard mercury-in-glass thermometer, with the bulb shielded from radiant heat. Estimate percent sunshine by judging what percent time the sun is not covered by clouds that are thick enough to produce a shadow. (100 percent sunshine = no cloud cover and a sharp, distinct shadow; 0 percent sunshine = no shadows.)

[c]A normal work ensemble consists of cotton coveralls or other cotton clothing with long sleeves and pants.

HEAT STRESS MONITORING FORM

Site: _____ Date: _____

Name	Time	Weight (lbs)	Oral Temp.,or equivalent	Blood Pulse	PPE A,B C,D

SSO Name: _____

SSO Signature: _____ Date: _____

APPENDIX 1

PERSONAL CONTACT REPORTS WITH WSMR

ADVANCED SCIENCES, INC.

CONTACT REPORT

PROJECT TITLE	YOUR NAME	DATE OF CONTACT (mm-dd-yy)
Commissary SWMU	Joel T. Giblin	Sept. 1994

SUBJECT	TYPE OF CONTACT (check one)
Safety Harnesses / WSMR Procedure	☒ by phone ☐ in person

CONTACT(S)

NAME	TITLE	ORGANIZATION	TELEPHONE
Bob (Robert) Peters	WSMR Safety Engineer		8-1211
Mike Milton	WSMR Safety Engineer		8-8234

DISCUSSION

Does WSMR require ASI employees to wear a safet harnesses when we are sampling from the top of bins. ASI is planning to employ the use of Aluminum ladders with plywood secured to ladder. The ladder will be used as a platform from which sampling can be conducted from. The height of the ladder platform will range from 4 to 5 feet. Per Mr. Mike Milton 14 Sept. 1994 as long as the sampling is a two man operation & the ladder is tied down and secure a harness is not required when sampling the bins.

DISTRIBUTION: **white** – designated word processor **yellow** – project manager **pink** – retain for your records

Additional Distribution – photocopies sent to:

ADVANCED SCIENCES, INC.

CONTACT REPORT

PROJECT TITLE	YOUR NAME	DATE OF CONTACT (mm-dd-yy)
Commissary SWMU	Joel T. Giblin	Sept. 13th 1994

SUBJECT	TYPE OF CONTACT (check one)
Un-exploded Ordnance WSMR EOD	☒ by phone ☐ in person

CONTACT(S) NAME	TITLE	ORGANIZATION	TELEPHONE
Staff Sergeant Sumrall			678-2035

DISCUSSION

I asked if the Staff Sergeant Sumrall had been contacted, to conduct an EOD survey of the old landfill. He stated to date (13 Sept. 1994) that the EOD had not been contacted or asked to look at the old commissary SWMU. He indicated that if we (ASI) had any reason to suspect an ordnance that we should call EOD at 8-2035 and that they would be right over to investigate the object.

DISTRIBUTION: **white** – designated word processor **yellow** – project manager **pink** – retain for your records

Additional Distribution – photocopies sent to:

APPENDIX F

ANALYTICAL RESULTS AND CHAIN OF CUSTODY

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

Page 1 of 1

CLIENT: ASI/WSMR	ADDRESS: 555 SOUTH TELSHOR
CONTACT PERSON: GARY JORDAN	LAS CRUCES NM 88011
TELEPHONE: (505) 522-7229	PROJECT: WSMR COMMISSARY / JOB ~~P.O. NO.~~: 600.11
FAX: (505) 522-7014	WESTECH QUOTE / CONTRACT NO.

• SEE FEE SCHEDULE •

SAMPLER (SIGNATURE): George Esquedra
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - SOIL, O - OIL, G - SLUDGE, D - DRINKING WATER, W - WASTEWATER, T - TRAVEL BLANK, F - FIELD BLANK, X - OTHER (SPECIFY): _____

SAMPLE/COOLER TEMPERATURE:

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	NO. CONTAINERS	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl	HOLD	6010 Pres. Pol + Barium	8260 Vol. Organics	8270 Semi Vol Org.	8080 Pest. + PCBs	8150 Herbicides	COMMENTS	LABORATORY IDENTIFICATION
CLT-1	9/26/94	1515	50' SOUTH OF NORTH HIGH WALL				S							✓	✓	✓	✓	✓	FAST TURN	6404433
CLT-2S	9/26/94	1530	75' SOUTH OF NHW				S							✓	✓	✓	—	—	"	6404434
CLT-3	9/26/94	1545	100' SOUTH OF NHW				S							—	—	—	—	—	"	6404435
CLT-4	9/27/94	945	120' " " "				S							✓	✓	✓	✓	✓	"	6404436
CLT-5	9/27/94	1000	140' " " "				S							✓	✓	✓	✓	✓	"	6404437
CLT-6S	9/27/94	1015	130' " " "				S							✓	✓	✓	✓	✓	"	6404438
BG-1S	9/27/94	1100	BG SOUTH OF TRENCH				S							✓					"	6404439
BG-2N	9/27/94	1110	" NORTH OF TRENCH				S							✓					"	6404440

GLJ

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		17:00 9-27-94

REMARKS: 6010 BY 9/30/94 ALL SAMPLES

☐ Fax Results ☐ Special Detection Limits / Requirements

SAMPLE PROCESS TURNAROUND TIME: ☐ Standard ☒ Other (specify) PER QUOTE

623 ©94 WTI White – Laboratory; Yellow – Work File; Pink – Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT: ASI/WSMA	ADDRESS: 555 S. TELSHOR
CONTACT PERSON: GARY JORDAN	LAS CRUCES NM
TELEPHONE: 505 522-7229	PROJECT: WSMA Comm. TRENCH / JOB ~~P.O. NO.~~: 600-11
FAX: 505 522-7014	WESTECH QUOTE / CONTRACT NO.

• SEE FEE SCHEDULE •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - SOIL, O - OIL, G - SLUDGE, D - DRINKING WATER, W - WASTEWATER, T - TRAVEL BLANK, F - FIELD BLANK, X - OTHER (SPECIFY): _____

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	NO. CONTAINERS	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl	HOLD (Do Not Analyze)	GOLD METHANOL	VOLATILE	SEMI VOLATILE	PEST + PCB	HERB.	COMMENTS	LABORATORY IDENTIFICATION
CLT-7	9/28	1215	WSMA Comm. TRENCH				S							✓	✓	✓	✓	✓	FAST TURN	6404465
CLT-8		1230	" " "				S							✓	✓	✓	✓	✓		6404466
CLT-9		1230	" " "				S							✓	✓	✓	✓	✓		6404467
CLT-10		1230	" " "				S							✓	✓	✓	✓	✓		6404468
CLT-11S		1310	" " "				S							✓	✓	✓	✓	✓		6404469
CLT-12S		1315	" " "				S							✓	✓	✓	✓	✓		6404470
CLT-13S		1315	" " "				S							✓	✓	✓	✓	✓		6404471
CLT-14S		1320	" " "				S							✓	✓	✓	✓	✓		6404472

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		9-28-94 16:13

REMARKS

☐ Fax Results ☐ Special Detection Limits / Requirements

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☒ Other (specify) PER QUOTE

623 ©94 WTI White – Laboratory; Yellow – Work File; Pink – Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS	
ASI/WSMR	555 S. TELSHOR	
CONTACT PERSON	LAS CRUCES NM 88011	
GARY JORDAN		
TELEPHONE	PROJECT	JOB/~~P.O. NO.~~
505 522-7229	WSMR COMM. TRENCH	600-11

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - Soil, O - Oil, T - Travel Blank, W - Water, G - Sludge, F - Field Blank, X - Other (specify) _____

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	METAL PB-Burn	VOLATILE ORG.	SEMIVOLATILE ORG.	PCB & HERB.	PESTICIDES				COMMENTS	LABORATORY IDENTIFICATION
CLT-15	9/29/94	0940	Comm. TRENCH			S								✓	✓	✓	✓	✓				FAST TURN	640 4487
CLT-16	"	0945	" "			S								✓	✓	✓	✓	✓					640 4488
CLT-17	"	0950	" "			S								✓	✓	✓	✓	✓					640 4489
CLT-18	"	0955	" "			S								✓	✓	✓	✓	✓					640 4490
CLT-19	"	1120	" "			S								✓	✓	✓	✓	✓					640 4491
CLT-20	"	1130	" "			S								✓	✓	✓	✓	✓					640 4492
CLT-21	"	1135	" "			S								✓	✓	✓	✓	✓					640 4493
CLT-22	"	1140	" "			S								✓	✓	✓	✓	✓					640 4494

SAMPLE/COOLER TEMPERATURE:

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		9-29-94 16:54

REMARKS _____

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☒ Other (specify) PER QUOTE

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404439
INVOICE NO.: 62141024
REPORT DATE: 09-28-94
REVIEWED BY: JWS
PAGE : 1 OF 1

CLIENT SAMPLE ID : BG-1S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: BG South of Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.3	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	8.7	mg/Kg	2.5	09-28-94
Total Lead .....:	16	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	7.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	27	mg/Kg	2.5	09-28-94
Total Barium .....:	51	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Skorna
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404440
INVOICE NO.: 62141024
REPORT DATE: 09-28-94
REVIEWED BY: AWS
PAGE : 1 OF 1

CLIENT SAMPLE ID : BG-2N
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: BG North of Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.96	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	10	mg/Kg	2.5	09-28-94
Total Lead .....:	14	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	8.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	32	mg/Kg	2.5	09-28-94
Total Barium .....:	56	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Skorna
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: AWS
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-1
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 50' South of North High W

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for selenium due to matrix interferences. 10X dilution showed 82% recovery on spike.

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.90	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	12	mg/Kg	2.5	09-30-94
Total Lead .....:	24	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	4.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	50	mg/Kg	2.5	09-30-94
Total Barium .....:	55	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Skowron
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-2S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 75' South of NHW

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.61	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	8.0	mg/Kg	2.5	09-28-94
Total Lead .....:	<10.0	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	6.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	18	mg/Kg	2.5	09-28-94
Total Barium .....:	61	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Sforma
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-3
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 100' South of NHW

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.1	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	24	mg/Kg	2.5	09-28-94
Total Lead .....:	25	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	7.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	83	mg/Kg	2.5	09-28-94
Total Barium .....:	66	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Sherman
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: JWS
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-4
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 120' South of NHW

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.86	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	19	mg/Kg	2.5	09-28-94
Total Lead .....:	34	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	13	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	89	mg/Kg	2.5	09-28-94
Total Barium .....:	81	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Sherman
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: AS
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-5
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 140' South of NHW

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.2	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	18	mg/Kg	2.5	09-28-94
Total Lead .....:	22	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	8.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	73	mg/Kg	2.5	09-28-94
Total Barium .....:	53	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Skorma
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: AB
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-6S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 130' South of NHW

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

Priority Pollutants

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.58	mg/Kg	0.50	09-28-94
Total Antimony .....:	<0.50	mg/Kg	0.50	09-29-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-28-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-28-94
Total Copper .....:	8.0	mg/Kg	2.5	09-28-94
Total Lead .....:	13	mg/Kg	10.0	09-28-94
Total Mercury .....:	<0.50	mg/Kg	0.50	09-29-94
Total Nickel .....:	8.0	mg/Kg	2.5	09-28-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-28-94
Total Thallium .....:	<0.50	mg/Kg	0.50	09-28-94
Total Zinc .....:	30	mg/Kg	2.5	09-28-94
Total Barium .....:	48	mg/Kg	10.0	09-28-94

(1) Copy to Client

Annette Skorna
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-7
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.77	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	4.0	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	6.0	mg/kg	2.5	09-30-94
Total Lead .....:	15	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	7.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	21	mg/kg	2.5	09-30-94
Total Barium .....:	51	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-8
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.2	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	5.0	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	91	mg/kg	2.5	09-30-94
Total Lead .....:	33	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	8.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	47	mg/kg	2.5	09-30-94
Total Barium .....:	78	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-9
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.64	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	5.0	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	6.0	mg/kg	2.5	09-30-94
Total Lead .....:	18	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	6.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	27	mg/kg	2.5	09-30-94
Total Barium .....:	52	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-10
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.74	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	5.0	mg/kg	2.5	09-30-94
Total Lead .....:	17	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	6.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	25	mg/kg	2.5	09-30-94
Total Barium .....:	41	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-11S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.84	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	7.0	mg/kg	2.5	09-30-94
Total Lead .....:	17	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	6.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	4.0	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	29	mg/kg	2.5	09-30-94
Total Barium .....:	67	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-12S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.3	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	8.1	mg/kg	2.5	09-30-94
Total Lead .....:	20	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	9.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	30	mg/kg	2.5	09-30-94
Total Barium .....:	98	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-13S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.5	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	8.0	mg/kg	2.5	09-30-94
Total Lead .....:	19	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	9.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	31	mg/kg	2.5	09-30-94
Total Barium .....:	140	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-14S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.1	mg/kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/kg	5.0	09-30-94
Total Copper .....:	4.0	mg/kg	2.5	09-30-94
Total Lead .....:	16	mg/kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/kg	0.50	09-29-94
Total Nickel .....:	7.0	mg/kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/kg	0.50	10-01-94
Total Zinc .....:	21	mg/kg	2.5	09-30-94
Total Barium .....:	79	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-15
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.3	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	11	mg/Kg	2.5	09-30-94
Total Lead .....:	53	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	9.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	34	mg/Kg	2.5	09-30-94
Total Barium .....:	76	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-16
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.4	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	5.0	mg/Kg	2.5	09-30-94
Total Lead .....:	19	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	8.6	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	27	mg/Kg	2.5	09-30-94
Total Barium .....:	79	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-17
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.0	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	9.0	mg/Kg	2.5	09-30-94
Total Lead .....:	19	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	8.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	28	mg/Kg	2.5	09-30-94
Total Barium .....:	62	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-18
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.5	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	31	mg/Kg	2.5	09-30-94
Total Lead .....:	42	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	7.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	68	mg/Kg	2.5	09-30-94
Total Barium .....:	73	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-19
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	1.1	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	6.0	mg/Kg	2.5	09-30-94
Total Lead .....:	29	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	6.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	52	mg/Kg	2.5	09-30-94
Total Barium .....:	70	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-20
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.58	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	7.0	mg/Kg	2.5	09-30-94
Total Lead .....:	24	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	6.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	31	mg/Kg	2.5	09-30-94
Total Barium .....:	29	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-21
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.69	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	5.0	mg/Kg	2.5	09-30-94
Total Lead .....:	19	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	7.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	54	mg/Kg	2.5	09-30-94
Total Barium .....:	47	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-22
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --

Priority Pollutants

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	0.59	mg/Kg	0.50	09-30-94
Total Antimony .....:	<0.50	mg/Kg	0.50	10-01-94
Total Beryllium .....:	<2.5	mg/Kg	2.5	10-01-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-30-94
Total Chromium .....:	<5.0	mg/Kg	5.0	09-30-94
Total Copper .....:	6.0	mg/Kg	2.5	09-30-94
Total Lead .....:	19	mg/Kg	10.0	09-30-94
Total Mercury .....:	<0.50	mg/Kg	0.50	10-05-94
Total Nickel .....:	9.0	mg/Kg	2.5	09-30-94
Total Selenium .....:	<0.50	mg/Kg	0.50	09-30-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-30-94
Total Thallium .....:	<0.50	mg/Kg	0.50	10-01-94
Total Zinc .....:	32	mg/Kg	2.5	09-30-94
Total Barium .....:	63	mg/Kg	10.0	10-01-94

(1) Copy to Client

Managing Director

METHOD 8080

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-1
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 50' South of North High W
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-2S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 75' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-3
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 100' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-4
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 120' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-5
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 140' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-6S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 130' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-7
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-8
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-9
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-10
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-11S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-29-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD .....:	<2.0	ug/Kg	2.0
4,4'-DDE .....:	<2.0	ug/Kg	2.0
4,4'-DDT .....:	<10.	ug/Kg	10.
Aldrin .....:	<10.	ug/Kg	10.
alpha-BHC .....:	<10.	ug/Kg	10.
beta-BHC .....:	<10.	ug/Kg	10.
delta-BHC .....:	<25.	ug/Kg	25.
Chlordane .....:	<75.	ug/Kg	75.
Dieldrin .....:	<25.	ug/Kg	25.
Endosulfan I .....:	<25.	ug/Kg	25.
Endosulfan II .....:	<50.	ug/Kg	50.
Endosulfan sulfate .....:	<25.	ug/Kg	25.
Endrin .....:	<100.	ug/Kg	100.
Endrin aldehyde .....:	<50.	ug/Kg	50.
Heptachlor .....:	<25.	ug/Kg	25.
Hetachlor Epoxide .....:	<50.	ug/Kg	50.
Lindane .....:	<25.	ug/Kg	25.
Methoxychlor .....:	<660.	ug/Kg	660.
Toxaphene .....:	<50.	ug/Kg	50.
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-12S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-04-94

Method 8080 - Pesticides & PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-05-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-13S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-04-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-14S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-04-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-15
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-16
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-17
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-18
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-19
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-20
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-21
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-22
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-05-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<10.	ug/Kg	10.
Aldrin	<10.	ug/Kg	10.
alpha-BHC	<10.	ug/Kg	10.
beta-BHC	<10.	ug/Kg	10.
delta-BHC	<25.	ug/Kg	25.
Chlordane	<75.	ug/Kg	75.
Dieldrin	<25.	ug/Kg	25.
Endosulfan I	<25.	ug/Kg	25.
Endosulfan II	<50.	ug/Kg	50.
Endosulfan sulfate	<25.	ug/Kg	25.
Endrin	<100.	ug/Kg	100.
Endrin aldehyde	<50.	ug/Kg	50.
Heptachlor	<25.	ug/Kg	25.
Hetachlor Epoxide	<50.	ug/Kg	50.
Lindane	<25.	ug/Kg	25.
Methoxychlor	<660.	ug/Kg	660.
Toxaphene	<50.	ug/Kg	50.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

METHOD 8150

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-1
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 50' South of North High W
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T ..... :	<40.	ug/Kg	40.
2,4,5-TP (Silvex) ..... :	<40.	ug/Kg	40.
2,4-D ..... :	<200.	ug/Kg	200.
2,4-DB ..... :	<200.	ug/Kg	200.
Dalapon ..... :	<3300.	ug/Kg	3300.
Dicamba ..... :	<40	ug/Kg	40
Dichlorprop ..... :	<660.	ug/Kg	660.
Dinoseb ..... :	<660.	ug/Kg	660.
MCPA ..... :	<4000.	ug/Kg	4000.
MCPP ..... :	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-2S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 75' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40	ug/Kg	40
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-3
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 100' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T .....:	<40.	ug/Kg	40.
2,4,5-TP (Silvex) .....:	<40.	ug/Kg	40.
2,4-D .....:	<200.	ug/Kg	200.
2,4-DB .....:	<200.	ug/Kg	200.
Dalapon .....:	<3300.	ug/Kg	3300.
Dicamba .....:	<40	ug/Kg	40
Dichlorprop .....:	<660.	ug/Kg	660.
Dinoseb .....:	<660.	ug/Kg	660.
MCPA .....:	<4000.	ug/Kg	4000.
MCPP .....:	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-4
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 120' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40	ug/Kg	40
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-5
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 140' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T ..... :	<40.	ug/Kg	40.
2,4,5-TP (Silvex) ..... :	<40.	ug/Kg	40.
2,4-D ..... :	<200.	ug/Kg	200.
2,4-DB ..... :	<200.	ug/Kg	200.
Dalapon ..... :	<3300.	ug/Kg	3300.
Dicamba ..... :	<40	ug/Kg	40
Dichlorprop ..... :	<660.	ug/Kg	660.
Dinoseb ..... :	<660.	ug/Kg	660.
MCPA ..... :	<4000.	ug/Kg	4000.
MCPP ..... :	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-6S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 130' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40	ug/Kg	40
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-7
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-8
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T ..... :	<40.	ug/Kg	40.
2,4,5-TP (Silvex) ..... :	<40.	ug/Kg	40.
2,4-D ..... :	<200.	ug/Kg	200.
2,4-DB ..... :	<200.	ug/Kg	200.
Dalapon ..... :	<3300.	ug/Kg	3300.
Dicamba ..... :	<40.	ug/Kg	40.
Dichlorprop ..... :	<660.	ug/Kg	660.
Dinoseb ..... :	<660.	ug/Kg	660.
MCPA ..... :	<4000.	ug/Kg	4000.
MCPP ..... :	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-9
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-10
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-11S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-12S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-13S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-14S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-06-94

Method 8150 - Chlorinated Herbicides

DATA TABLE

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-15
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T ..... :	<40.	ug/Kg	40.
2,4,5-TP (Silvex) ..... :	<40.	ug/Kg	40.
2,4-D ..... :	<200.	ug/Kg	200.
2,4-DB ..... :	<200.	ug/Kg	200.
Dalapon ..... :	<3300.	ug/Kg	3300.
Dicamba ..... :	<40.	ug/Kg	40.
Dichlorprop ..... :	<660.	ug/Kg	660.
Dinoseb ..... :	<660.	ug/Kg	660.
MCPA ..... :	<4000.	ug/Kg	4000.
MCPP ..... :	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-16
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-17
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-18
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-10-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-19
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-09-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-10-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-20
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-10-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-21
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-10-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : CLT-22
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-04-94
ANALYSIS DATE .: 10-08-94

Method 8150 - Chlorinated Herbicides

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
2,4,5-T	<40.	ug/Kg	40.
2,4,5-TP (Silvex)	<40.	ug/Kg	40.
2,4-D	<200.	ug/Kg	200.
2,4-DB	<200.	ug/Kg	200.
Dalapon	<3300.	ug/Kg	3300.
Dicamba	<40.	ug/Kg	40.
Dichlorprop	<660.	ug/Kg	660.
Dinoseb	<660.	ug/Kg	660.
MCPA	<4000.	ug/Kg	4000.
MCPP	<5000.	ug/Kg	5000.

(1) Copy to Client

Managing Director

METHOD 8260

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: [illegible]

CLIENT SAMPLE ID : CLT-1
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 50' South of North High W
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-28-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<200.	ug/Kg	200.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-2S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 75' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-28-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane ..... :	<50.	ug/Kg	50.
Carbon tetrachloride ..... :	<50.	ug/Kg	50.
Chlorobenzene ..... :	<50.	ug/Kg	50.
Chloroethane ..... :	<50.	ug/Kg	50.
Chloroform ..... :	<50.	ug/Kg	50.
Chloromethane ..... :	<50.	ug/Kg	50.
cis 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Dibromochloromethane ..... :	<50.	ug/Kg	50.
Dibromochloropropane ..... :	<50.	ug/Kg	50.
Dibromomethane ..... :	<50.	ug/Kg	50.
Dichlorodifluoromethane ..... :	<250.	ug/Kg	250.
Dichloromethane ..... :	<50.	ug/Kg	50.
Diethyl ether ..... :	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro .. :	<200.	ug/Kg	200.
ethane (Freon 113) ..... :			
Ethylbenzene ..... :	<50.	ug/Kg	50.
Hexachlorobutadiene ..... :	<200.	ug/Kg	200.
Isopropylbenzene ..... :	<50.	ug/Kg	50.
Methyl ethyl ketone ..... :	<200.	ug/Kg	200.
Methyl isobutyl ketone ..... :	<200.	ug/Kg	200.
Methyl tert-butyl ether ..... :	<200.	ug/Kg	200.
m,p - Xylene ..... :	<50.	ug/Kg	50.
Napthalene ..... :	<50.	ug/Kg	50.
n-Butylbenzene ..... :	<50.	ug/Kg	50.
o-Xylene ..... :	<50.	ug/Kg	50.
Propylbenzene ..... :	<50.	ug/Kg	50.
sec-Butylbenzene ..... :	<50.	ug/Kg	50.
Styrene ..... :	<50.	ug/Kg	50.
tert-Butylbenzene ..... :	<50.	ug/Kg	50.
Toluene ..... :	<50.	ug/Kg	50.
Chloroethylvinyl Ether ..... :	<500.	ug/Kg	500.
trans 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Trichloroethene ..... :	<50.	ug/Kg	50.
Trichlorofluoromethane ..... :	<50.	ug/Kg	50.
Vinyl chloride ..... :	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene ..... :	<50.	ug/Kg	50.
trans 1,3-Dichloropropene ..... :	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-3
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 100' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-28-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: [illegible]
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<200.	ug/Kg	200.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-4
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 120' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-28-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<200.	ug/Kg	200.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-5
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 140' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-28-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<200.	ug/Kg	200.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-6S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 130' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 09-28-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 09-29-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<200.	ug/Kg	200.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 35-092994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Mass Spectrometer-Volatiles
ANALYZED BY : C. Warner
ANALYZED ON : 09-28-94

TEST DESCRIPTION ..: Method 8260 - Volatile Organics
TEST METHOD .....: 8260

SAMPLES IN THIS RUN: 6404433 6404434 6404435 6404436 6404437 6404438

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
1,1,2,2-Tetrachloroethane	ug/L	10	10	100.0
1,1-Dichloroethane	ug/L	10	10	100.0
1,1-Dichloroethene	ug/L	10	10	100.0
1,2-Dichloropropane	ug/L	10	10	100.0
Bromoform	ug/L	10	10	100.0
Chlorobenzene	ug/L	10	10	100.0
Chloroform	ug/L	10	10	100.0
Chloromethane	ug/L	10	10	100.0
Ethylbenzene	ug/L	10	10	100.0
Toluene	ug/L	10	10	100.0
Vinyl chloride	ug/L	10	10	100.0
1,1,2,2-Tetrachloroethane	ug/L	10	8.0	80.0
1,1-Dichloroethane	ug/L	10	8.4	84.0
1,1-Dichloroethene	ug/L	10	8.4	84.0
1,2-Dichloropropane	ug/L	10	7.3	73.0
Chlorobenzene	ug/L	10	8.0	80.0
Chloroform	ug/L	10	8.0	80.0
Chloromethane	ug/L	10	10	100.0
Ethylbenzene	ug/L	10	8.1	81.0
Toluene	ug/L	10	8.2	82.0
Vinyl chloride	ug/L	10	10	100.0

REPLICATES -

SAMPLE NUMBER	PARAMETER	UNIT	RESULT	REPLICATE	RPD%
6404433	trans 1,3-Dichloropropene	ug/Kg	<50.	<50.	NC
6404433	1,1,2-Trichloro 1,2,2-Trifluoro	ug/Kg	<200.	<200.	NC
6404433	1,1,1,2-Tetrachloroethane	ug/Kg	<50.	<50.	NC
6404433	1,1,1-Trichloroethane	ug/Kg	<50.	<50.	NC
6404433	1,1,2,2-Tetrachloroethane	ug/Kg	<50.	<50.	NC
6404433	1,1,2,2-Tetrachloroethene	ug/Kg	<50.	<50.	NC
6404433	1,1,2-Trichloroethane	ug/Kg	<50.	<50.	NC
6404433	1,1-Dichloroethane	ug/Kg	<50.	<50.	NC

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 35-092994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Mass Spectrometer-Volatiles
ANALYZED BY : C. Warner
ANALYZED ON : 09-28-94

REPLICATES -

SAMPLE NUMBER	PARAMETER	UNIT	RESULT	REPLICATE	RPD%
6404433	1,1-Dichloroethene	ug/Kg	<50.	<50.	NC
6404433	1,1-Dichloropropene	ug/Kg	<50.	<50.	NC
6404433	1,2Dibromoethane	ug/Kg	<50.	<50.	NC
6404433	1,2,3-Trichlorobenzene	ug/Kg	<50.	<50.	NC
6404433	1,2,3-Trichloropropane	ug/Kg	<50.	<50.	NC
6404433	1,2,4-Trichlorobenzene	ug/Kg	<50.	<50.	NC
6404433	1,2,4-Trimethylbenzene	ug/Kg	<50.	<50.	NC
6404433	1,2-Dichlorobenzene	ug/Kg	<50.	<50.	NC
6404433	1,2-Dichloroethane	ug/Kg	<50.	<50.	NC
6404433	1,2-Dichloropropane	ug/Kg	<50.	<50.	NC
6404433	1,3,5-Trimethylbenzene	ug/Kg	<50.	<50.	NC
6404433	1,3-Dichlorobenzene	ug/Kg	<50.	<50.	NC
6404433	1,3-Dichloropropane	ug/Kg	<50.	<50.	NC
6404433	1,4-Dichlorobenzene	ug/Kg	<50.	<50.	NC
6404433	2,2-Dichloropropane	ug/Kg	<50.	<50.	NC
6404433	2-Chlorotoluene	ug/Kg	<50.	<50.	NC
6404433	2-Hexanone	ug/Kg	<200.	<200.	NC
6404433	4-Chlorotoluene	ug/Kg	<50.	<50.	NC
6404433	4-Isopropyltoluene	ug/Kg	<50.	<50.	NC
6404433	Acetone	ug/Kg	<200.	<200.	NC
6404433	Benzene	ug/Kg	<50.	<50.	NC
6404433	Bromobenzene	ug/Kg	<50.	<50.	NC
6404433	Bromodichloromethane	ug/Kg	<50.	<50.	NC
6404433	Bromoform	ug/Kg	<50.	<50.	NC
6404433	Bromomethane	ug/Kg	<50.	<50.	NC
6404433	Carbon tetrachloride	ug/Kg	<50.	<50.	NC
6404433	Chlorobenzene	ug/Kg	<50.	<50.	NC
6404433	Chloroethane	ug/Kg	<50.	<50.	NC
6404433	Chloroform	ug/Kg	<50.	<50.	NC
6404433	Chloromethane	ug/Kg	<50.	<50.	NC
6404433	cis 1,2-Dichloroethene	ug/Kg	<50.	<50.	NC
6404433	Dibromochloromethane	ug/Kg	<50.	<50.	NC
6404433	Dibromochloropropane	ug/Kg	<50.	<50.	NC
6404433	Dibromomethane	ug/Kg	<50.	<50.	NC
6404433	Dichlorodifluoromethane	ug/Kg	<250.	<250.	NC
6404433	Dichloromethane	ug/Kg	<50.	<50.	NC
6404433	Diethyl ether	ug/Kg	<200.	<200.	NC
6404433	Ethylbenzene	ug/Kg	<50.	<50.	NC
6404433	Hexachlorobutadiene	ug/Kg	<200.	<200.	NC
6404433	Isopropylbenzene	ug/Kg	<50.	<50.	NC
6404433	Methyl ethyl ketone	ug/Kg	<200.	<200.	NC

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 35-092994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Mass Spectrometer-Volatiles
ANALYZED BY : C. Warner
ANALYZED ON : 09-28-94

REPLICATES -

SAMPLE NUMBER	PARAMETER	UNIT	RESULT	REPLICATE	RPD%
6404433	Methyl isobutyl ketone	ug/Kg	<200.	<200.	NC
6404433	Methyl tert-butyl ether	ug/Kg	<200.	<200.	NC
6404433	m,p - Xylene	ug/Kg	<50.	<50.	NC
6404433	Naphthalene	ug/Kg	<50.	<50.	NC
6404433	n-Butylbenzene	ug/Kg	<50.	<50.	NC
6404433	o-Xylene	ug/Kg	<50.	<50.	NC
6404433	Propylbenzene	ug/Kg	<50.	<50.	NC
6404433	sec-Butylbenzene	ug/Kg	<50.	<50.	NC
6404433	Styrene	ug/Kg	<50.	<50.	NC
6404433	tert-Butylbenzene	ug/Kg	<50.	<50.	NC
6404433	Toluene	ug/Kg	<50.	<50.	NC
6404433	trans 1,2-Dichloroethene	ug/Kg	<50.	<50.	NC
6404433	Trichloroethene	ug/Kg	<50.	<50.	NC
6404433	Trichlorofluoromethane	ug/Kg	<50.	<50.	NC
6404433	Vinyl chloride	ug/Kg	<50.	<50.	NC
6404433	Chloroethylvinyl Ether	ug/Kg	<500.	<500.	NC
6404433	Cis 1,3-Dichloropropylene	ug/Kg	<50.	<50.	NC

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE AMOUNT	SAMPLE+SPIKE RESULT	%RECOVERY
6404433	Benzene	ug/Kg	<50.	500	370	74.0
6404433	Chlorobenzene	ug/Kg	<50.	500	320	64.0
6404433	Toluene	ug/Kg	<50.	500	390	78.0
6404433	Trichloroethene	ug/Kg	<50.	500	500	100.0

METHOD BLANKS -

PARAMETER	UNIT	RESULT
1,1,1,2-Tetrachloroethane	ug/Kg	<50.
1,1,1-Trichloroethane	ug/Kg	<50.

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 35-092994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Mass Spectrometer-Volatiles
ANALYZED BY : C. Warner
ANALYZED ON : 09-28-94

METHOD BLANKS -

PARAMETER	UNIT	RESULT
1,1,2,2-Tetrachloroethane	ug/Kg	<50.
1,1,2,2-Tetrachloroethene	ug/Kg	<50.
1,1,2-Trichloroethane	ug/Kg	<50.
1,1-Dichloroethane	ug/Kg	<50.
1,1-Dichloroethene	ug/Kg	<50.
1,1-Dichloropropene	ug/Kg	<50.
1,2-Dibromoethane	ug/Kg	<50.
1,2,3-Trichlorobenzene	ug/Kg	<50.
1,2,3-Trichloropropane	ug/Kg	<50.
1,2,4-Trichlorobenzene	ug/Kg	<50.
1,2,4-Trimethylbenzene	ug/Kg	<50.
1,2-Dichlorobenzene	ug/Kg	<50.
1,2-Dichloroethane	ug/Kg	<50.
1,2-Dichloropropane	ug/Kg	<50.
1,3,5-Trimethylbenzene	ug/Kg	<50.
1,3-Dichlorobenzene	ug/Kg	<50.
1,3-Dichloropropane	ug/Kg	<50.
1,4-Dichlorobenzene	ug/Kg	<50.
2,2-Dichloropropane	ug/Kg	<50.
2-Chlorotoluene	ug/Kg	<50.
2-Hexanone	ug/Kg	<200.
4-Chlorotoluene	ug/Kg	<50.
4-Isopropyltoluene	ug/Kg	<50.
Acetone	ug/Kg	<200.
Benzene	ug/Kg	<50.
Bromobenzene	ug/Kg	<50.
Bromodichloromethane	ug/Kg	<50.
Bromoform	ug/Kg	<50.
Bromomethane	ug/Kg	<50.
Carbon tetrachloride	ug/Kg	<50.
Chlorobenzene	ug/Kg	<50.
Chloroethane	ug/Kg	<50.
Chloroform	ug/Kg	<50.
Chloromethane	ug/Kg	<50.
cis 1,2-Dichloroethene	ug/Kg	<50.
Dibromochloromethane	ug/Kg	<50.
Dibromochloropropane	ug/Kg	<50.
Dibromomethane	ug/Kg	<50.
Dichlorodifluoromethane	ug/Kg	<250.
Dichloromethane	ug/Kg	<50.
Diethyl ether	ug/Kg	<200.
1,1,2-Trichloro 1,2,2-Trifluoro	ug/Kg	<200

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 35-092994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Mass Spectrometer-Volatiles
ANALYZED BY : C. Warner
ANALYZED ON : 09-28-94

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Ethylbenzene	ug/Kg	<50.
Hexachlorobutadiene	ug/Kg	<200.
Isopropylbenzene	ug/Kg	<50.
Methyl ethyl ketone	ug/Kg	<200.
Methyl isobutyl ketone	ug/Kg	<200.
Methyl tert-butyl ether	ug/Kg	<200.
m,p - Xylene	ug/Kg	<50.
Napthalene	ug/Kg	<50.
n-Butylbenzene	ug/Kg	<50.
o-Xylene	ug/Kg	<50.
Propylbenzene	ug/Kg	<50.
sec-Butylbenzene	ug/Kg	<50.
Styrene	ug/Kg	<50.
tert-Butylbenzene	ug/Kg	<50.
Toluene	ug/Kg	<50.
Chloroethylvinyl Ether	ug/Kg	<500.
trans 1,2-Dichloroethene	ug/Kg	<50.
Trichloroethene	ug/Kg	<50.
Trichlorofluoromethane	ug/Kg	<50.
Vinyl chloride	ug/Kg	<50.
Cis 1,3-Dichloropropylene	ug/Kg	<50.
trans 1,3-Dichloropropene	ug/Kg	<50.

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result} - \text{Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result} - \text{Replicate Result}}{(\text{Sample Result} + \text{Replicate Result})/2} \times 100$$

WESTECH
LABORATORIES, INC.
QUALITY ASSURANCE OFFICER

DATE 9-30-94

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-7
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-8
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-9
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-10
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-11S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-12S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-03-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane ..... :	<50.	ug/Kg	50.
Carbon tetrachloride ..... :	<50.	ug/Kg	50.
Chlorobenzene ..... :	<50.	ug/Kg	50.
Chloroethane ..... :	<50.	ug/Kg	50.
Chloroform ..... :	<50.	ug/Kg	50.
Chloromethane ..... :	<50.	ug/Kg	50.
cis 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Dibromochloromethane ..... :	<50.	ug/Kg	50.
Dibromochloropropane ..... :	<50.	ug/Kg	50.
Dibromomethane ..... :	<50.	ug/Kg	50.
Dichlorodifluoromethane ..... :	<250.	ug/Kg	250.
Dichloromethane ..... :	<50.	ug/Kg	50.
Diethyl ether ..... :	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro .. :	<50.	ug/Kg	50.
ethane (Freon 113) ..... :			
Ethylbenzene ..... :	<50.	ug/Kg	50.
Hexachlorobutadiene ..... :	<200.	ug/Kg	200.
Isopropylbenzene ..... :	<50.	ug/Kg	50.
Methyl ethyl ketone ..... :	<200.	ug/Kg	200.
Methyl isobutyl ketone ..... :	<200.	ug/Kg	200.
Methyl tert-butyl ether ..... :	<200.	ug/Kg	200.
m,p - Xylene ..... :	<50.	ug/Kg	50.
Napthalene ..... :	<50.	ug/Kg	50.
n-Butylbenzene ..... :	<50.	ug/Kg	50.
o-Xylene ..... :	<50.	ug/Kg	50.
Propylbenzene ..... :	<50.	ug/Kg	50.
sec-Butylbenzene ..... :	<50.	ug/Kg	50.
Styrene ..... :	<50.	ug/Kg	50.
tert-Butylbenzene ..... :	<50.	ug/Kg	50.
Toluene ..... :	<50.	ug/Kg	50.
Chloroethylvinyl Ether ..... :	<500.	ug/Kg	500.
trans 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Trichloroethene ..... :	<50.	ug/Kg	50.
Trichlorofluoromethane ..... :	<50.	ug/Kg	50.
Vinyl chloride ..... :	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene ..... :	<50.	ug/Kg	50.
trans 1,3-Dichloropropene ..... :	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-13S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane ..... :	<50.	ug/Kg	50.
Carbon tetrachloride ..... :	<50.	ug/Kg	50.
Chlorobenzene ..... :	<50.	ug/Kg	50.
Chloroethane ..... :	<50.	ug/Kg	50.
Chloroform ..... :	<50.	ug/Kg	50.
Chloromethane ..... :	<50.	ug/Kg	50.
cis 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Dibromochloromethane ..... :	<50.	ug/Kg	50.
Dibromochloropropane ..... :	<50.	ug/Kg	50.
Dibromomethane ..... :	<50.	ug/Kg	50.
Dichlorodifluoromethane ..... :	<250.	ug/Kg	250.
Dichloromethane ..... :	<50.	ug/Kg	50.
Diethyl ether ..... :	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro .. :	<50.	ug/Kg	50.
ethane (Freon 113) ..... :			
Ethylbenzene ..... :	<50.	ug/Kg	50.
Hexachlorobutadiene ..... :	<200.	ug/Kg	200.
Isopropylbenzene ..... :	<50.	ug/Kg	50.
Methyl ethyl ketone ..... :	<200.	ug/Kg	200.
Methyl isobutyl ketone ..... :	<200.	ug/Kg	200.
Methyl tert-butyl ether ..... :	<200.	ug/Kg	200.
m,p - Xylene ..... :	<50.	ug/Kg	50.
Napthalene ..... :	<50.	ug/Kg	50.
n-Butylbenzene ..... :	<50.	ug/Kg	50.
o-Xylene ..... :	<50.	ug/Kg	50.
Propylbenzene ..... :	<50.	ug/Kg	50.
sec-Butylbenzene ..... :	<50.	ug/Kg	50.
Styrene ..... :	<50.	ug/Kg	50.
tert-Butylbenzene ..... :	<50.	ug/Kg	50.
Toluene ..... :	<50.	ug/Kg	50.
Chloroethylvinyl Ether ..... :	<500.	ug/Kg	500.
trans 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Trichloroethene ..... :	<50.	ug/Kg	50.
Trichlorofluoromethane ..... :	<50.	ug/Kg	50.
Vinyl chloride ..... :	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene ..... :	<50.	ug/Kg	50.
trans 1,3-Dichloropropene ..... :	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-14S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-01-94
ANALYSIS DATE .: 10-03-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY: HKN
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-15
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane ..... :	<50.	ug/Kg	50.
Carbon tetrachloride ..... :	<50.	ug/Kg	50.
Chlorobenzene ..... :	<50.	ug/Kg	50.
Chloroethane ..... :	<50.	ug/Kg	50.
Chloroform ..... :	<50.	ug/Kg	50.
Chloromethane ..... :	<50.	ug/Kg	50.
cis 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Dibromochloromethane ..... :	<50.	ug/Kg	50.
Dibromochloropropane ..... :	<50.	ug/Kg	50.
Dibromomethane ..... :	<50.	ug/Kg	50.
Dichlorodifluoromethane ..... :	<250.	ug/Kg	250.
Dichloromethane ..... :	<50.	ug/Kg	50.
Diethyl ether ..... :	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro .. :	<50.	ug/Kg	50.
ethane (Freon 113) ..... :			
Ethylbenzene ..... :	<50.	ug/Kg	50.
Hexachlorobutadiene ..... :	<200.	ug/Kg	200.
Isopropylbenzene ..... :	<50.	ug/Kg	50.
Methyl ethyl ketone ..... :	<200.	ug/Kg	200.
Methyl isobutyl ketone ..... :	<200.	ug/Kg	200.
Methyl tert-butyl ether ..... :	<200.	ug/Kg	200.
m,p - Xylene ..... :	<50.	ug/Kg	50.
Napthalene ..... :	<50.	ug/Kg	50.
n-Butylbenzene ..... :	<50.	ug/Kg	50.
o-Xylene ..... :	<50.	ug/Kg	50.
Propylbenzene ..... :	<50.	ug/Kg	50.
sec-Butylbenzene ..... :	<50.	ug/Kg	50.
Styrene ..... :	<50.	ug/Kg	50.
tert-Butylbenzene ..... :	<50.	ug/Kg	50.
Toluene ..... :	<50.	ug/Kg	50.
Chloroethylvinyl Ether ..... :	<500.	ug/Kg	500.
trans 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Trichloroethene ..... :	<50.	ug/Kg	50.
Trichlorofluoromethane ..... :	<50.	ug/Kg	50.
Vinyl chloride ..... :	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene ..... :	<50.	ug/Kg	50.
trans 1,3-Dichloropropene ..... :	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY: [illegible]
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-16
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-17
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane ..... :	<50.	ug/Kg	50.
Carbon tetrachloride ..... :	<50.	ug/Kg	50.
Chlorobenzene ..... :	<50.	ug/Kg	50.
Chloroethane ..... :	<50.	ug/Kg	50.
Chloroform ..... :	<50.	ug/Kg	50.
Chloromethane ..... :	<50.	ug/Kg	50.
cis 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Dibromochloromethane ..... :	<50.	ug/Kg	50.
Dibromochloropropane ..... :	<50.	ug/Kg	50.
Dibromomethane ..... :	<50.	ug/Kg	50.
Dichlorodifluoromethane ..... :	<250.	ug/Kg	250.
Dichloromethane ..... :	<50.	ug/Kg	50.
Diethyl ether ..... :	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro .. :	<5.0	ug/Kg	5.0
ethane (Freon 113) ..... :			
Ethylbenzene ..... :	<50.	ug/Kg	50.
Hexachlorobutadiene ..... :	<200.	ug/Kg	200.
Isopropylbenzene ..... :	<50.	ug/Kg	50.
Methyl ethyl ketone ..... :	<200.	ug/Kg	200.
Methyl isobutyl ketone ..... :	<200.	ug/Kg	200.
Methyl tert-butyl ether ..... :	<200.	ug/Kg	200.
m,p - Xylene ..... :	<50.	ug/Kg	50.
Napthalene ..... :	<50.	ug/Kg	50.
n-Butylbenzene ..... :	<50.	ug/Kg	50.
o-Xylene ..... :	<50.	ug/Kg	50.
Propylbenzene ..... :	<50.	ug/Kg	50.
sec-Butylbenzene ..... :	<50.	ug/Kg	50.
Styrene ..... :	<50.	ug/Kg	50.
tert-Butylbenzene ..... :	<50.	ug/Kg	50.
Toluene ..... :	<50.	ug/Kg	50.
Chloroethylvinyl Ether ..... :	<500.	ug/Kg	500.
trans 1,2-Dichloroethene ..... :	<50.	ug/Kg	50.
Trichloroethene ..... :	<50.	ug/Kg	50.
Trichlorofluoromethane ..... :	<50.	ug/Kg	50.
Vinyl chloride ..... :	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene ..... :	<50.	ug/Kg	50.
trans 1,3-Dichloropropene ..... :	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-18
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : CLT-19
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-20
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-21
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY: [illegible]
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ethane (Freon 113)	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-22
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-03-94
ANALYSIS DATE .: 10-04-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethene .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
2-Hexanone .....:	<200.	ug/Kg	200.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Acetone .....:	<200.	ug/Kg	200.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<50.	ug/Kg	50.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-05-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Bromomethane	<50.	ug/Kg	50.
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<50.	ug/Kg	50.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<50.	ug/Kg	50.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<50.	ug/Kg	50.
Dibromomethane	<50.	ug/Kg	50.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<50.	ug/Kg	50.
Diethyl ether	<200.	ug/Kg	200.
1,1,2-Trichloro 1,2,2-Trifluoro ..	<50.	ug/Kg	50.
ethane (Freon 113)			
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<200.	ug/Kg	200.
Isopropylbenzene	<50.	ug/Kg	50.
Methyl ethyl ketone	<200.	ug/Kg	200.
Methyl isobutyl ketone	<200.	ug/Kg	200.
Methyl tert-butyl ether	<200.	ug/Kg	200.
m,p - Xylene	<50.	ug/Kg	50.
Napthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Chloroethylvinyl Ether	<500.	ug/Kg	500.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<50.	ug/Kg	50.
Vinyl chloride	<50.	ug/Kg	50.
Cis 1,3-Dichloropropylene	<50.	ug/Kg	50.
trans 1,3-Dichloropropene	<50.	ug/Kg	50.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-1
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 50' South of North High W
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404433
INVOICE NO.: 62141024
REPORT DATE: 10-03-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-2S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 75' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-29-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 2 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404434
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 4 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-3
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 100' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404435
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-4
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 120' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404436
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-5
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 140' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404437
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

CLIENT SAMPLE ID : CLT-6S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: 130' South of NHW
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]
PAGE : 2 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404438
INVOICE NO.: 62141024
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-7
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404465
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-8
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404466
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-9
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404467
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-10
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404468
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-11S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 09-28-94
ANALYSIS DATE .: 10-01-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404469
INVOICE NO.: 62141033
REPORT DATE: 10-04-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-12S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-05-94
ANALYSIS DATE .: 10-06-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY: MMM

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404470
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-13S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-05-94
ANALYSIS DATE .: 10-06-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404471
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:
PAGE : 4 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-14S
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: 10-05-94
ANALYSIS DATE .: 10-06-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404472
INVOICE NO.: 62141033
REPORT DATE: 10-07-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-15
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404487
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 4 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-16
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 2 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404488
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-17
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404489
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-18
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol ..... :	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether ..... :	<200.	ug/Kg	200.
2-Chlorophenol ..... :	<200.	ug/Kg	200.
1,3-Dichlorobenzene ..... :	<200.	ug/Kg	200.
1,4-Dichlorobenzene ..... :	<200.	ug/Kg	200.
1,2-Dichlorobenzene ..... :	<200.	ug/Kg	200.
2-Methylphenol ..... :	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether ..... :	<200.	ug/Kg	200.
4-Methylphenol ..... :	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine ..... :	<200.	ug/Kg	200.
Hexachloroethane ..... :	<200.	ug/Kg	200.
Nitrobenzene ..... :	<200.	ug/Kg	200.
Isophorone ..... :	<200.	ug/Kg	200.
2-Nitrophenol ..... :	<200.	ug/Kg	200.
2,4-Dimethylphenol ..... :	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane ..... :	<200.	ug/Kg	200.
2,4-Dichlorophenol ..... :	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene ..... :	<200.	ug/Kg	200.
Naphthalene ..... :	<200.	ug/Kg	200.
4-Chloroaniline ..... :	<400.	ug/Kg	400.
Hexachlorobutadiene ..... :	<200.	ug/Kg	200.
4-Chloro-3-methylphenol ..... :	<300.	ug/Kg	300.
2-Methylnaphthalene ..... :	<200.	ug/Kg	200.
Hexachlorocyclopentadiene ..... :	<200.	ug/Kg	200.
2,4,6-Trichlorophenol ..... :	<200.	ug/Kg	200.
2,4,5-Trichlorophenol ..... :	<200.	ug/Kg	200.
2-Chloronaphthalene ..... :	<200.	ug/Kg	200.
2-Nitroaniline ..... :	<300.	ug/Kg	300.
Dimethyl phthalate ..... :	<200.	ug/Kg	200.
Acenaphthylene ..... :	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline ....:	<400.	ug/Kg	400.
Acenaphthene ....:	<200.	ug/Kg	200.
2,4-Dinitrophenol ....:	<200.	ug/Kg	200.
4-Nitrophenol ....:	<300.	ug/Kg	300.
Dibenzofuran ....:	<200.	ug/Kg	200.
2,4-Dinitrotoluene ....:	<200.	ug/Kg	200.
2,6-Dinitrotoluene ....:	<200.	ug/Kg	200.
Diethyl phthalate ....:	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether ....:	<200.	ug/Kg	200.
Fluorene ....:	<200.	ug/Kg	200.
4-Nitroaniline ....:	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol ....:	<300.	ug/Kg	300.
N-Nitrosodiphenylamine ....:	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether ....:	<200.	ug/Kg	200.
Hexachlorobenzene ....:	<200.	ug/Kg	200.
Pentachlorophenol ....:	<300.	ug/Kg	300.
3-Methylphenol ....:	<200.	ug/Kg	200.
2,6-Dichlorophenol ....:	<200.	ug/Kg	200.
N-Nitrosodibutylamine ....:	<200.	ug/Kg	200.
N-Nitrosodiethylamine ....:	<200.	ug/Kg	200.
Phenanthrene ....:	<200.	ug/Kg	200.
Anthracene ....:	<200.	ug/Kg	200.
Di-n-butyl phthalate ....:	<200.	ug/Kg	200.
Fluoranthene ....:	<200.	ug/Kg	200.
Pyrene ....:	<200.	ug/Kg	200.
Butyl benzyl phthalate ....:	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine ....:	<300.	ug/Kg	300.
Benzo(a)anthracene ....:	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate ....:	<200.	ug/Kg	200.
Chrysene ....:	<200.	ug/Kg	200.
Di-n-octyl phthalate ....:	<200.	ug/Kg	200.
Benzo(b)fluoranthene ....:	<660.	ug/Kg	660.
Benzo(k)fluoranthene ....:	<200.	ug/Kg	200.
Benzo(a)pyrene ....:	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene ....:	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene ....:	<200.	ug/Kg	200.
Benzo(ghi)perylene ....:	<200.	ug/Kg	200.
alpha-BHC ....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 3 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404490
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 4 OF 4

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-19
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404491
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-20
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404492
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : CLT-21
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-94

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404493
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

CLIENT SAMPLE ID : CLT-22
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: Comm. Trench
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-29-94
SUBMITTAL DATE : 09-29-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-08-91

Method 8270: Semi-Volatiles by Capillary Column GC/MS

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<200.	ug/Kg	200.
Bis(2-chloroethyl)ether	<200.	ug/Kg	200.
2-Chlorophenol	<200.	ug/Kg	200.
1,3-Dichlorobenzene	<200.	ug/Kg	200.
1,4-Dichlorobenzene	<200.	ug/Kg	200.
1,2-Dichlorobenzene	<200.	ug/Kg	200.
2-Methylphenol	<200.	ug/Kg	200.
Bis(2-chloroisopropyl)ether	<200.	ug/Kg	200.
4-Methylphenol	<200.	ug/Kg	200.
N-Nitroso-di-n-propylamine	<200.	ug/Kg	200.
Hexachloroethane	<200.	ug/Kg	200.
Nitrobenzene	<200.	ug/Kg	200.
Isophorone	<200.	ug/Kg	200.
2-Nitrophenol	<200.	ug/Kg	200.
2,4-Dimethylphenol	<200.	ug/Kg	200.
Bis(2-chloroethoxy)methane	<200.	ug/Kg	200.
2,4-Dichlorophenol	<200.	ug/Kg	200.
1,2,4-Trichlorobenzene	<200.	ug/Kg	200.
Naphthalene	<200.	ug/Kg	200.
4-Chloroaniline	<400.	ug/Kg	400.
Hexachlorobutadiene	<200.	ug/Kg	200.
4-Chloro-3-methylphenol	<300.	ug/Kg	300.
2-Methylnaphthalene	<200.	ug/Kg	200.
Hexachlorocyclopentadiene	<200.	ug/Kg	200.
2,4,6-Trichlorophenol	<200.	ug/Kg	200.
2,4,5-Trichlorophenol	<200.	ug/Kg	200.
2-Chloronaphthalene	<200.	ug/Kg	200.
2-Nitroaniline	<300.	ug/Kg	300.
Dimethyl phthalate	<200.	ug/Kg	200.
Acenaphthylene	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<400.	ug/Kg	400.
Acenaphthene	<200.	ug/Kg	200.
2,4-Dinitrophenol	<200.	ug/Kg	200.
4-Nitrophenol	<300.	ug/Kg	300.
Dibenzofuran	<200.	ug/Kg	200.
2,4-Dinitrotoluene	<200.	ug/Kg	200.
2,6-Dinitrotoluene	<200.	ug/Kg	200.
Diethyl phthalate	<200.	ug/Kg	200.
4-Chlorophenyl phenyl ether	<200.	ug/Kg	200.
Fluorene	<200.	ug/Kg	200.
4-Nitroaniline	<400.	ug/Kg	400.
2-Methyl-4,6-dinitrophenol	<300.	ug/Kg	300.
N-Nitrosodiphenylamine	<200.	ug/Kg	200.
4-Bromophenyl phenyl ether	<200.	ug/Kg	200.
Hexachlorobenzene	<200.	ug/Kg	200.
Pentachlorophenol	<300.	ug/Kg	300.
3-Methylphenol	<200.	ug/Kg	200.
2,6-Dichlorophenol	<200.	ug/Kg	200.
N-Nitrosodibutylamine	<200.	ug/Kg	200.
N-Nitrosodiethylamine	<200.	ug/Kg	200.
Phenanthrene	<200.	ug/Kg	200.
Anthracene	<200.	ug/Kg	200.
Di-n-butyl phthalate	<200.	ug/Kg	200.
Fluoranthene	<200.	ug/Kg	200.
Pyrene	<200.	ug/Kg	200.
Butyl benzyl phthalate	<200.	ug/Kg	200.
3,3'-Dichlorobenzidine	<300.	ug/Kg	300.
Benzo(a)anthracene	<200.	ug/Kg	200.
Bis(2-ethylhexyl) phthalate	<200.	ug/Kg	200.
Chrysene	<200.	ug/Kg	200.
Di-n-octyl phthalate	<200.	ug/Kg	200.
Benzo(b)fluoranthene	<660.	ug/Kg	660.
Benzo(k)fluoranthene	<200.	ug/Kg	200.
Benzo(a)pyrene	<200.	ug/Kg	200.
Indenol(1,2,3-cd)pyrene	<200.	ug/Kg	200.
Dibenzo(a,h)anthracene	<200.	ug/Kg	200.
Benzo(ghi)perylene	<200.	ug/Kg	200.
alpha-BHC	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
beta-BHC	<200.	ug/Kg	200.
gamma-BHC	<200.	ug/Kg	200.
delta-BHC	<200.	ug/Kg	200.
Heptachlor	<200.	ug/Kg	200.
Chlorodanes (alpha and gamma)	<200.	ug/Kg	200.
Aldrin	<200.	ug/Kg	200.
Heptachlor epoxide	<200.	ug/Kg	200.
Dieldrin	<200.	ug/Kg	200.
Endrin	<200.	ug/Kg	200.
Endrin aldehyde	<200.	ug/Kg	200.
4,4'DDD	<200.	ug/Kg	200.
4,4'DDE	<200.	ug/Kg	200.
4,4'DDT	<200.	ug/Kg	200.
Endosulfan I	<200.	ug/Kg	200.
Endosulfan II	<200.	ug/Kg	200.
Endosulfan sulfate	<200.	ug/Kg	200.
Methoxychlor	<200.	ug/Kg	200.
Toxaphene	<500.	ug/Kg	500.
a,a Dimethylphenethylamine	<100.	ug/Kg	100.
PCB 1221	<500.	ug/Kg	500.
PCB 1232	<500.	ug/Kg	500.
PCB 1242	<500.	ug/Kg	500.
PCB 1248	<500.	ug/Kg	500.
PCB 1254	<500.	ug/Kg	500.
PCB 1260	<500.	ug/Kg	500.
PCB 1016	<500.	ug/Kg	500.
Aniline	<200.	ug/Kg	200.
Benzyl alcohol	<200.	ug/Kg	200.
Ethyl Methanesulfonate	<200.	ug/Kg	200.
2-Picoline	<200.	ug/Kg	200.
Acetophenone	<200.	ug/Kg	200.
Benzoic acid	<200.	ug/Kg	200.
N-Nitrosopiperidine	<200.	ug/Kg	200.
1-Chloronaphthalene	<200.	ug/Kg	200.
1-Naphthylamine	<200.	ug/Kg	200.
2-Naphthylamine	<200.	ug/Kg	200.
Pentachlorobenzene	<200.	ug/Kg	200.
1,2,4,5-Tetrachlorobenzene	<200.	ug/Kg	200.

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404494
INVOICE NO.: 62141037
REPORT DATE: 10-06-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
2,3,4,6-Tetrachlorophenol .....:	<200.	ug/Kg	200.
4-Aminobiphenyl .....:	<200.	ug/Kg	200.
Diphenylamine .....:	<200.	ug/Kg	200.
1,2-Diphenylhydrazide .....:	<200.	ug/Kg	200.
Pentachloronitrobenzene .....:	<200.	ug/Kg	200.
Phenacetin .....:	<200.	ug/Kg	200.
Pronamide .....:	<200.	ug/Kg	200.
Benzidine .....:	<200.	ug/Kg	200.
p-Dimethylaminozobenzene .....:	<200.	ug/Kg	200.
Dibenz(a,j)acridine (H2O) .....:	<200.	ug/Kg	200.
7,12-Dimethylbenz(a)anthracene ...:	<200.	ug/Kg	200.
3-Methylcholanthrene .....:	<200.	ug/Kg	200.

(1) Copy to Client

Appendix C-2
SWMU 163: 1994 Trench Excavation Material Sampling Report

139791, ZZ2020 • October 2013 • ACA08-037

2880000001340O

DEPARTMENT OF THE ARMY

U.S. ARMY WHITE SANDS MISSILE RANGE
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-

REPLY TO
ATTENTION OF

06 DEC 1994

Directorate of Environment and Safety

Mr. David Morgan
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Dear Mr. Morgan:

Enclosed please find the formal report prepared by our environmental services contractor detailing the sampling of the material in the roll-off bins associated with the White Sands Missile Range commissary landfill project. The analytical results of those sampling events are also contained in the report. If you have any questions regarding the report, please do not hesitate to contact Ms. Robin Smith of our staff at (505) 678-8693. Allow us to extend our best to you for this holiday season.

Sincerely,

ORIGINAL SIGNED BY
Gene Forsyth
Thomas A. Ladd
Director, Environment and Safety

Enclosure

ADVANCED
SCIENCES, INC.

December 1, 1994

Commander
U. S. Army
White Sands Missile Range
Attention: DES (Ms. Romero)
White Sands Missile Range, NM 88002

RE: Contract DAAD07-90-C-0018, WAO-600-11, Commissary Landfill Trench Material Sampling-Final Report

Dear Ms. Romero:

Enclosed are two copies of the final report detailing the sampling and analysis of the Commissary Landfill Trench Material (CLTM). Also enclosed are two copies of the text portion of the final report that should be substituted for the text in the two draft reports delivered to you and Ms. Robin Smith on 11/18/94. This will make a total of four copies of the final report for your use. The final report incorporates your comments in letter dated 11/28/94.

Please let me know if further information is required.

Sincerely,

Stephen R. Alcorn

Stephen R. Alcorn
Sr. Project Manager

Enclosure

cc: STEWS-PR-MA (S. Lopez) w/o Enclosure
STEWS-DES-E (H. Magallanes) w/o Enclosure
STEWS-DES-E (R. Smith) w/o Enclosure
SRA/GLJ/glj

555 South Telshor Blvd., Suite 310 Las Cruces, NM 88011-8646 (505) 522-7229 FAX (505) 522-7014

WORK ASSIGNMENT ORDER (WAO)
NUMBER 600-11

COMMISSARY LANDFILL TRENCH EXCAVATION MATERIAL SAMPLING

AT

WHITE SANDS MISSILE RANGE (WSMR)

CONTRACT DAAD07-90-C-0018
WORK ASSIGNMENT ORDER 600-11

1 December 1994

Submitted to:

U. S. Army
White Sands Missile Range
Director of Contracting
Services Contracting Branch
White Sands Missile Range, New Mexico 88002-5201

Submitted By:

Advanced Sciences, Inc.
555 S Telshor Blvd., Suite 310
Las Cruces, New Mexico 88011

WSMR Environment and Safety Technical Library
2 8800 00001 3400

TABLE OF CONTENTS

Section *Page*

1.0 INTRODUCTION 1

2.0 COMMISSARY LANDFILL TRENCH MATERIAL (CLTM) SAMPLING 1

3.0 ANALYTICAL RESULTS 7

4.0 CONCLUSIONS AND RECOMMENDATIONS 14

LIST OF APPENDICES

Appendix

APPENDIX A INITIAL WSMR SAMPLING RESULTS
APPENDIX B RCRA TCLP LIMITS
APPENDIX C EPA LETTER DATED 1/13/93
APPENDIX D HEALTH AND SAFETY PLAN 7/14/94
APPENDIX E SAMPLING LOCATION(S) LOGSHEETS
APPENDIX F ANALYTICAL RESULTS AND CHAIN OF CUSTODY

LIST OF PHOTOS

Photo *Page*

Photo 1. Removal of Landfill Material from Trench. 4
Photo 2. Placement of Landfill Material in Roll Off Bins. 5
Photo 3. Decontamination and Sample Area Packaging. 6
Photo 4. Bin Cover Removal. 8
Photo 5. Bin Sampling. 9
Photo 6. Sample From Bin. 10

LIST OF TABLES

Table *Page*

Table 1. Analytical results, above detection limits, for CLTM sampling and regulatory limits 11

LIST OF FIGURES

Figure *Page*

Figure 1. Site of new commissary. 2
Figure 2. Commissary Landfill Trench Material bin locations. 3

COMMISSARY LANDFILL TRENCH EXCAVATION MATERIAL SAMPLING

1.0 INTRODUCTION

During construction activities in early August, 1994, at the site of the new WSMR Commissary, an old, inactive landfill was discovered (Figure 1). The old landfill was estimated to have been in operation from 1946 until 1952. The exact contents and quantities of materials placed in this landfill are unknown. Initial sampling results of the landfill material, reported by WSMR (Appendix A), indicated concentrations of lead above the Resource Conservation and Recovery Act (RCRA) Regulatory limit (Appendix B). In accordance with the RCRA Regulations, this landfill is to be treated as a Solid Waste Management Unit (SWMU)(Appendix C).

The Commissary Landfill Trench Material (CLTM) was in a location needed for completion of the Commissary. The CLTM is non homogeneous and cannot be compacted and stabilized in situ. Therefore WSMR deemed it necessary to remove the visible CLTM. The visible CLTM was removed with a front-end loader and placed into 82 roll off bins (see Photos 1 and 2). The excavated trench was sampled and analytical results indicated that all potentially hazardous materials had been removed. The trench sampling was addressed in a separate report, dated 24 October, 1994, entitled "Commissary Landfill Trench Sampling". The roll off bins were located in close proximity to the Commissary construction site as shown in Figure 2. The bins were sampled and the analytical results compared with RCRA Part 241.24 (Appendix B) to determine if the CLTM exhibits characteristics of toxicity.

This report details the sampling techniques and analytical results of the CLTM.

2.0 COMMISSARY LANDFILL TRENCH MATERIAL (CLTM) SAMPLING

Since the initial sampling of CLTM by WSMR indicated levels of lead above the RCRA regulatory level (Appendix A), a Health and Safety Plan was required prior to entry into the roll off bins to sample the CLTM. Appendix D is the approved Health and Safety Plan implemented for the CLTM sampling effort. Full face respirators with GMC-H type cartridges, Tyvek coveralls, steel toed safety boots with rubber or Tyvek overboots, nitrile disposal gloves, and a hard hat were used during the CLTM sampling.

Sampling of the bins containing CLTM began on September 21, 1994 and the last bin was sampled on October 3, 1994. On October 26, 1994, two one liter samples from bin B-1068 were taken and shipped to a Rollins International, Inc. subsidiary for stabilization profiling, as directed by DES-E. All bin samples were obtained using the above sampling protocol. The location of the bin storage area was accurately located using the Global Positioning System (GPS).

Prior to the initial sampling of the bins, a decontamination area was established. This area was used for decontaminating (cleaning) the sampling augers, stainless steel mixing bowl and spatula and as a area to label and package samples and prepare chain of custody records for samples prior to shipment to the laboratory for analysis (see Photo 3).

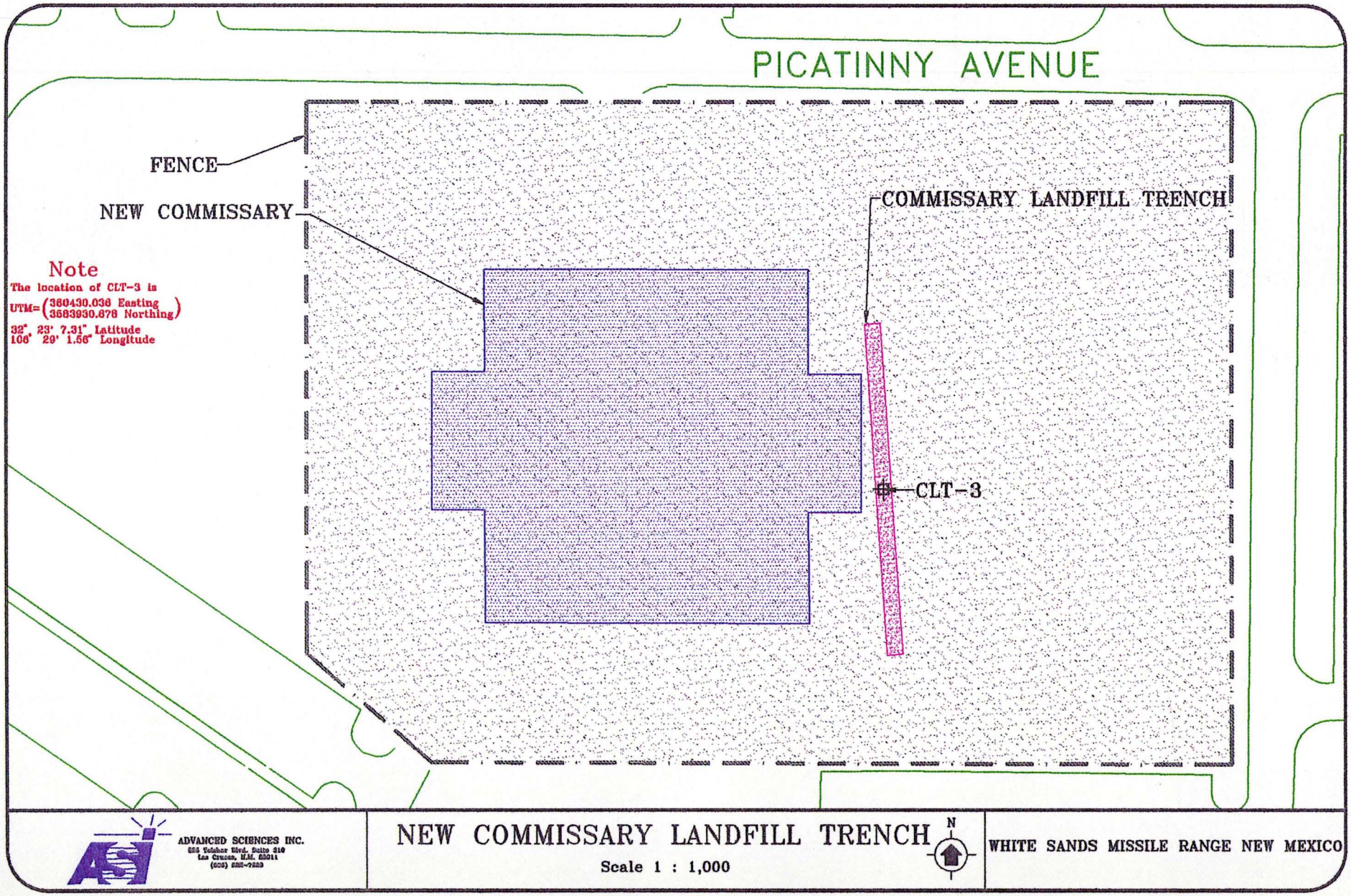

PICATINNY AVENUE
FENCE
NEW COMMISSARY
COMMISSARY LANDFILL TRENCH
CLT-3
Note
The location of CLT-3 is
UTM= (360430.036 Easting
3583930.678 Northing)
32° 23' 7.31" Latitude
106° 29' 1.56" Longitude
ADVANCED SCIENCES INC.
NEW COMMISSARY LANDFILL TRENCH
Scale 1 : 1,000
N
WHITE SANDS MISSILE RANGE NEW MEXICO

Figure 1.

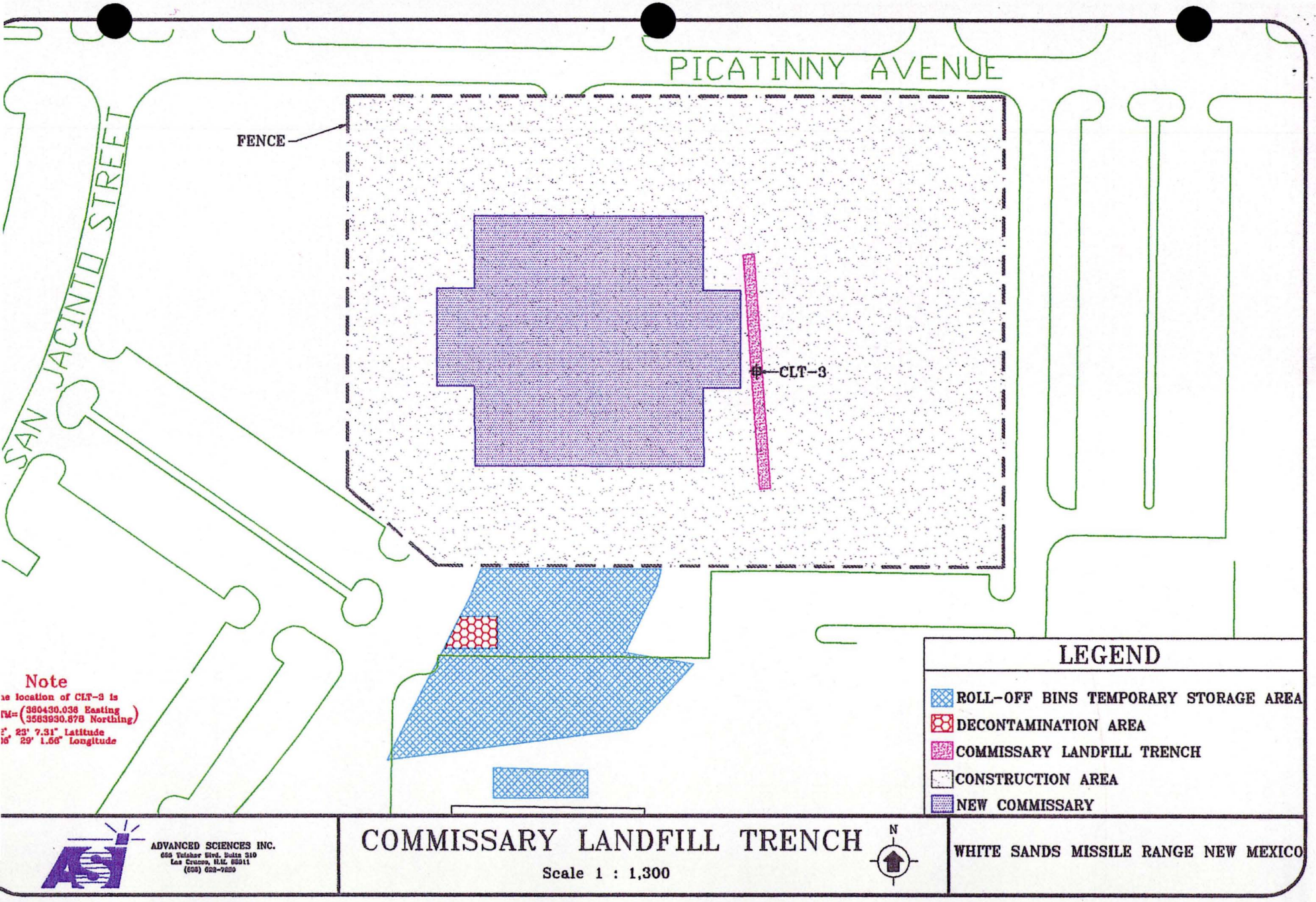

PICATINNY AVENUE
SAN JACINTO STREET
FENCE
CLT-3
Note
ne location of CLT-3 is
TM= (360430.036 Easting
3563930.678 Northing)
2° 23' 7.31" Latitude
16° 29' 1.66" Longitude
LEGEND
ROLL-OFF BINS TEMPORARY STORAGE AREA
DECONTAMINATION AREA
COMMISSARY LANDFILL TRENCH
CONSTRUCTION AREA
NEW COMMISSARY
ADVANCED SCIENCES INC.
655 Telshor Blvd. Suite 310
Las Cruces, N.M. 88011
(505) 522-7225
COMMISSARY LANDFILL TRENCH
Scale 1 : 1,300
N
WHITE SANDS MISSILE RANGE NEW MEXICO

Figure 2.

Photo 1. Removal of Landfill Material from Trench

Photo 2. Placement of Landfill Material in Roll Off Bins

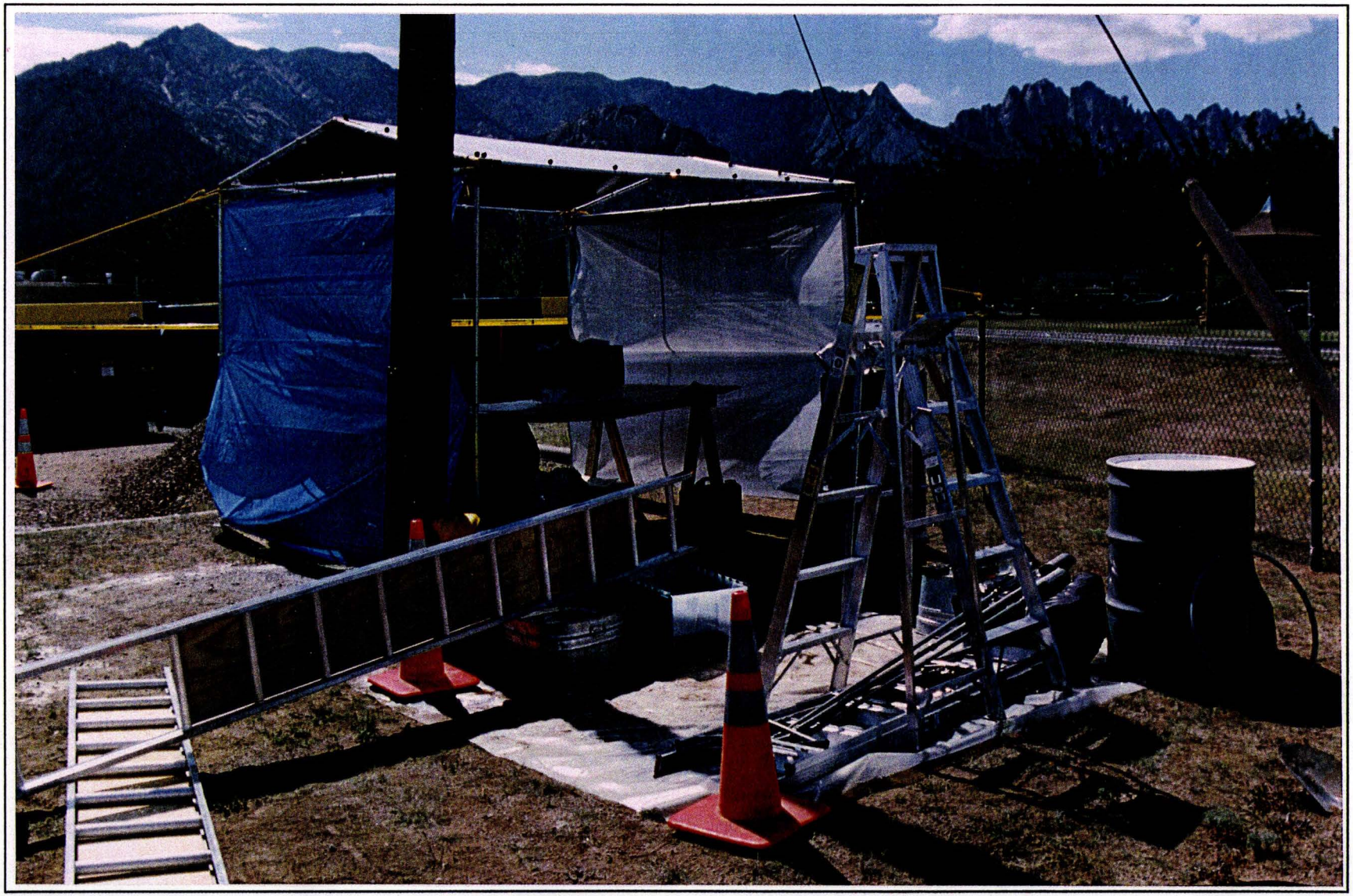


Photo 3. Decontamination and Sample Packaging Area.

The bin(s) to be sampled were uncovered by releasing three racheting hold down straps and removing up to five elastic tie down cords on each end of the bin (see Photo 4). The bin cover was rolled up to one side for access to the CLTM in the bin. A sampling platform was placed on top of the bin and secured on both ends with an elastic tie down cord. A step ladder was placed next to the sampling platform to gain access to the platform. Sampling equipment consisting of stainless steel hand auger(s), stainless steel mixing bowl(s) and stainless steel mixing spatula(s), nine ounce glass sample container(s) supplied by the analytical laboratory (Westech Laboratories, Inc.) were placed on the sampling platform. In accordance with "Test Methods For Evaluating Solid Waste Physical/Chemical Methods", EPA, July 1992(SW-846), samples were obtained from four separate locations within each bin. Each of the four sampling locations were chosen by dividing the bin into 160 grids, each one foot square, and using a random number generator to determine the four separate locations for a sample to be taken within each bin. At each sampling location, a second random number was generated, between 1 and 4 to determine the depth of the sample at each location. Number 1 corresponds to a sample depth of 6 inches, Number 2 corresponds to a sample depth of 12 inches, Number 3 corresponds to a sample depth of 18 inches and Number 4 corresponds to a sample depth of 24 inches. Appendix E contains the sampling location log sheets for each of the 82 bins sampled. Each of the four samples (see Photo 5) were placed into the stainless steel mixing bowl and after all four of the samples were placed into the mixing bowl, a stainless steel spatula was used to mix the samples and a composite sample of the four samples was taken from the mixing bowl and placed into a nine ounce glass jar (see Photo 6). The remainder of the material in the mixing bowl was returned to the bin. The sample jar top was labeled and placed in a cooler with ice pack(s). The step ladder and sampling platform were removed and the bin cover was rolled into place and secured by the racheting hold down straps and elastic tie down cords prior to moving on to the next bin to be sampled. Sufficient hand augers, stainless steel mixing bowls and stainless steel spatulas were on hand to allow four bins to be sampled before a decontamination cycle was done. The sampling equipment was decontaminated with an Alconnox wash and rinsed with distilled water. Samples were labeled, custody sealed, placed into zip-lock bags and placed into a large cooler with ice packs. A total of 82 bins were sampled using the above procedure.

During the sampling of each bin, a photoionization detector(PID) organic analyzer, was used to determine the organic content of the atmosphere in which the sampling was taking place. PID organic readings were obtained from the sample(s) mixing bowl as well as from the bin close to the location of each sample. All PID readings were less than 5ppm. Because some readings were above the 1ppm level as a cutoff for wearing full face respirators, the sampling was not down graded to a level D effort (Appendix D).

At the end of each day, coolers with Chain of Custody Record(s) were delivered to the South Entrance Gate of WSMR and custody transferred to Westech Laboratories, Inc. for laboratory analysis. Decontamination wash water was placed in a 55 gallon drum and potentially contaminated personal protective equipment was placed in another open-top 55 gallon drum for disposal.

3.0 ANALYTICAL RESULTS

All CLTM (bin) samples were analyzed for TCLP Metals, TCLP Pesticides, TCLP Volatile Organics, TCLP Semi-Volatile Organics and EPA Method 8080 PCB's. The results of the analyses

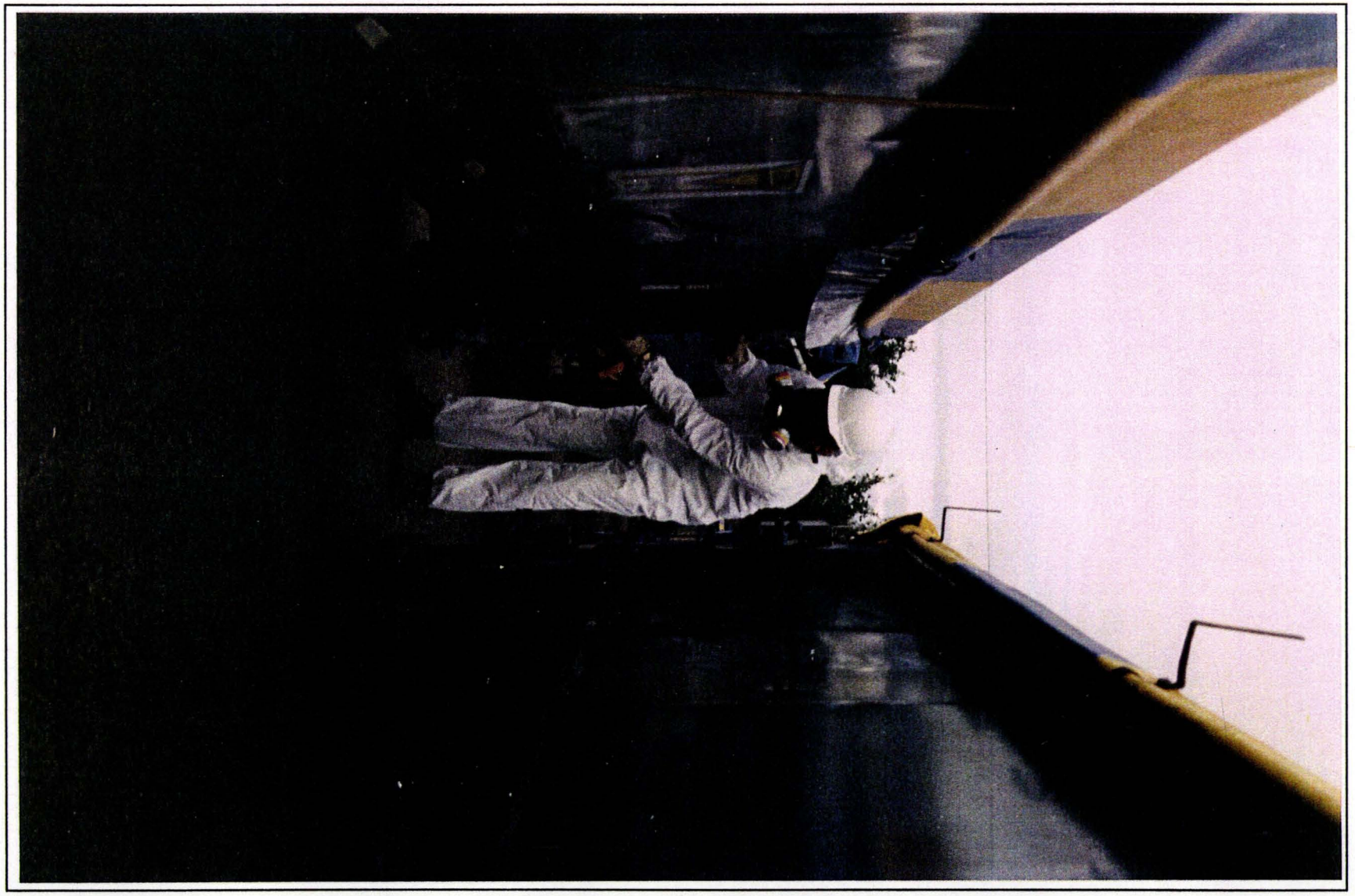


Photo 4. Bin Cover Removal.

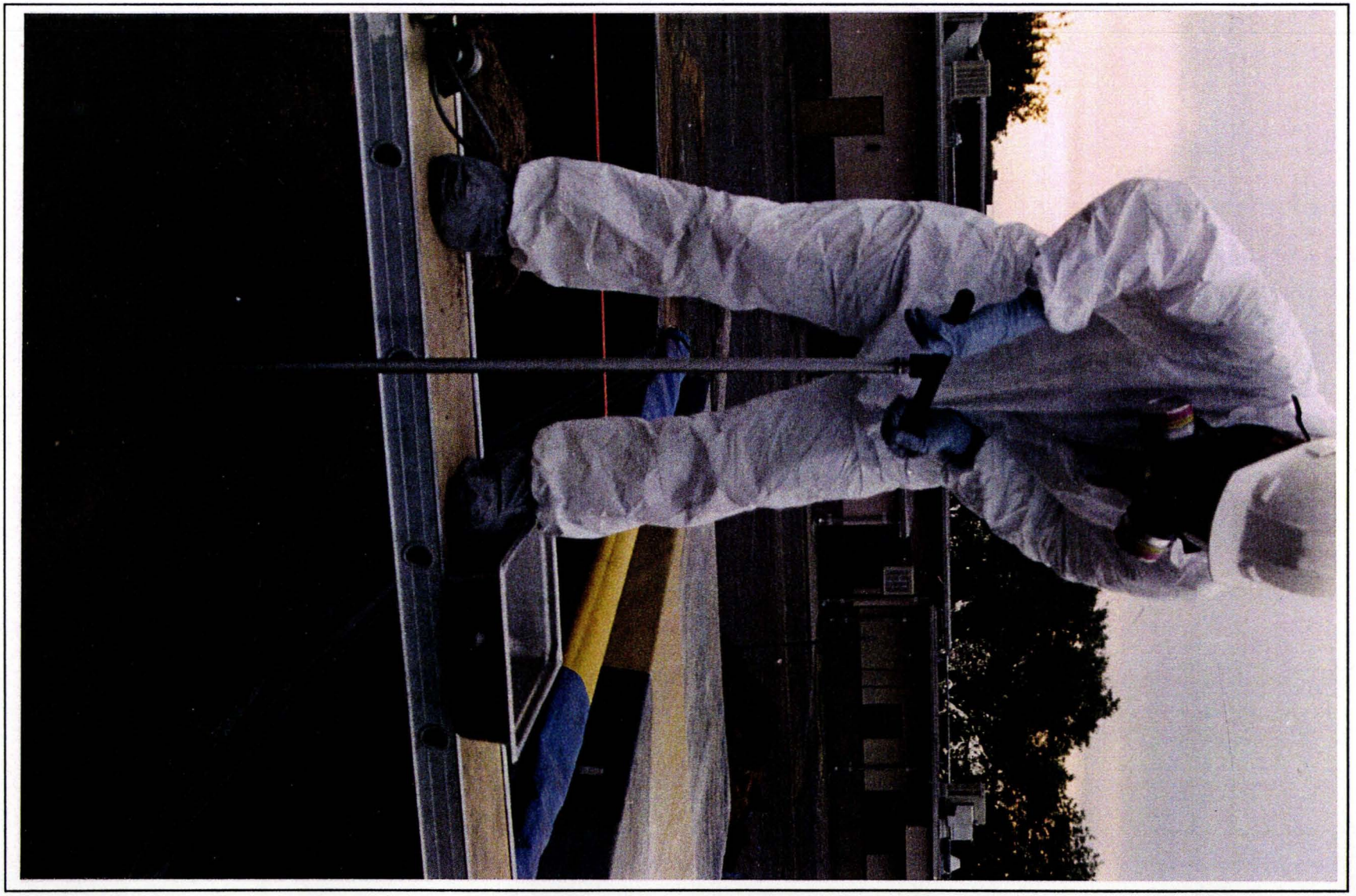


Photo 5. Bin Sampling.

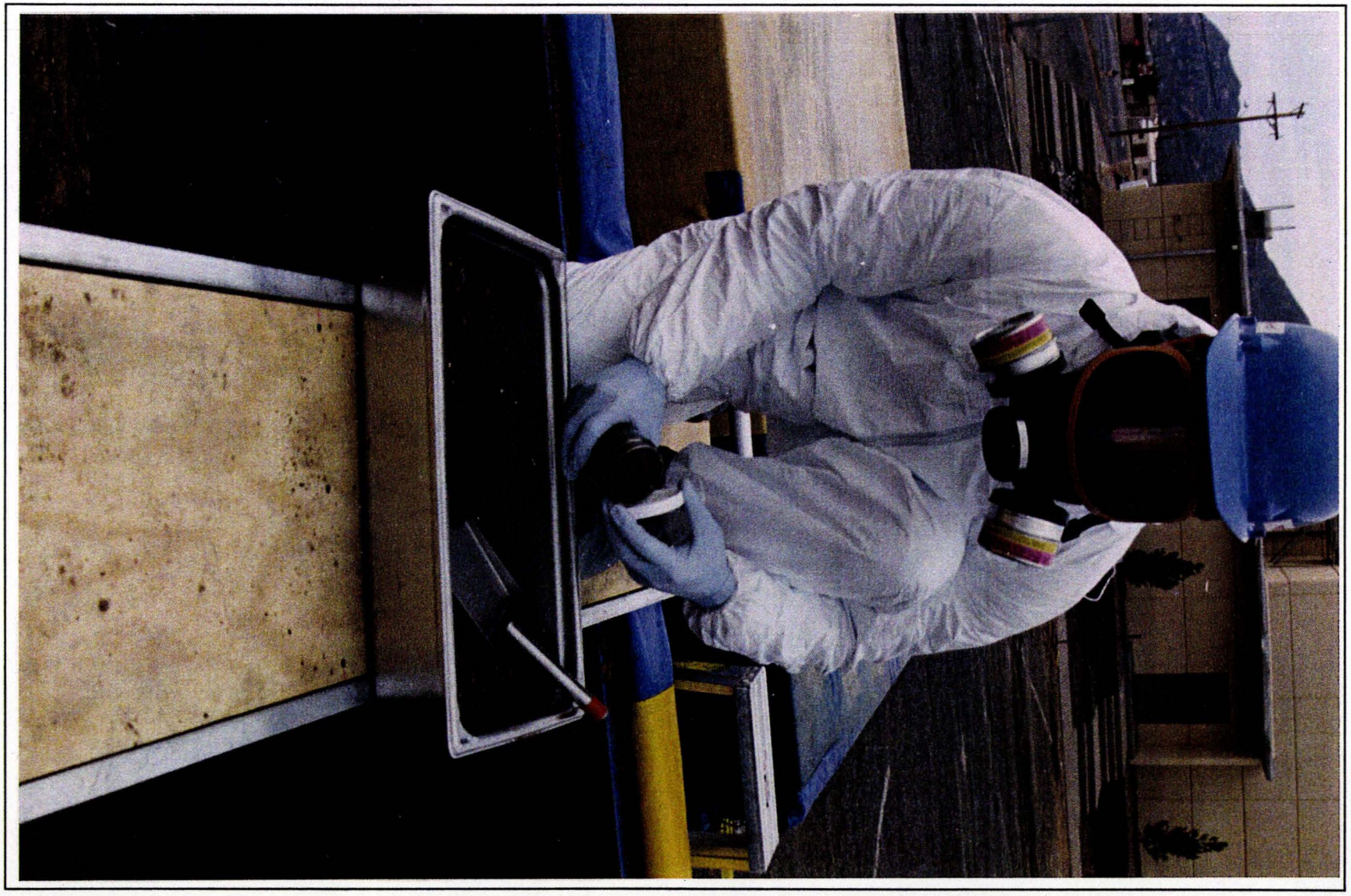


Photo 6. Sample From Bin.

of the 82 CLTM (bin) samples are in Appendix F along with the Chain of Custody Records for the samples. Only one bin (B-685) had no detectable levels for any of the constituents analyzed. All other bin(s) analyses were above the method detection level for some TCLP Metals. Table 1 shows the results of analysis that were above the method detection level. Of the 81 bins showing above detectable levels for some TCLP Metals, seven bins had levels above RCRA 261.24 regulatory levels of Lead.

Table 1. Analytical results, above detection limits, for CLTM sampling and regulatory limits

	ARSENIC (TCLP)	BARIUM (TCLP)	CADMIUM (TCLP)	LEAD (TCLP)	SILVER (TCLP)
	mg/l	mg/l	mg/l	mg/l	mg/l
DETECTION LIMIT (1)	0.01	0.2	0.05	0.2	0.05
REGULATORY LIMIT (2)	5	100	1	5	5
BIN I.D.					
B-50G	LTD	0.7	0.06	LTD	LTD
B-513	LTD	LTD	LTD	0.32	LTD
B-528	LTD	0.25	LTD	LTD	LTD
B-561	LTD	0.39	LTD	0.46	LTD
B-563	LTD	LTD	0.05	2.7	LTD
B-589	LTD	0.51	LTD	0.27	LTD
B-628	LTD	LTD	LTD	8.3	LTD
B-641	LTD	LTD	0.05	8.4	LTD
B-655	LTD	0.68	LTD	1.4	LTD
B-675	LTD	0.6	LTD	LTD	LTD
B-688	LTD	0.66	LTD	0.46	LTD
B-692	LTD	0.49	LTD	LTD	LTD
B-706	LTD	0.45	LTD	0.2	0.05
B-713	LTD	0.45	LTD	0.83	LTD
B-755	LTD	LTD	LTD	0.36	LTD
B-764	LTD	0.34	LTD	LTD	LTD
B-771	LTD	0.4	LTD	0.55	LTD
B-789	LTD	0.33	LTD	0.2	LTD

Table 1. Analytical results, above detection limits, for CLTM sampling and regulatory limits (continued)

	ARSENIC (TCLP)	BARIUM (TCLP)	CADMIUM (TCLP)	LEAD (TCLP)	SILVER (TCLP)
	mg/l	mg/l	mg/l	mg/l	mg/l
BIN I.D.					
B-797	LTD	0.42	LTD	LTD	LTD
B-805	LTD	0.67	LTD	0.35	LTD
B-810	LTD	0.54	0.1	1.1	LTD
B-812	LTD	0.53	LTD	0.27	LTD
B-828	LTD	0.49	LTD	0.5	LTD
B-852	LTD	LTD	LTD	2	LTD
B-854	LTD	0.26	LTD	LTD	LTD
B-868	LTD	0.48	LTD	15	LTD
B-872	LTD	0.47	LTD	LTD	LTD
B-877	LTD	0.35	LTD	LTD	LTD
B-888	LTD	0.35	LTD	0.7	LTD
B-890	LTD	LTD	LTD	3.4	LTD
B-915	LTD	0.43	LTD	0.23	LTD
B-918	LTD	0.59	LTD	0.29	LTD
B-936	LTD	0.7	LTD	0.23	LTD
B-960	LTD	0.47	LTD	LTD	LTD
B-962	LTD	0.64	LTD	0.22	LTD
B-965	LTD	0.58	LTD	0.48	LTD
B-972	LTD	0.47	LTD	LTD	LTD
B-974	LTD	0.61	LTD	2.1	LTD
B-998	LTD	0.26	LTD	LTD	LTD
B-1007	LTD	0.57	LTD	0.49	LTD
B-1010	LTD	0.33	LTD	LTD	LTD
B-1020	LTD	0.31	LTD	LTD	LTD
B-1028	LTD	0.69	LTD	0.29	LTD

Table 1. Analytical results, above detection limits, for CLTM sampling and regulatory limits (continued)

	ARSENIC (TCLP)	BARIUM (TCLP)	CADMIUM (TCLP)	LEAD (TCLP)	SILVER (TCLP)
	mg/l	mg/l	mg/l	mg/l	mg/l
BIN I.D.					
B-1032	LTD	LTD	LTD	0.43	LTD
B-1034	LTD	0.5	LTD	1.7	LTD
B-1036	LTD	LTD	LTD	1.3	LTD
B-1038	LTD	0.66	LTD	0.49	LTD
B-1040	LTD	0.76	LTD	0.34	0.05
B-1041	LTD	0.6	LTD	0.21	LTD
B-1042	LTD	0.72	LTD	0.94	LTD
B-1046	LTD	0.66	LTD	LTD	LTD
B-1051	LTD	0.73	LTD	2.1	LTD
B-1056	LTD	0.85	LTD	6.7	LTD
B-1063	LTD	LTD	LTD	0.48	LTD
B-1064	LTD	0.26	LTD	0.3	LTD
B-1065	LTD	0.26	LTD	10	LTD
B-1066	LTD	0.56	LTD	0.44	LTD
B-1067	LTD	0.56	LTD	1	LTD
B-1068	0.02	0.62	LTD	52	LTD
B-1069	LTD	0.31	LTD	0.77	LTD
B-1070	LTD	0.6	LTD	1.2	LTD
B-1071	LTD	0.23	LTD	LTD	LTD
B-1072	LTD	0.52	LTD	0.26	LTD
B-1073	LTD	0.59	LTD	2.1	LTD
B-1074	LTD	0.49	LTD	LTD	LTD
B-1075	LTD	0.46	LTD	LTD	LTD
B-1076	LTD	0.64	LTD	11	LTD
B-1077	LTD	0.53	LTD	LTD	LTD

Table 1. Analytical results, above detection limits, for CLTM sampling and regulatory limits (continued)					
	ARSENIC (TCLP)	BARIUM (TCLP)	CADMIUM (TCLP)	LEAD (TCLP)	SILVER (TCLP)
	mg/l	mg/l	mg/l	mg/l	mg/l
BIN I.D.					
B-1078	LTD	LTD	0.06	1.8	LTD
B-1079	LTD	0.67	LTD	0.42	LTD
B-1080	LTD	0.63	LTD	LTD	LTD
B-1081	LTD	0.69	LTD	LTD	LTD
B-1082	LTD	0.68	LTD	0.41	LTD
B-1083	LTD	0.65	LTD	LTD	LTD
B-1084	LTD	0.26	LTD	1.3	LTD
B-1085	LTD	0.59	LTD	2.9	LTD
B-1086	LTD	0.58	LTD	3.5	LTD
B-1087	LTD	0.74	LTD	2.7	LTD
B-1088	LTD	0.41	LTD	1.8	LTD
B-1089	LTD	0.53	LTD	0.35	LTD
B-1090	LTD	0.72	LTD	LTD	LTD

NOTES: 1) ANALYTICAL DETECTION LIMITS-APPENDIX F
2) RCRA REGULATORY LIMITS-APPENDIX B
LTD = LESS THAN ANALYTICAL DETECTION LIMITS
SHADING = VALUE ABOVE REGULATORY LIMIT

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the analytical results, seven bins (B-628, B-641, B-868, B-1056, B-1065, B-1068 and B-1076) contain lead exhibiting the characteristic of toxicity in accordance with RCRA Regulation 261.24 (Appendix B). ASI recommends that the contents of these seven bins be disposed of as a RCRA Hazardous Waste. ASI recommends that the remaining 65 bins' contents be taken to the WSMR Sanitary Landfill and be beneficially reused as cover material.

APPENDIX A

INITIAL WSMR SAMPLING RESULTS

STEWS-MTD-AA (70)

MEMORANDUM FOR ES-E, ATTN: Mr. Magallanes

SUBJECT: Soil Analysis

1. Responding to your request, White Sands Missile Range (WSMR) Test Support Division analyzed three soil samples in accordance with the U.S. Environmental Protection Agency (USEPA) Test Method 1311: Toxicity Characteristics Leaching Procedure (TCLP), three soil samples in accordance with USEPA Test Method 6010: Inductively Coupled Plasma Atomic Emission Spectroscopy, and two soils samples for the presence of Halogenated Organics. These analyses were performed to ascertain the presence of hazardous constituents. The samples were collected and delivered to the Chemistry Laboratory by Environmental Services.

2. Sample identification and specific analysis criteria are listed in enclosure 1. The results are listed in enclosures 2-18.

3. All metals analyzed for, with the exception of Lead, are below the TCLP regulatory levels at which waste is considered hazardous. Chemical Log Number 478 is above the listed TCLP regulatory level of 5 milligrams per Liter (mg/L) for Lead. The Lead concentration was 37.3 mg/L. Chemical Log Number's: 480, 482 below the TCLP regulatory level for Lead. A Total Lead level of 1.6 percent by weight was seen for Chemical Log number 478. No halogenated organics were detected for the samples analyzed.

4. Point of contact is Mr. Milton Carter, 678-4733.

18 Encls

ANDRUS GARAY
Chief, Applied Envr Test Branch

SAMPLE IDENTIFICATION

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	ANALYTICAL METHODOLOGY
478	SOIL-COMM I, 9 AUG	TEST METHOD 1311
479	SOIL-COMM II, 9 AUG	TEST METHOD 6010
480	SOIL-COMM III, 9 AUG	TEST METHOD 1311
481	SOIL-COMM IV, 9 AUG	TEST METHOD 6010
482	SOIL-COMM V, 9 AUG	TEST METHOD 1311
483	SOIL-COMM VI, 9 AUG	TEST METHOD 6010
484	SOIL-COMM VII, 9 AUG	HALOGENATED ORGANICS
485	SOIL-COMM VIII, 9 AUG	HALOGENATED ORGANICS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

ARSENIC

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<2
480	SOIL - COMM III	<2
482	SOIL - COMM V	<2

** METHOD DETECTION LIMIT = 2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

BARIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<5
480	SOIL - COMM III	<5
482	SOIL - COMM V	<5

** METHOD DETECTION LIMIT = 5 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

CADMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<1
480	SOIL - COMM III	<1
482	SOIL - COMM V	<1

** METHOD DETECTION LIMIT = 1 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

CHROMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<2
480	SOIL - COMM III	<2
482	SOIL - COMM V	<2

** METHOD DETECTION LIMIT = 2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

LEAD

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	37
480	SOIL - COMM III	<2
482	SOIL - COMM V	2.4

** METHOD DETECTION LIMIT = 2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

MERCURY

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<0.2
480	SOIL - COMM III	<0.2
482	SOIL - COMM V	<0.2

** METHOD DETECTION LIMIT = 0.2 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

SELENIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<1
480	SOIL - COMM III	<1
482	SOIL - COMM V	<1

** METHOD DETECTION LIMIT = 1 mg/L

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

SILVER

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Liter
478	SOIL - COMM I	<2
480	SOIL - COMM III	<2
482	SOIL - COMM V	<2

** METHOD DETECTION LIMIT = 2 mg/L

TOTAL ARSENIC

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<2	---
481	SOIL - COMM IV	<2	---
483	SOIL - COMM VI	<2	---

** METHOD DETECTION LIMIT = 2 mg/kg

TOTAL BARIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	131	0.013
481	SOIL - COMM IV	65	0.007
483	SOIL - COMM VI	42	0.004

** METHOD DETECTION LIMIT = 5 mg/kg

TOTAL CADMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<1	---
481	SOIL - COMM IV	<1	---
483	SOIL - COMM VI	<1	---

** METHOD DETECTION LIMIT = 1 mg/kg

TOTAL CHROMIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<2	---
481	SOIL - COMM IV	<2	---
483	SOIL - COMM VI	5.7	0.0006

** METHOD DETECTION LIMIT = 2 mg/kg

TOTAL LEAD

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	16200	1.6
481	SOIL - COMM IV	340	0.03
483	SOIL - COMM VI	61	0.006

** METHOD DETECTION LIMIT = 2 mg/kg

TOTAL MERCURY

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<0.2	---
481	SOIL - COMM IV	<0.2	---
483	SOIL - COMM VI	<0.2	---

** METHOD DETECTION LIMIT = 0.2 mg/kg

TOTAL SELENIUM

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<1	---
481	SOIL - COMM IV	<1	---
483	SOIL - COMM VI	<1	---

** METHOD DETECTION LIMIT = 1 mg/kg

TOTAL SILVER

CHEMICAL LOG NUMBER	SAMPLE IDENTIFICATION	METAL CONCENTRATION, Milligrams per Kilograms	WEIGHT PERCENT (%)
479	SOIL - COMM II	<2	---
481	SOIL - COMM IV	<2	---
483	SOIL - COMM VI	<2	---

** METHOD DETECTION LIMIT = 2 mg/kg

HALOGENATED ORGANICS

CHEMICAL LOG NUMBER	CONCENTRATION, Parts per Million				
	TFF	DCM	TCA	TCE	PCE
484	<0.05	<0.10	<0.002	<0.004	<0.002
485	<0.05	<0.10	<0.002	<0.004	<0.002
DETECTION LIMIT	0.05	0.10	0.002	0.004	0.002

**TFF = Freon 113
DCM = Methylene Chloride
TCA = 1,1,1 - Trichloroethane
TCE = Trichloroethylene
PCE = Perchloroethylene

APPENDIX B

RCRA TCLP LIMITS

RCRA 126, 242, 268, 301

§ 261.24 Toxicity characteristic.

(a) A solid waste exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure, test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, as incorporated by reference in § 260.11 of this chapter, the extract from a representative sample of the waste contains any of the contaminants listed in table 1 at the concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this section.

(b) A solid waste that exhibits the characteristic of toxicity has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous.

TABLE 1.—MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC

EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/L)	EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/L)	
D004	Arsenic	7440-38-2	5.0	D032	Hexachlorobenzene	118-74-1	[3]0.13	
D005	Barium	7440-39-3	100.0	D033	Hexachlorobutadiene	87-68-3	0.5	
D018	Benzene	71-43-2	0.5	D034	Hexachloroethane	67-72-1	3.0	
D006	Cadmium	7440-43-9	1.0	D008	Lead	7439-92-1	5.0	RCRA
D019	Carbon tetrachloride	56-23-5	0.5	D013	Lindane	58-89-9	0.4	
D020	Chlordane	57-74-9	0.03	D009	Mercury	7439-97-6	0.2	RCRA
D021	Chlorobenzene	108-90-7	100.0	D014	Methoxychlor	72-43-5	10.0	
D022	Chloroform	67-66-3	6.0	D035	Methyl ethyl ketone	78-93-3	200.0	
D007	Chromium	7440-47-3	5.0	D036	Nitrobenzene	98-95-3	2.0	
D023	o-Cresol	95-48-7	[4]200.0	D037	Pentrachlorophenol	87-86-5	100.0	
D024	m-Cresol	108-39-4	[4]200.0	D038	Pyridine	110-86-1	[3]5.0	
D025	p-Cresol	106-44-5	[4]200.0	D010	Selenium	7782-49-2	1.0	
D026	Cresol		[4]200.0	D011	Silver	7440-22-4	5.0	
D016	2,4-D	94-75-7	10.0	D039	Tetrachloroethylene	127-18-4	0.7	
D027	1,4-Dichlorobenzene	106-46-7	7.5	D015	Toxaphene	8001-35-2	0.5	
D028	1,2-Dichloroethane	107-06-2	0.5	D040	Trichloroethylene	79-01-6	0.5	
D029	1,1-Dichloroethylene	75-35-4	0.7	D041	2,4,5-Trichlorophenol	95-95-4	400.0	
D030	2,4-Dinitrotoluene	121-14-2	[3]0.13	D042	2,4,6-Trichlorophenol	88-06-2	2.0	
D012	Endrin	72-20-8	0.02	D017	2,4,5-TP (Silvex)	93-72-1	1.0	
D031	Heptachlor (and its epoxide)	76-44-8	0.008	D043	Vinyl chloride	75-01-4	0.2	

[1] Hazardous waste number.

[2] Chemical abstracts service number.

[3] Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

[4] If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

[55 FR 11862, Mar. 29, 1990, as amended at 55 FR 22684, June 1, 1990; 55 FR 26987, June 29, 1990; 58 FR 46049, Aug. 31, 1993]

[This space intentionally left blank.]

©1994 by Elsevier Science Inc.

APPENDIX C

EPA LETTER DATED 1/13/93

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

January 5, 1993

Certified Mail - return receipt requested

Brigadier General Richard B. Wharton
Commanding General
U. S. Army White Sands Missile Range
White Sands Missile Range, NM 88002-5000

Dear General Wharton:

On November 13, 1992, representatives from EPA Region 6, White Sands Missile Range, the Army Corps of Engineers, and the New Mexico Environment Department met in Dallas to discuss Installation Restoration Program environmental investigations and some related regulatory compliance issues. A great deal of progress has obviously been made in IRP site investigation at White Sands, and we applaud your success. We have three areas of concern, however, that I would like to bring to your attention.

Most importantly, a diesel leak from an underground tank and piping system at the HELSTF area in the mid-1980s remains incompletely investigated and unremediated. This situation persists more than a year after the signing of an agreement between White Sands Missile Range, NMED, and EPA providing for an investigation schedule. Progress has slipped behind the agreed schedule; we understand that Lockheed Engineering and Sciences Company, which had performed what work was done at the site, is no longer involved; and to our knowledge no other contractor has been employed. This situation is a clear violation of the New Mexico Underground Storage Tank Regulations and Water Quality Control Commission Regulations. We will have no recourse except formal dispute resolution under the Defense-State Memorandum of Agreement. and possible enforcement action, if the inattention to this problem cannot be corrected immediately.

Next in importance, an ongoing program of periodic ground water quality monitoring must be implemented at several of the sites investigated under the Installation Restoration Program. Even if this regular monitoring is not explicitly required by EPA as a condition of White Sands' RCRA hazardous waste premit, it is required under New Mexico Water Quality Control Commission regulations. White Sands Missile Range needs either to submit a written proposal for ground water monitoring, or to work out the details of such a program in meetings with NMED staff.

The third point concerns various landfills and dump sites. I understand that some confusion may exist regarding the regulatory

status of landfills and dumps. Any landfill still in use, or that received any use after May 14, 1989, is subject to the New Mexico Solid Waste Mangement Regulations. A Notice of Intent must be on file with the NMED Solid Waste Bureau for each such landfill, active or inactive. In addition, any landfill or dump site on White Sands' property is a Solid Waste Management Unit ("SWMU") as defined by RCRA and must be reported to EPA as required by White Sands' hazardous waste premit. Most, perhaps all, such sites will already be on the list of SWMUs to be investigated. However, if any dumps or landfills are discovered that are not on the existing list, they must be added and investigated. Work required under the terms of the hazardous waste permit can normally be dovetailed with that required under the Solid Waste Management Regulations to avoid duplication of effort.

Your prompt response to our concerns will make a great contribution to the generally cordial and productive working relationship we enjoy with White Sands Missile Range. The HELSTF diesel problem, in particular, needs immediate attention. We must insist on receiving a written, enforceable investigation and remediation schedule within 30 days of your receipt of this letter; and the schedule must include a resumption of active work at the site on or before March 1, 1993. A response to our other concerns by March 1 would be adequate. The appropriate NMED contact person for these and all IRP affairs is David Morgan, in the Ground Water Protection and Remediation Bureau, who can be reached at the address on the previous page or at 827-2754. Thank you for your attention to these matters.

Sincerely,

Ron Curry
Deputy Secretary

c: James Harris, EPA Region 6
Hector Magallanes, WSMR Environmental Office
Kathleen Sisneros, NMED Water and Waste Management Division
David Vackar, NMED Environmental Protection Division
James Bearzi, NMED USTB
Steven Cary, NMED GWPRB
Benito Garcia, NMED HRMB
Gerald Silva, NMED SWB

APPENDIX D

HEALTH AND SAFETY PLAN 7/14/94

APPENDIX 1

PERSONAL CONTACT REPORTS WITH WSMR

ADVANCED SCIENCES, INC.

CONTACT REPORT

PROJECT TITLE	YOUR NAME	DATE OF CONTACT (mm-dd-yy)
Commissary SWMU	Fred T. Giblin	Sept. 1994

SUBJECT	TYPE OF CONTACT (check one)
Safety Harnesses / WSMR Procedure	☒ by phone ☐ in person

CONTACT(S) NAME	TITLE	ORGANIZATION	TELEPHONE
Bob (Robert) Peters	WSMR Safety Engineer		8-1211
Mike Milton	WSMR Safety Engineer		8-8234

DISCUSSION

Does WSMR require ASI employees to wear a safety harness when we are sampling from the top of bins. ASI is planning to employ the use of Aluminum ladders with plywood secured to ladder. The ladder will be used as a platform from which sampling can be conducted from. The height of the ladder platform will range from 4 to 5 feet. Per Mr. Mike Milton 14 Sept. 1994 as long as the sampling is a two man operation & the ladder is tied down and secure, a harness is not required when sampling the bins.

DISTRIBUTION: **white** – designated word processor **yellow** – project manager **pink** – retain for your records

Additional Distribution – photocopies sent to:

ADVANCED SCIENCES, INC.

CONTACT REPORT

PROJECT TITLE	YOUR NAME	DATE OF CONTACT (mm-dd-yy)
Commissary SWMU	Joel T. Giblin	Sept. 13th 1994
SUBJECT		TYPE OF CONTACT (check one)
Un-exploded Ordnance WSMR EOD		☒ by phone ☐ in person

CONTACT(S) NAME	TITLE	ORGANIZATION	TELEPHONE
Staff Sergeant Sumrall			678-2035

DISCUSSION

I asked if the Staff Sergeant Sumrall had been contacted to conduct an EOD survey of the old landfill. He stated to date (13 Sept. 1994) that the EOD had not been contacted or asked to look at the old commissary SWMU. He indicated that if we (ASI) had any reason to suspect an ordnance that we should call EOD at 8-2035 and that they would be right over to investigate the object.

DISTRIBUTION: white – designated word processor yellow – project manager pink – retain for your records

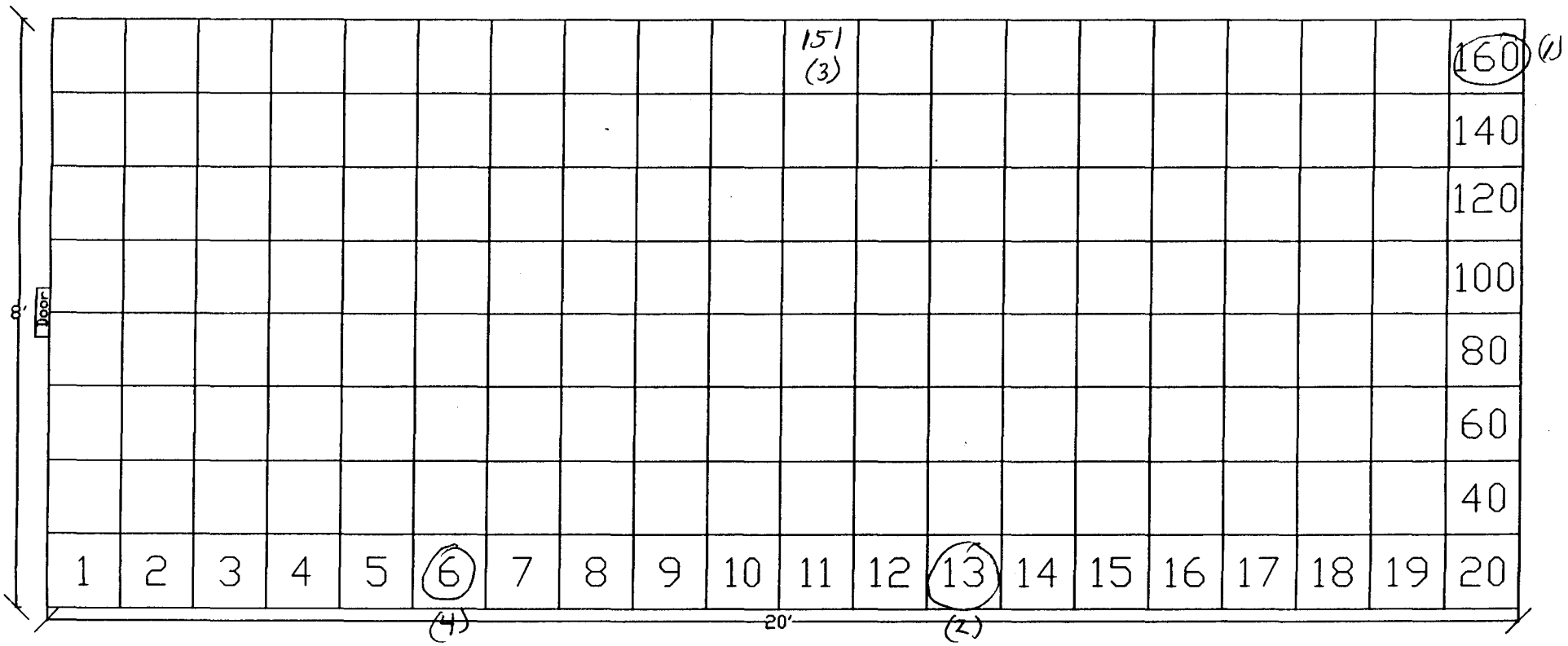
Additional Distribution – photocopies sent to:

APPENDIX E

SAMPLING LOCATION(S) LOGSHEETS

WSMR Commissary Landfill
Material Sampling

BIN No. B-50G Date 10/1/94

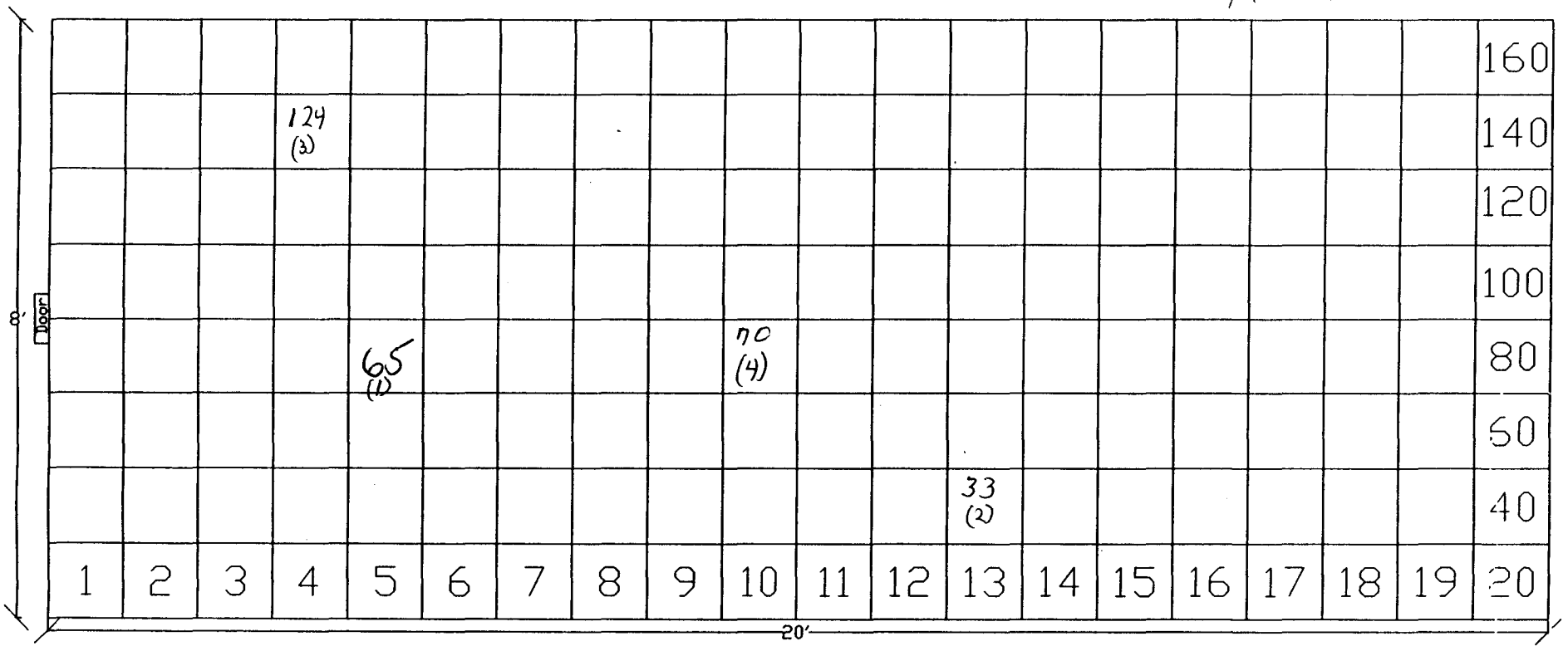


Sample Team _____

Notes #72 1030(5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-513 Date 9/30/94

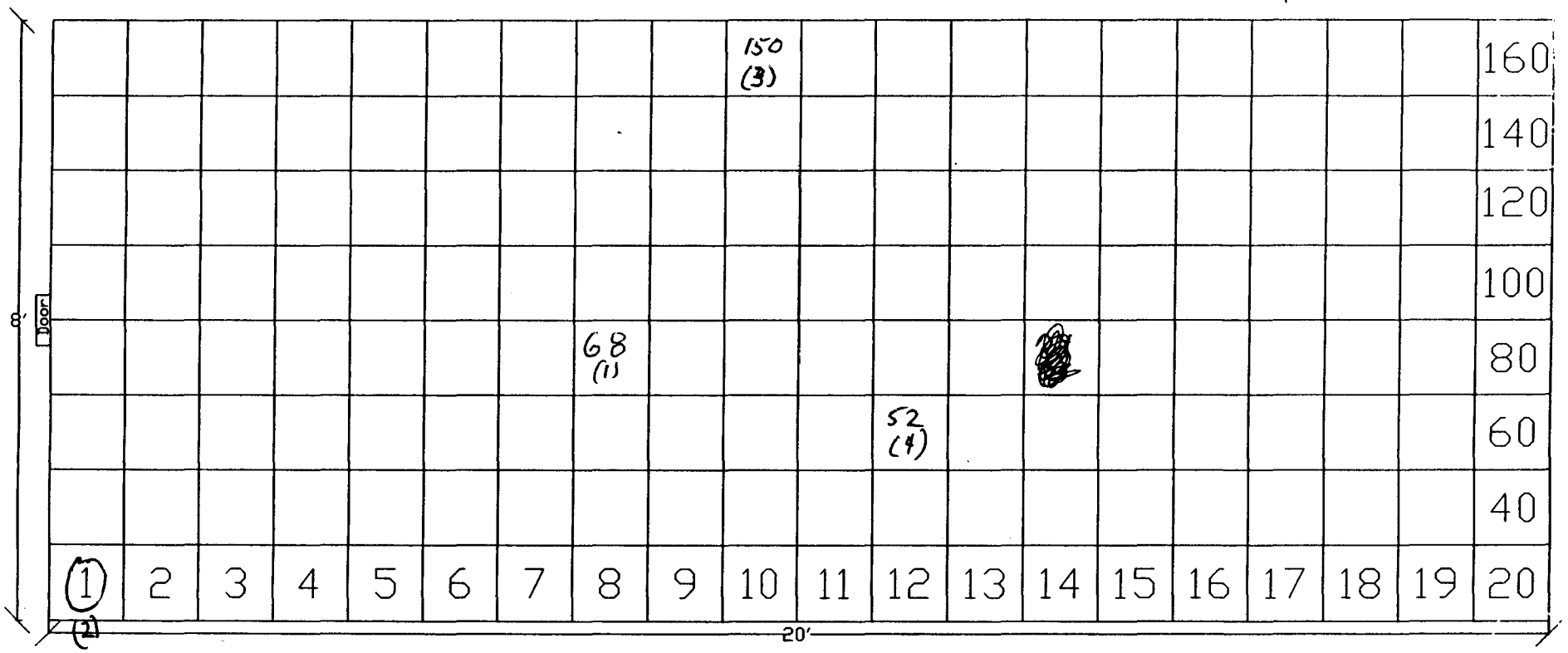


Sample Team _____

Notes #48 10:00 F

WSMR Commissary Landfill
Material Sampling

BIN No. B-528 Date 9/21/94

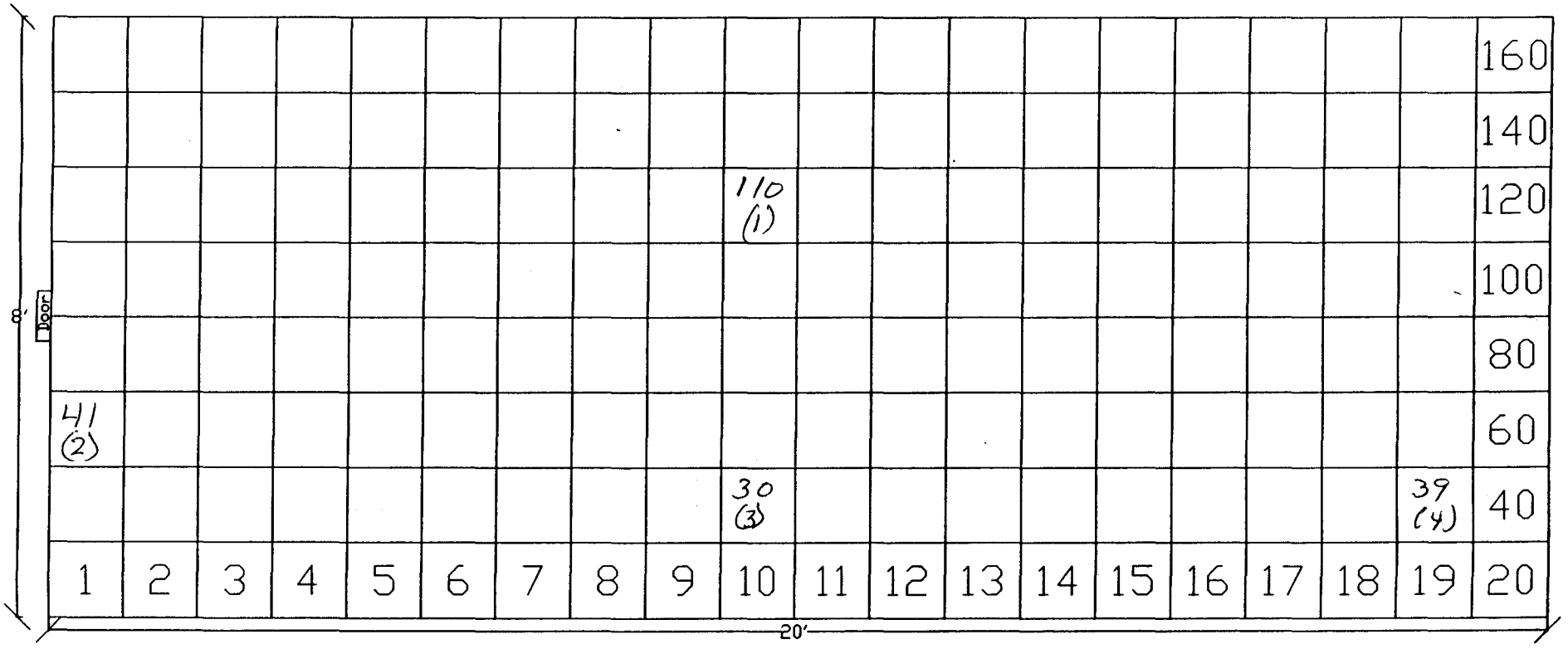


Sample Team G.I., G.L., I.G.

Notes 5th Day 4:00 P.M.

WSMR Commissary Landfill
Material Sampling

BIN No. B-561 Date 10/3/94

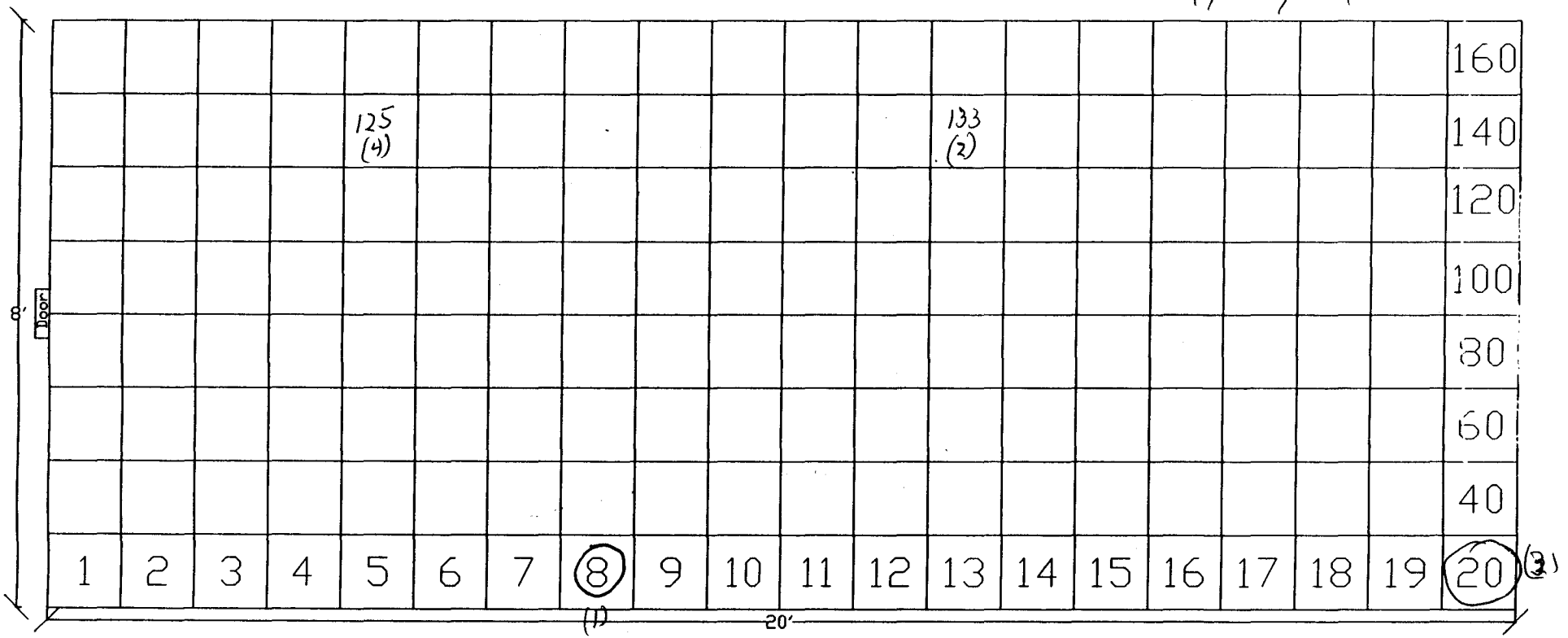


Sample Team _____

Notes #76 9,10 (F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-563 Date 9/23/94

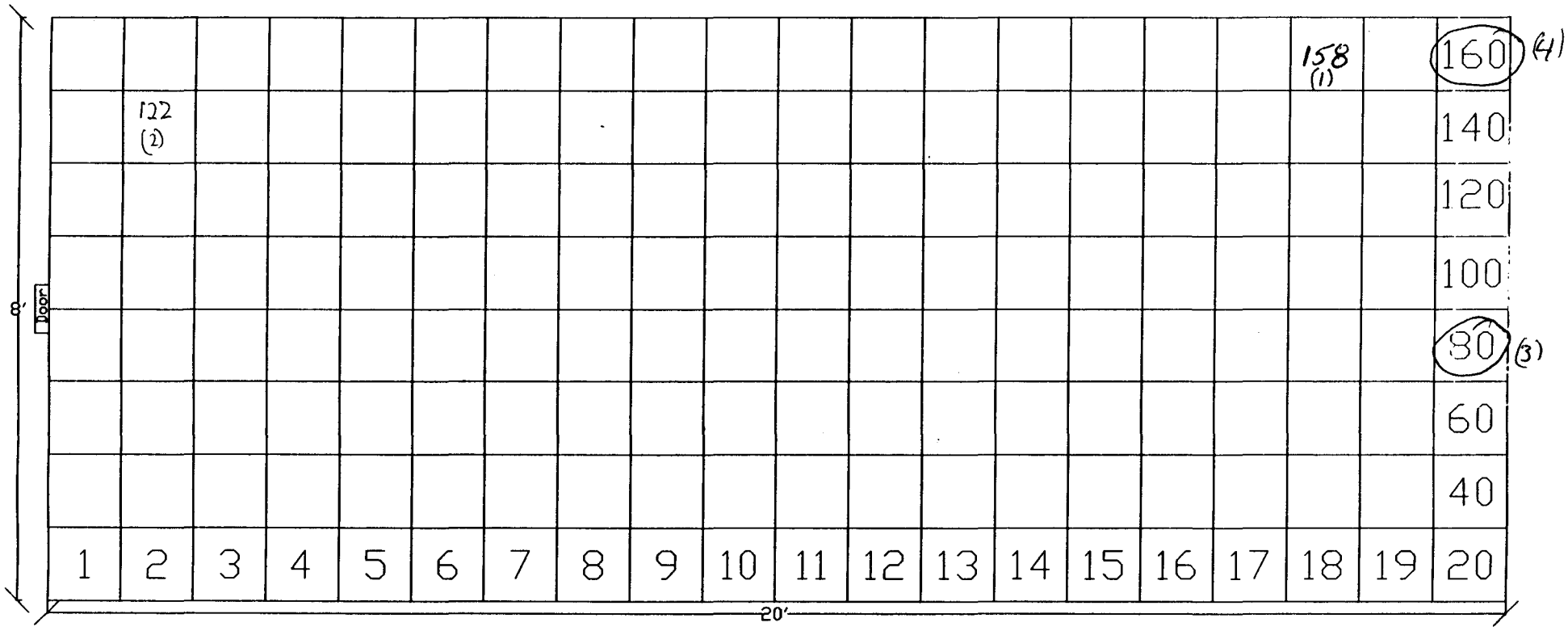


Sample Team _____

Notes #33 15:45 (P)

WSMR Commissary Landfill
Material Sampling

BIN No. B-589 Date 9/23/94

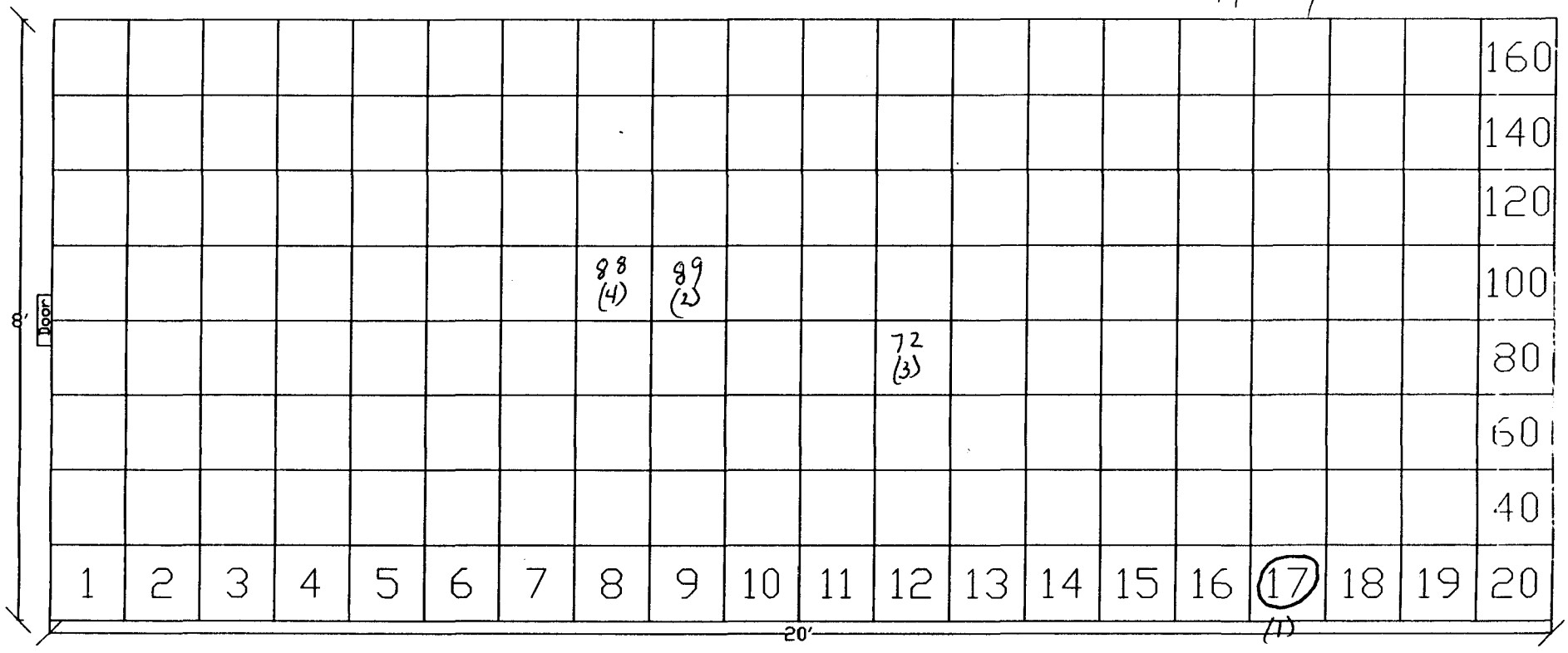


Sample Team

Notes ~~1330~~ 1410 1420

WSMR Commissary Landfill
Material Sampling

BIN No. B-628 Date 9/26/94

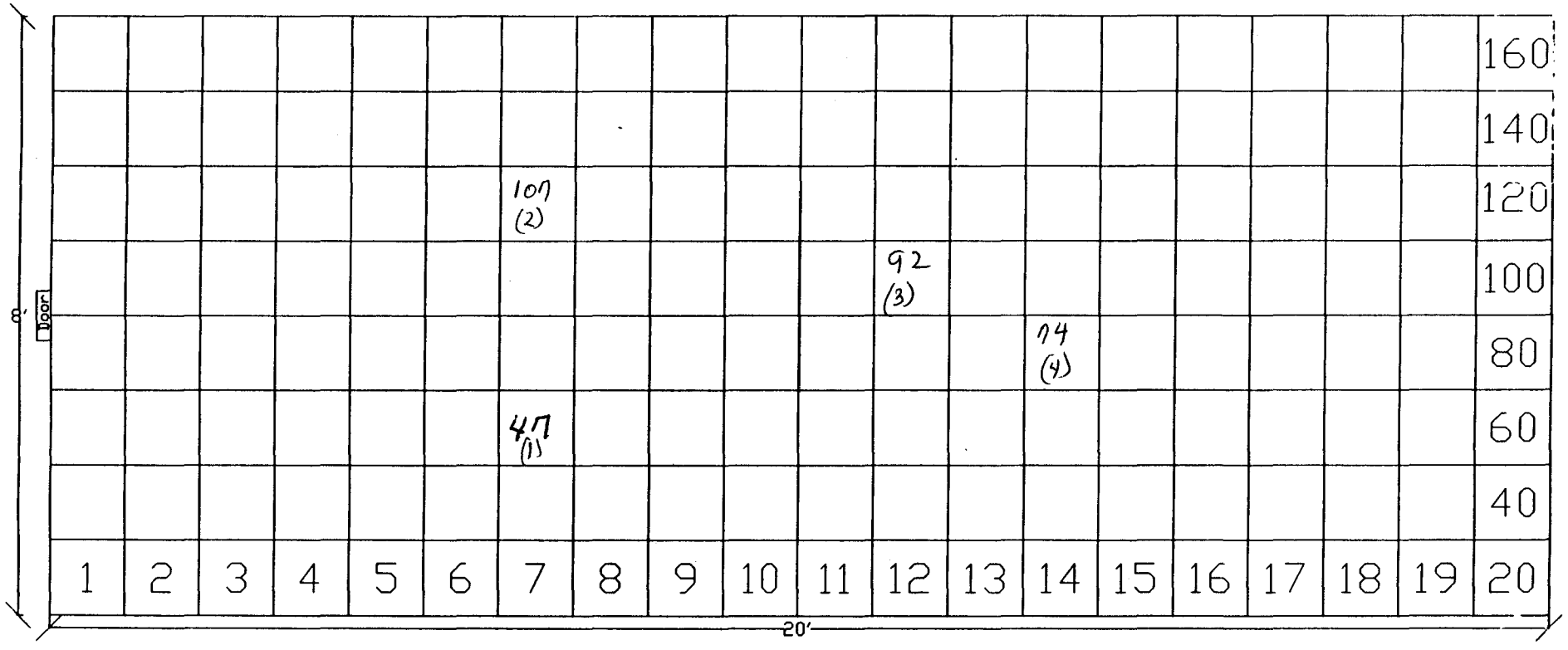


Sample Team

Notes #36 1420(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-641 Date 9/26/94

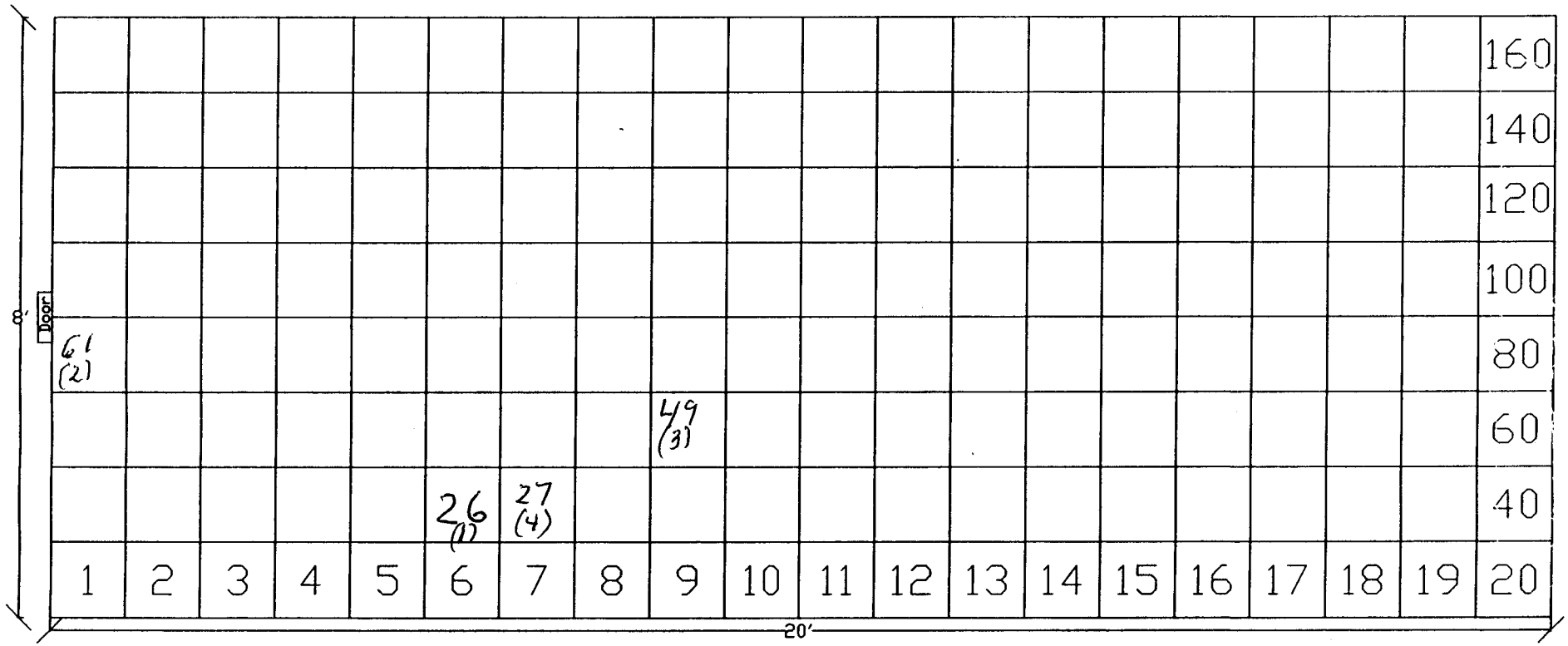


Sample Team _____

Notes #34 13:50 (S) 14:05

WSMR Commissary Landfill
Material Sampling

BIN No. B-655 Date 10/1/94



Sample Team

Notes #65 735(5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-675 Date 10/1/94

	142 (1)																			160
							128 (2)													140
																				120
													94 (4)							100
																				80
																				60
					26 (3)															40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

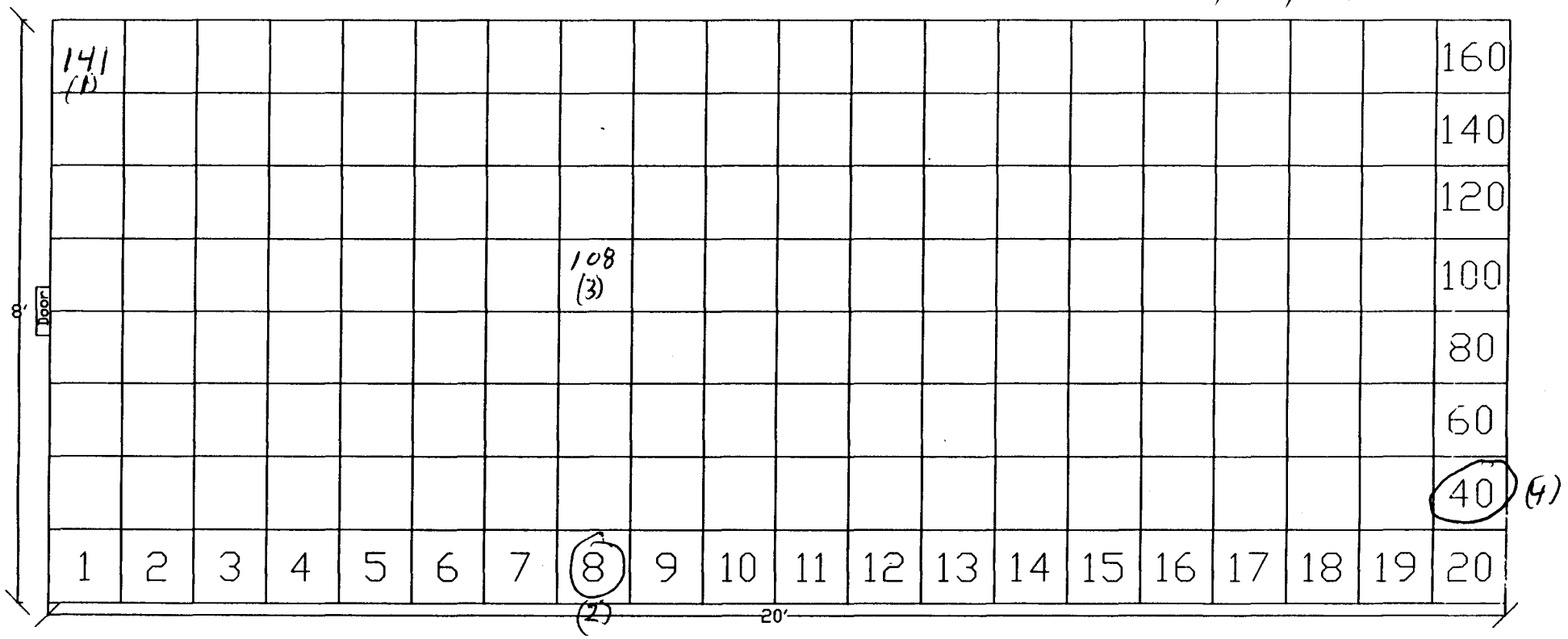
8' Door 20'

Sample Team

Notes #14 1040(g)

WSMR Commissary Landfill
Material Sampling

BIN No. B-685 Date 9/30/94

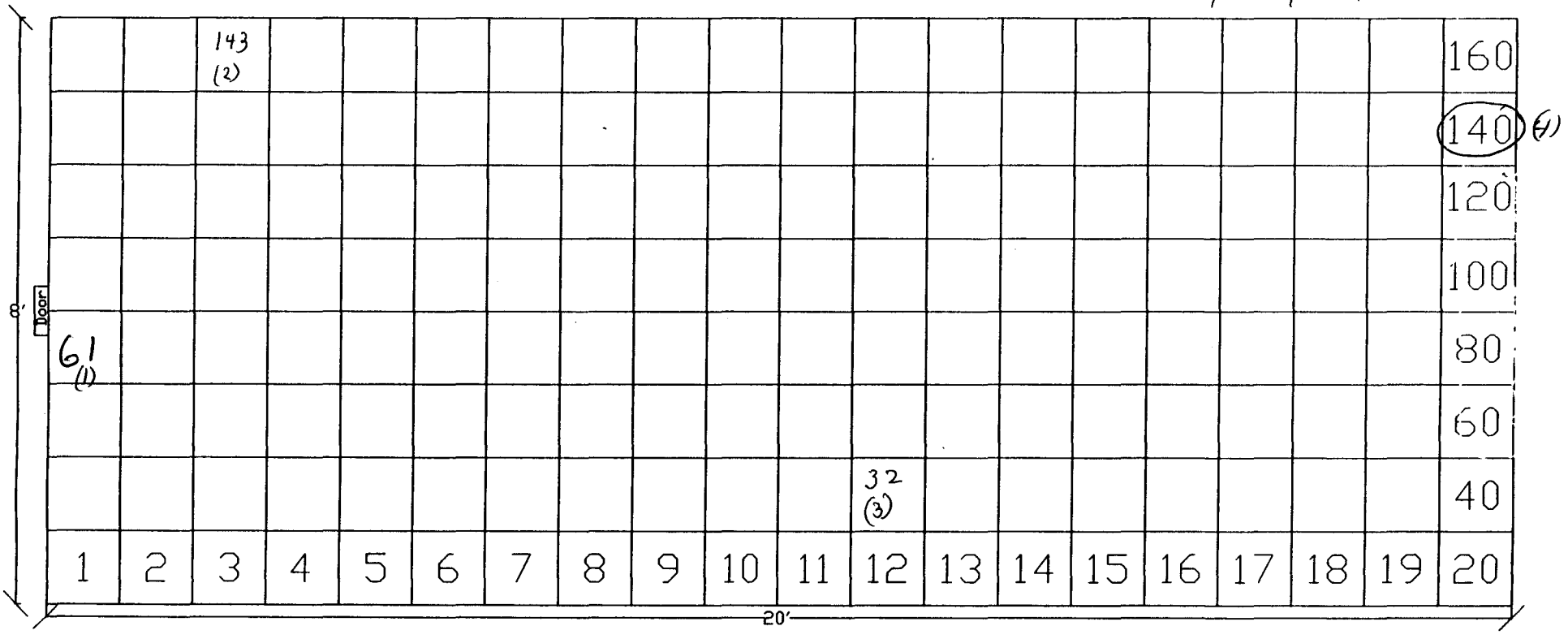


Sample Team _____

Notes #61 (F) 1515

WSMR Commissary Landfill
Material Sampling

BIN No. B-688 Date 9/28/94



Sample Team _____

Notes #46 (F) 1100

WSMR Commissary Landfill
Material Sampling

BIN No. B-692 Date 9/22/94

																				160
																				140
																				120
			84 (4)								92 (2)								99 (1)	100
																				80
																				60
															36 (3)					40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

8' Door

20'

Sample Team GJ, TG, GE

Notes #17 BIN (F)1500

WSMR Commissary Landfill
Material Sampling

BIN No. B-706 Date 9/22/94

																			160
							128 (2)												140
											112 (3)								120
																			100
																			80
																			60
											32 (4)			35 (1)					40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

8' Door 20'

Sample Team G.J, JE, J.G

Notes #16 Bow (5) 142.35 F1445

WSMR Commissary Landfill
Material Sampling

BIN No. B-713 Date 9/30/94

					146 (4)															160
																				140
																				120
														95 (2)						100
						67 (3)														80
																				60
		23 (1)																		40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

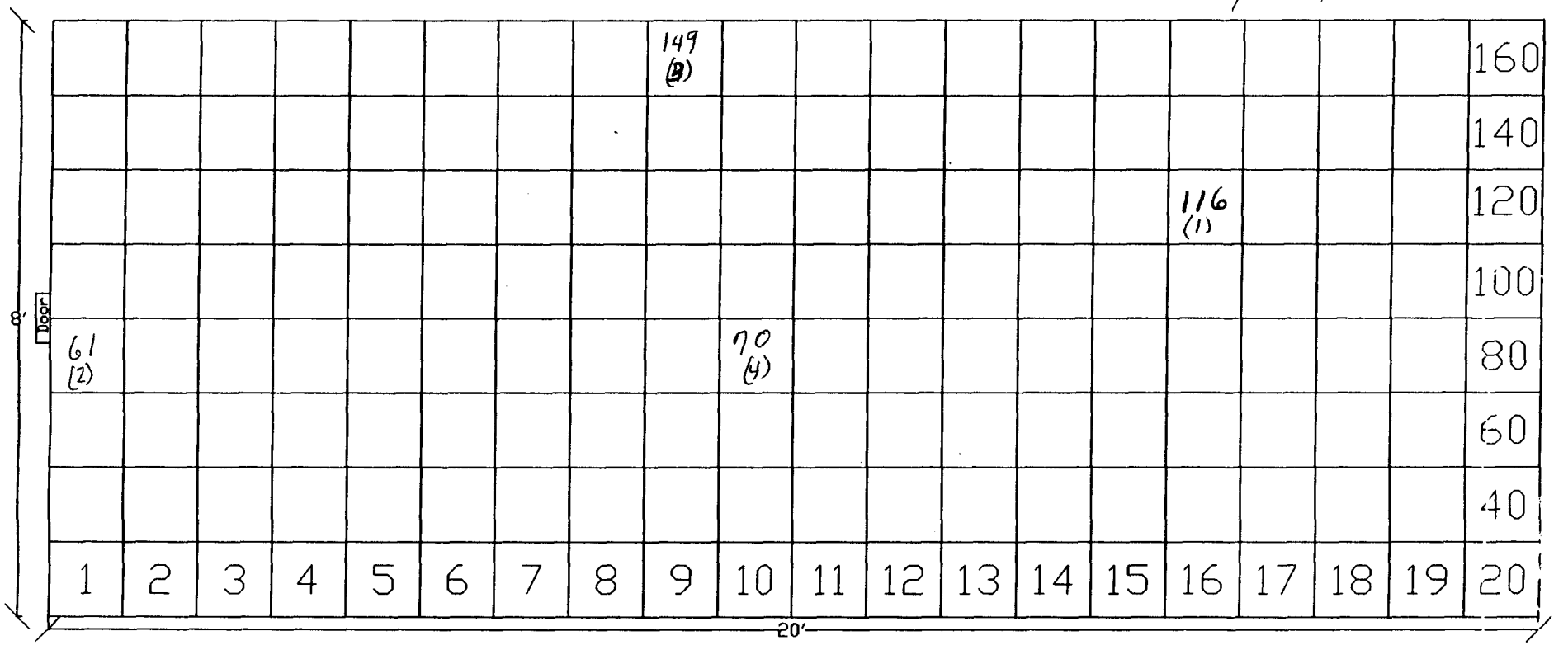
8' Door 20'

Sample Team _____

Notes #58 F1410

WSMR Commissary Landfill
Material Sampling

BIN No. B-755 Date 9/23/84

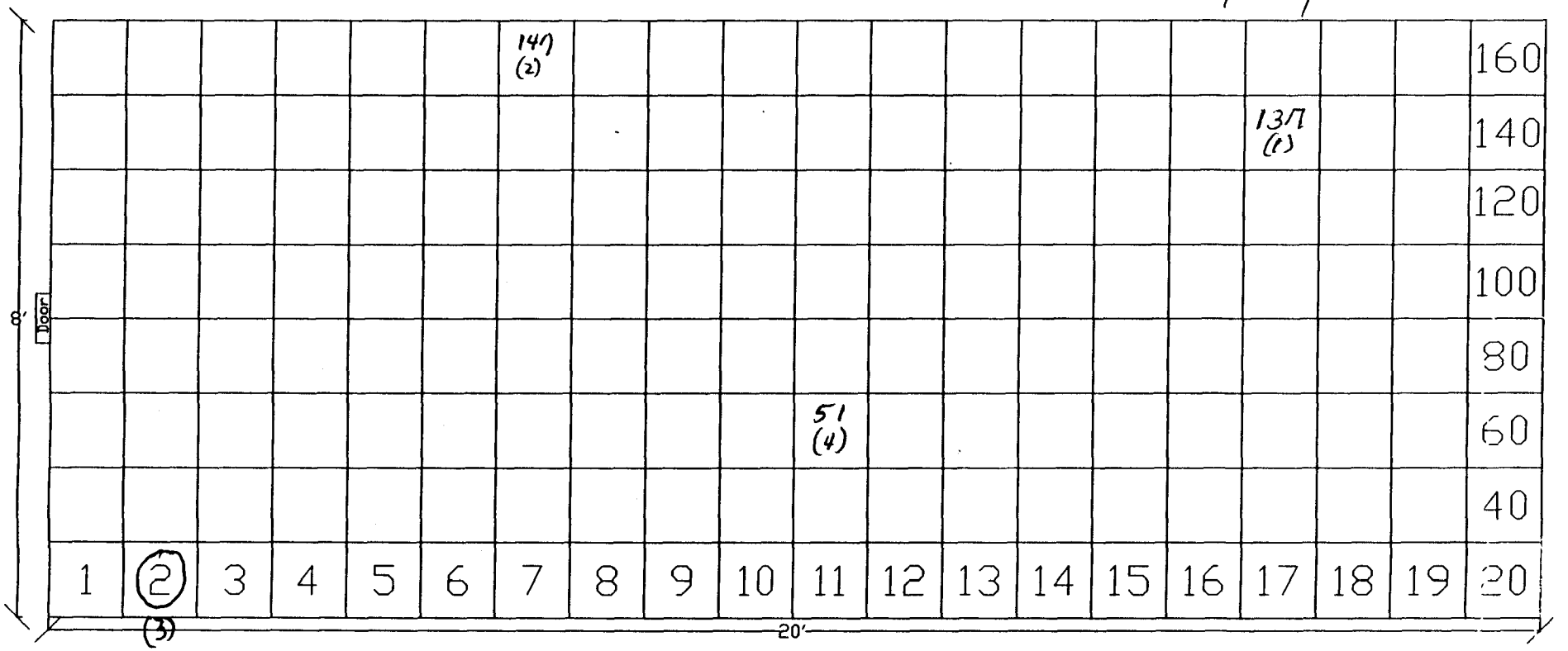


Sample Team _____

Notes #32 1530(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-064 Date 9/21/94

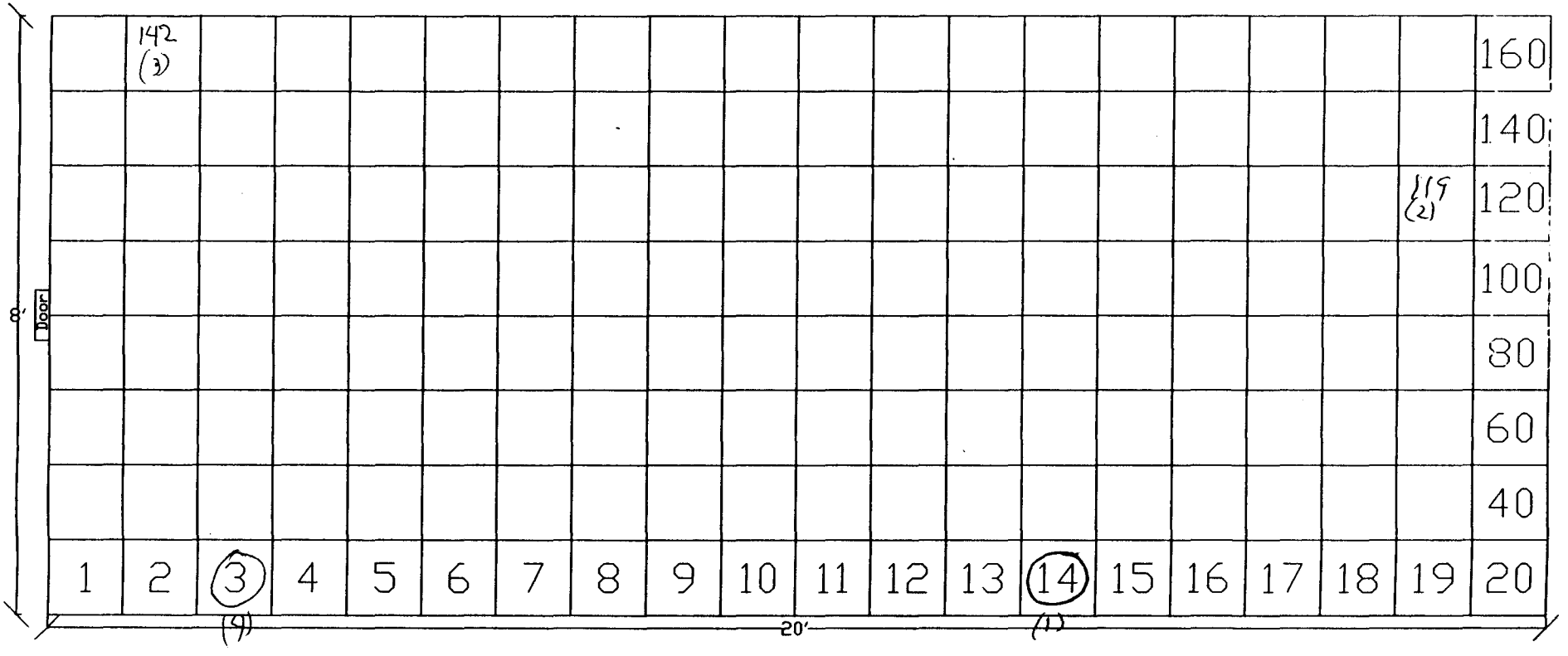


Sample Team GJ, GE, JG

Notes 6th BIN (5) 1650

WSMR Commissary Landfill
Material Sampling

BIN No. B-771 Date 9/22/94

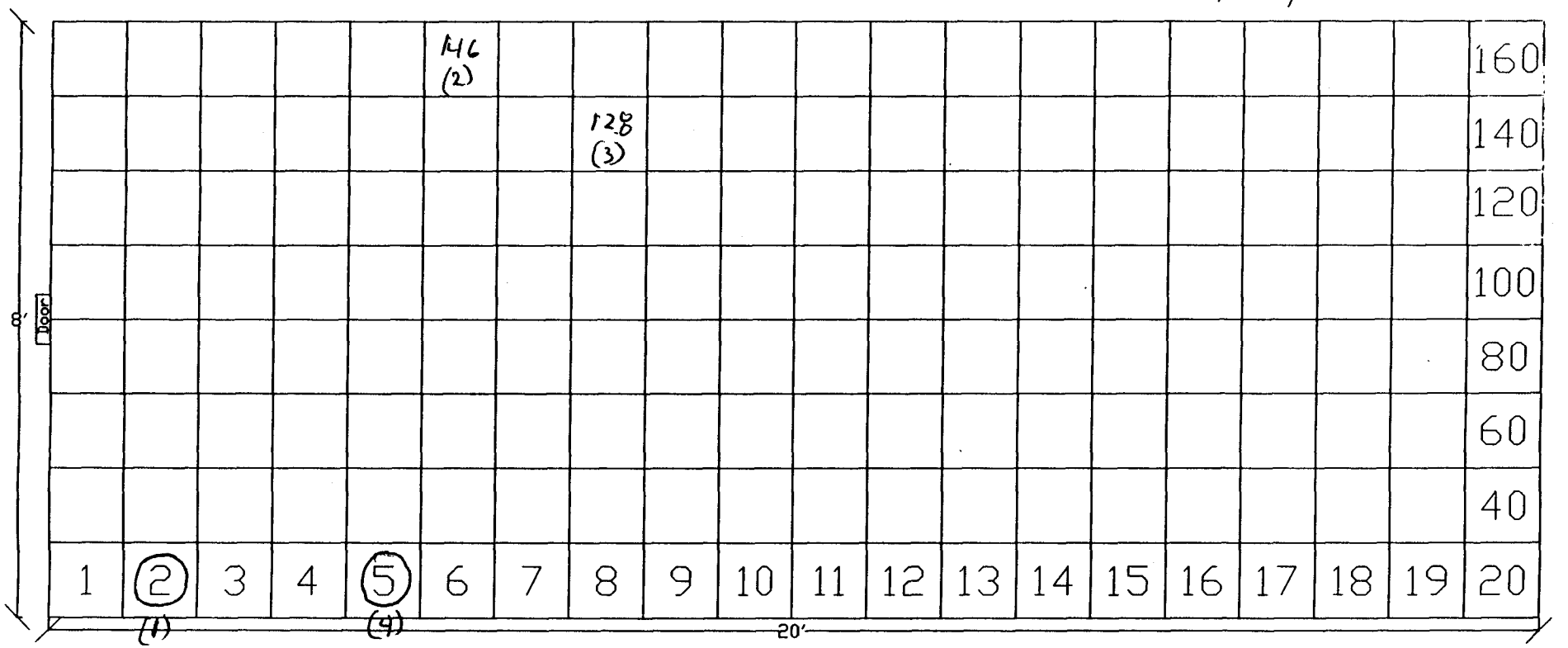


Sample Team GJ & E, TG.

Notes 14TH BIN Final B.O.40

WSMR Commissary Landfill
Material Sampling

BIN No. B-789 Date 9/22/94

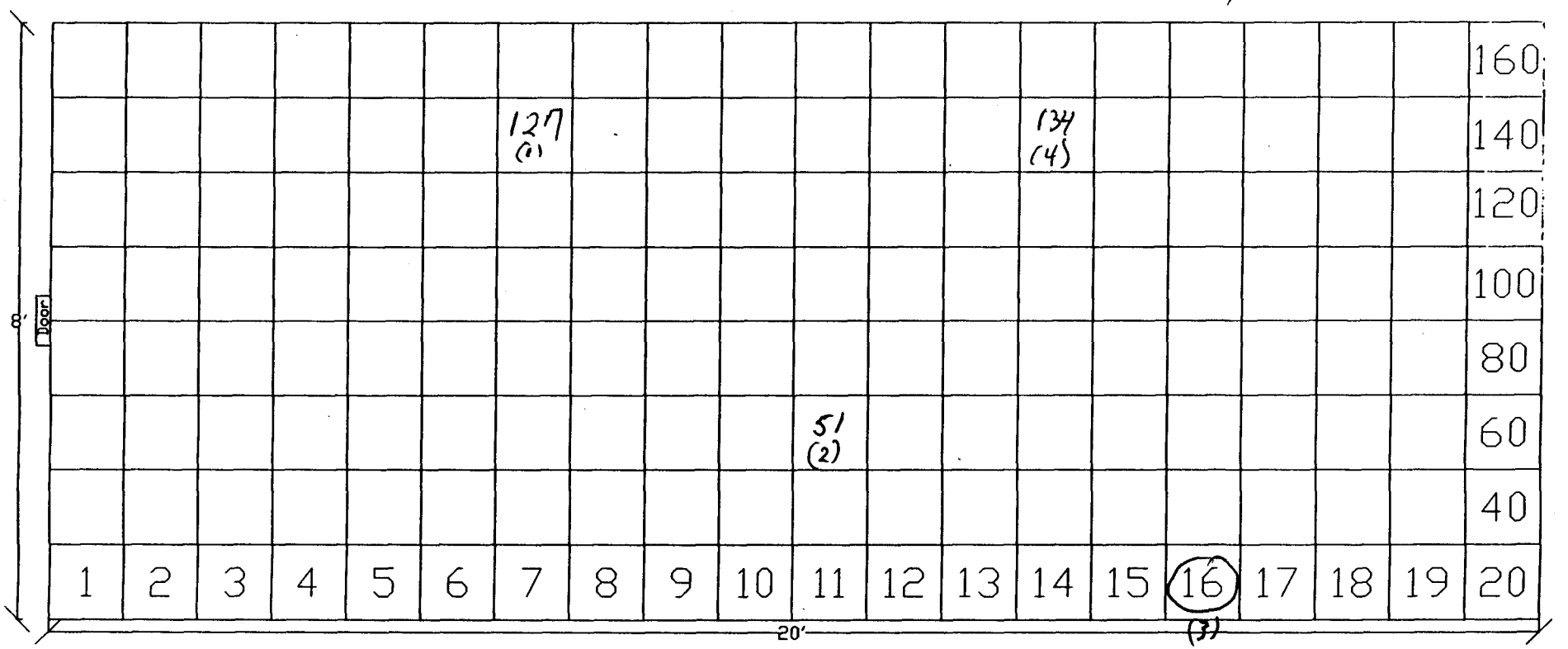


Sample Team GJ, GE, JG

Notes 8th BIN 9:30 A.M. 10:00 A.M

WSMR Commissary Landfill
Material Sampling

BIN No. B-797 Date 9/22/94



Sample Team GI, JG, GE

Notes 11th BIN 11:00

18" sample had to be moved to 56 to get sample more @ 16 or 36"

WSMR Commissary Landfill
Material Sampling

BIN No. B-805 Date 10/3/94

								149 (3)												160
																				140
																				120
																				100
										71 (4)		73 (1)								80
																				60
														35 (2)						40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

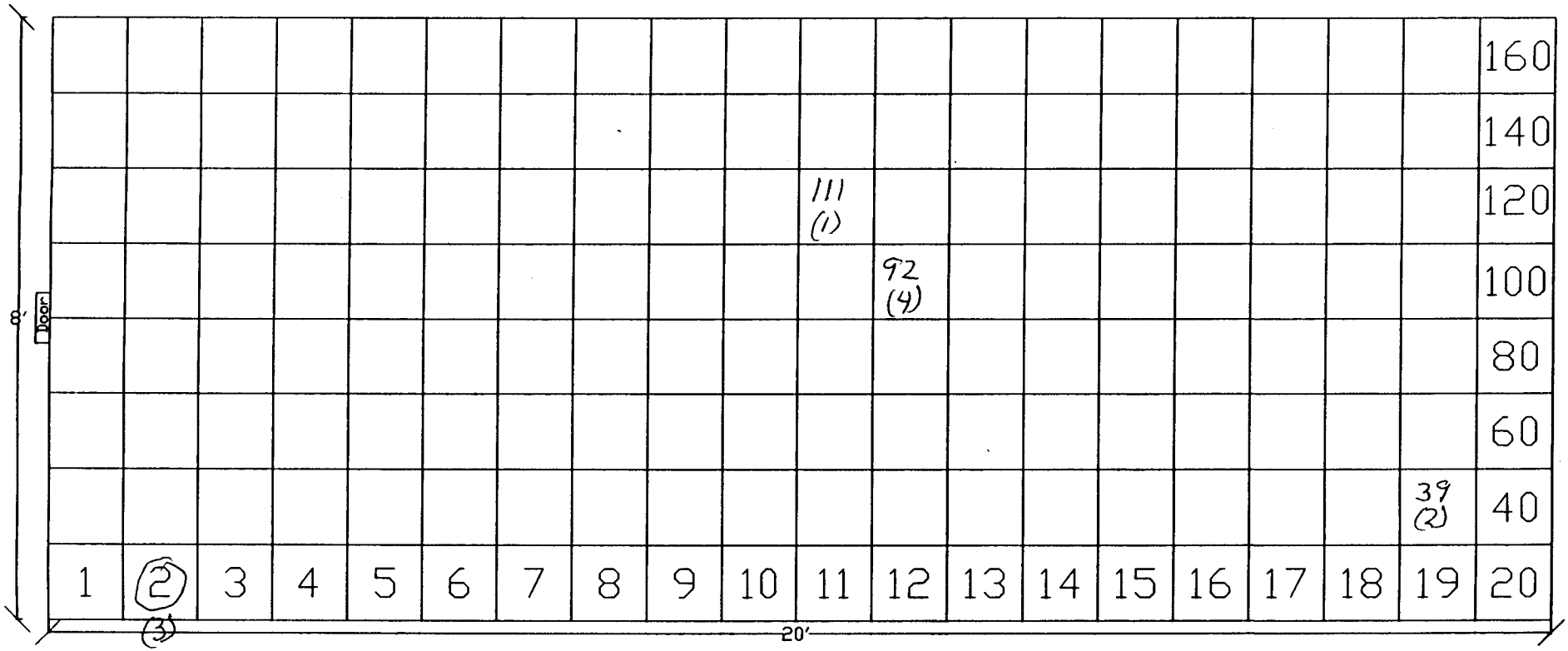
8' Door 20'

Sample Team

Notes #77 0920 (5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-810 Date 10/1/94

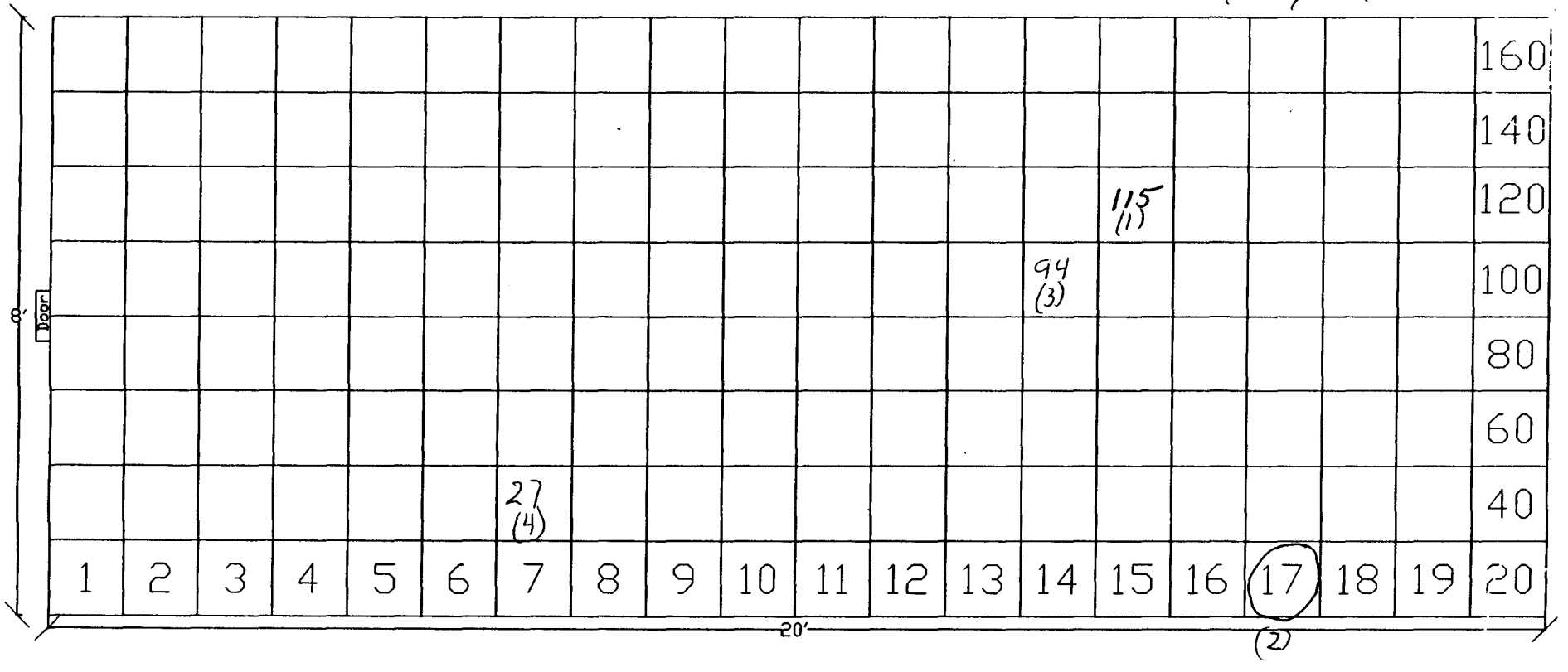


Sample Team _____

Notes #13 F 10:35

WSMR Commissary Landfill
Material Sampling

BIN No. B-812 Date 9/23/94

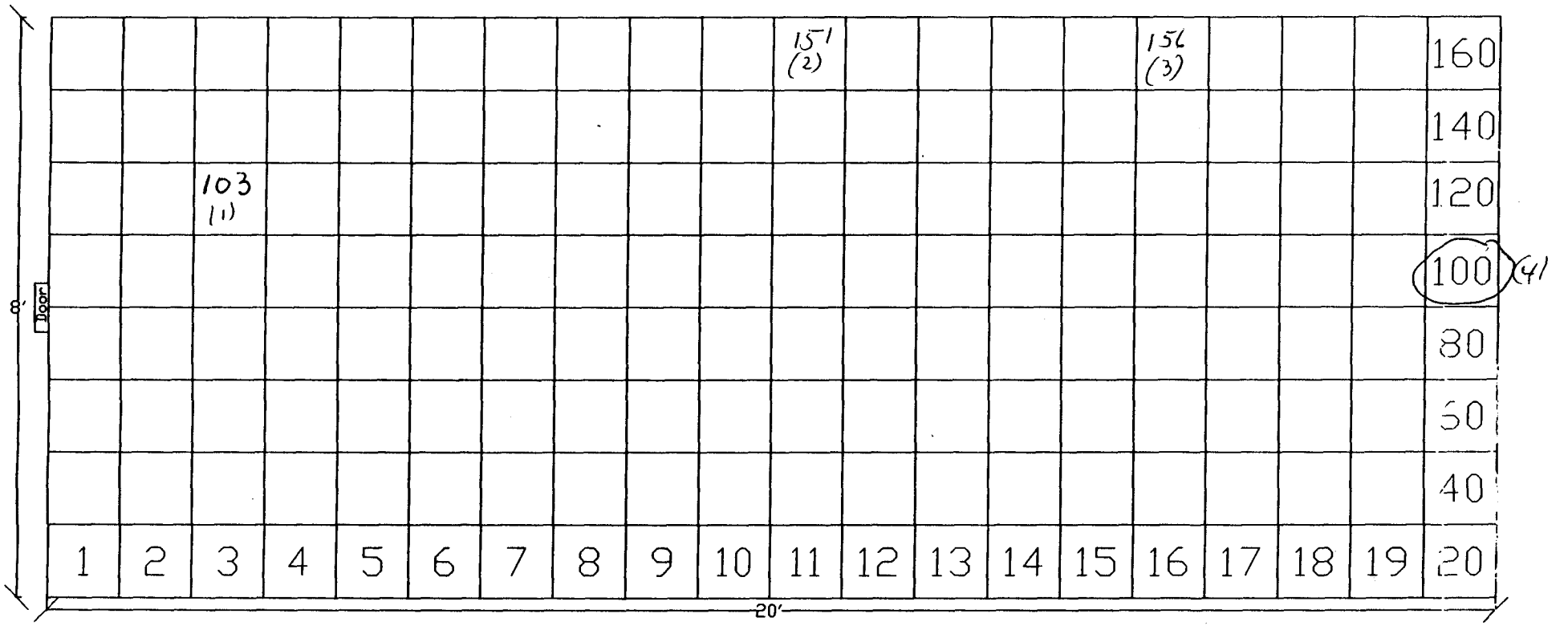


Sample Team _____

Notes #31 1505 1515

WSMR Commissary Landfill
Material Sampling

BIN No. B-828 Date 9/22/94

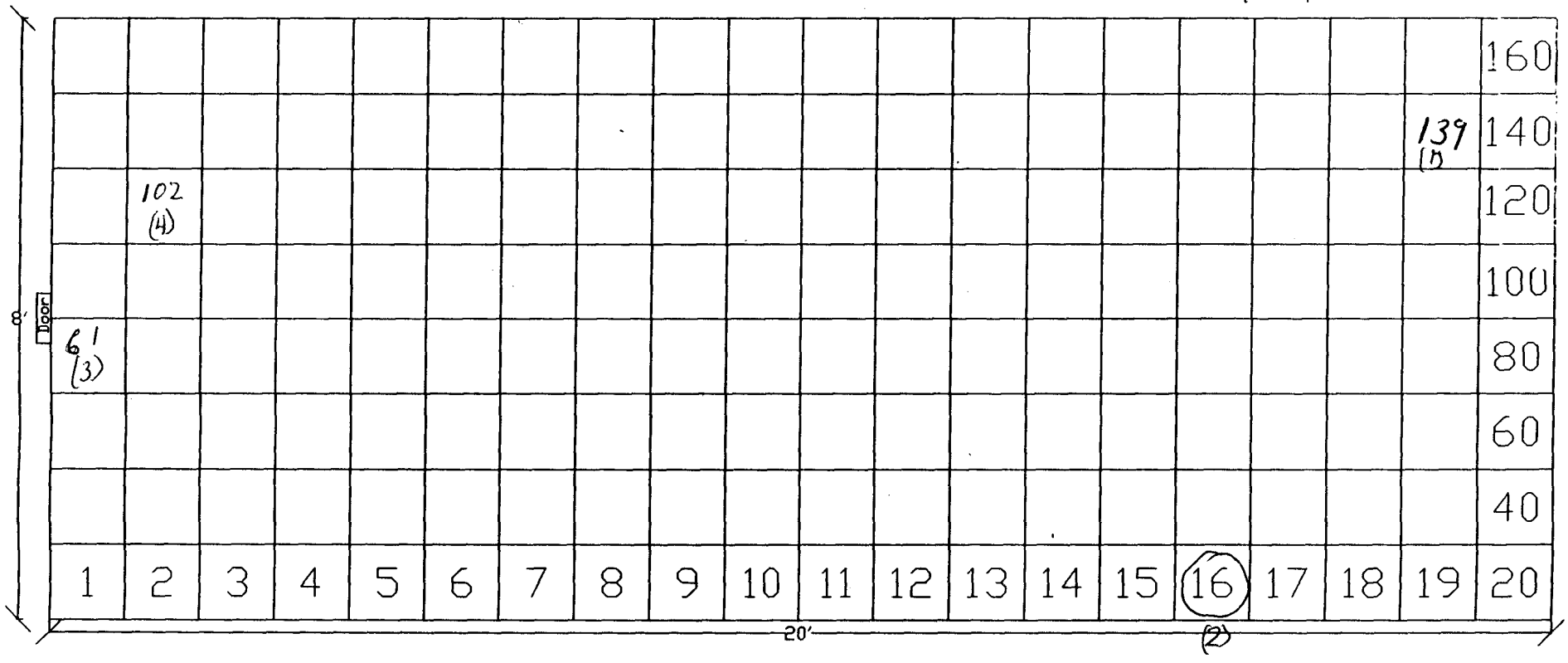


Sample Team GJ, JG, GE

Notes 13th Bin 12:50 13:10

WSMR Commissary Landfill
Material Sampling

BIN No. B-852 Date 9/26/94

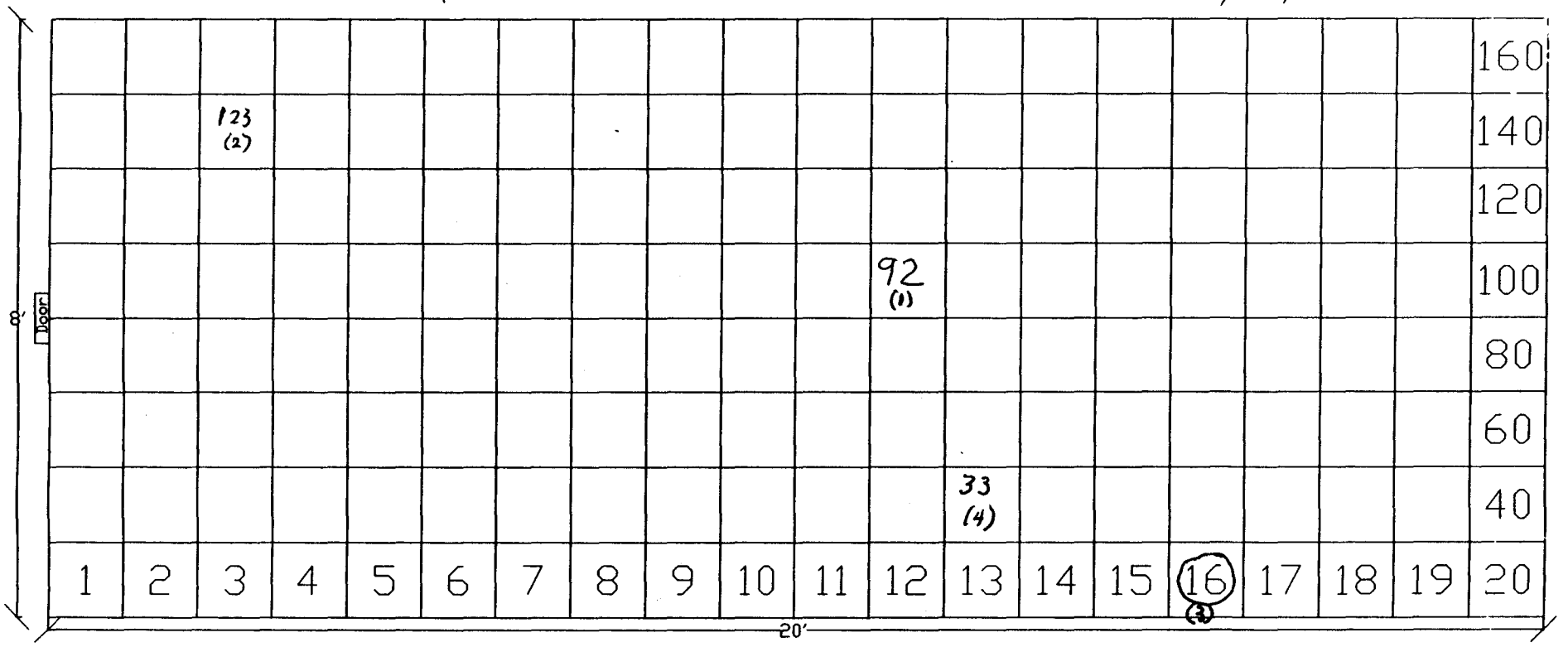


Sample Team _____

Notes #37 14:30

WSMR Commissary Landfill
Material Sampling

BIN No. B-854 Date 9/21/94

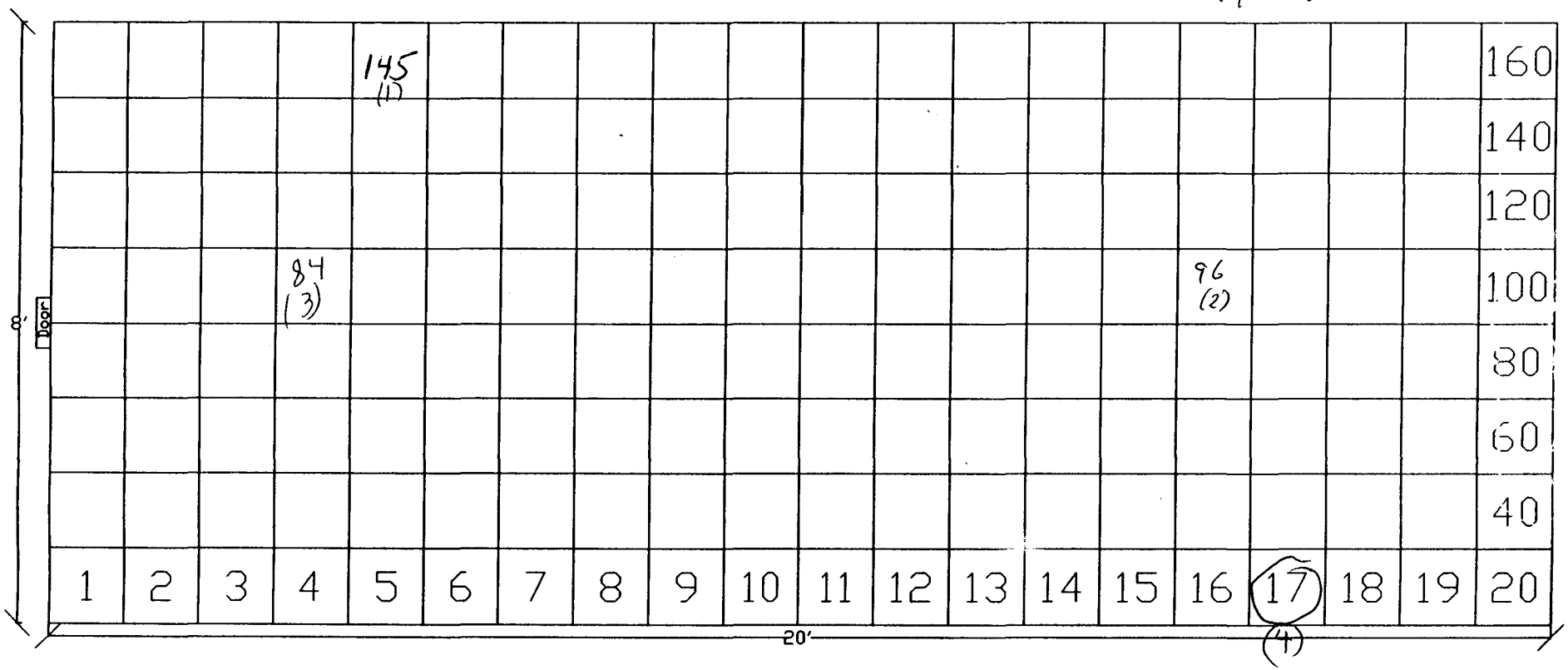


Sample Team GT, GE, JG

Notes 2ND BIN 2:15 2:45 SAMPLED

WSMR Commissary Landfill
Material Sampling

BIN No. B-868 Date 9/23/94

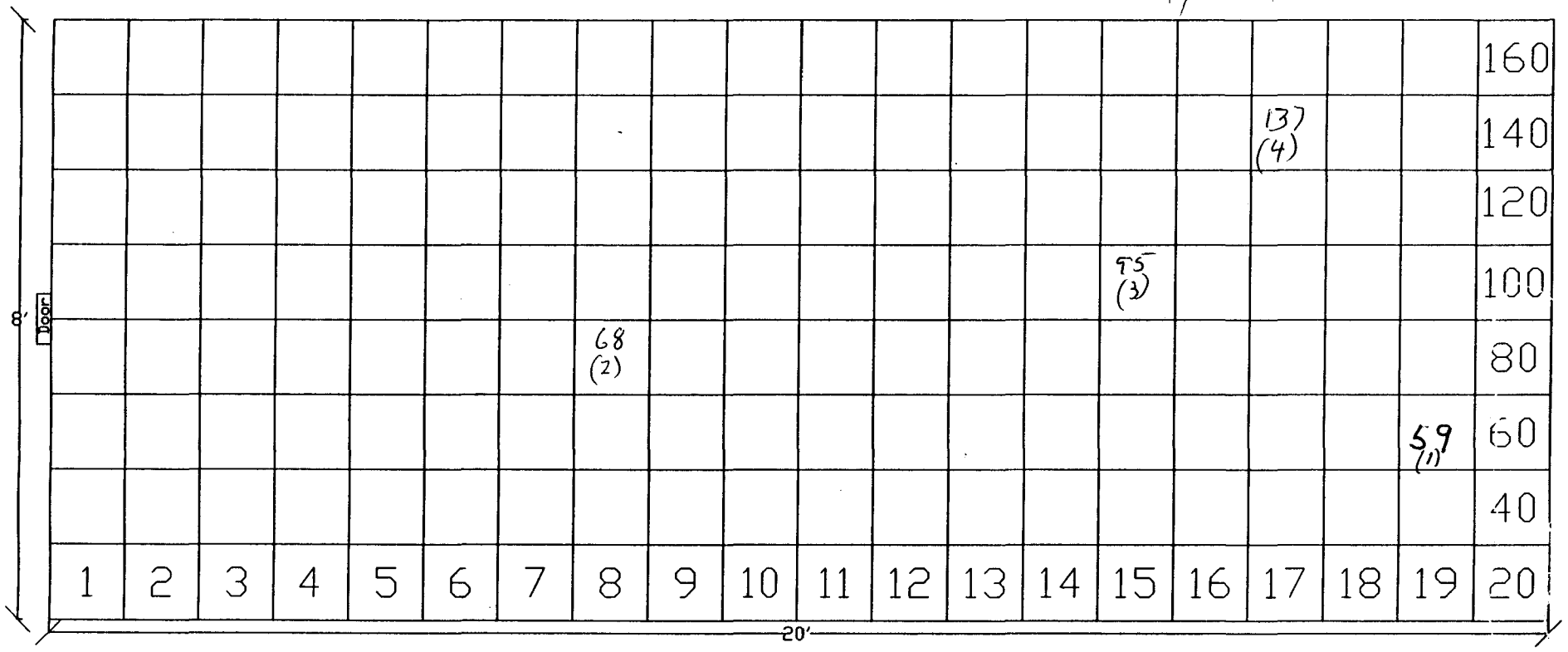


Sample Team GJ, JE, JG

Notes #20 10:00 10:10(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-072 Date 9/22/94



Sample Team _____

Notes #19 15:50 (F)

These Samples were shipped to Westech @ 1700 9/22/94

WSMR Commissary Landfill
Material Sampling

BIN No. B-877 Date 9/22/98

					146 (2)			149 (4)												160
																				140
		103 (1)																		120
																	97 (3)			100
																				80
																				60
																				40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

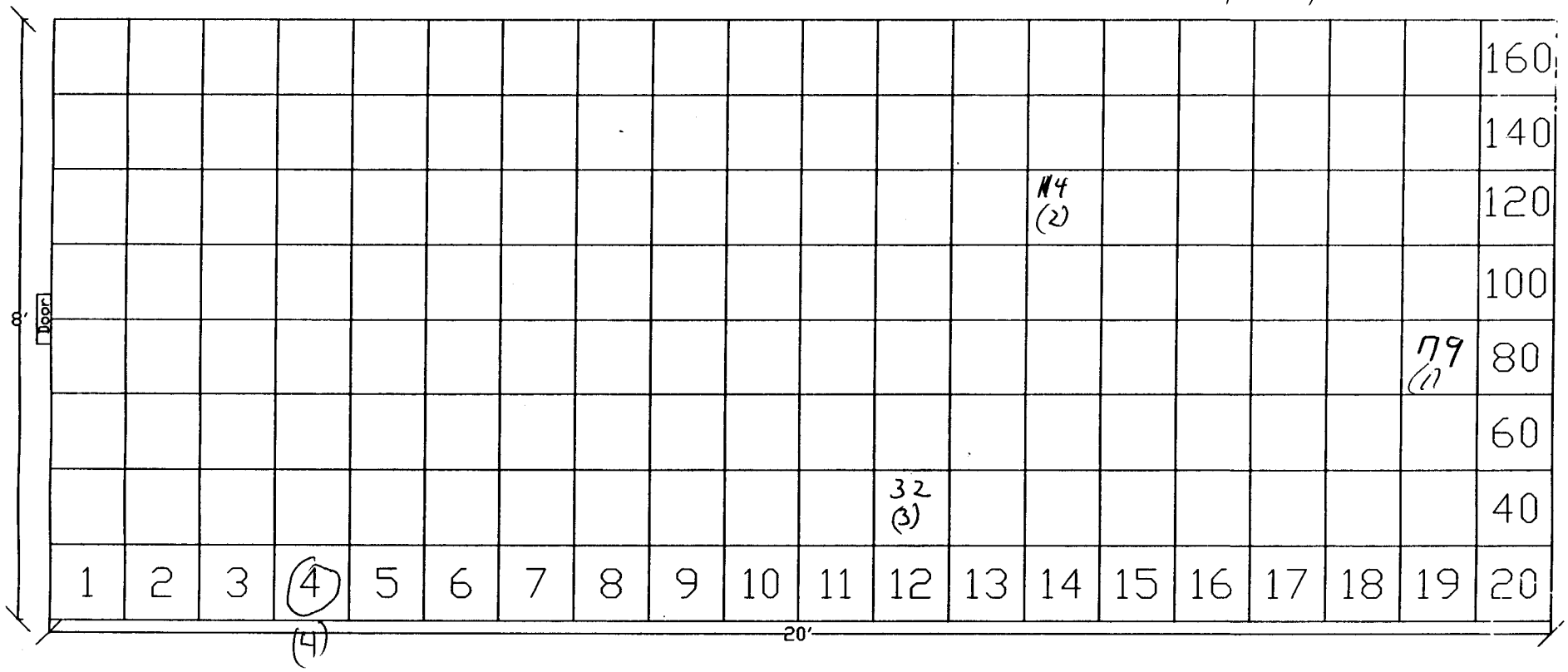
8' Door 20'

Sample Team JG, GE, GJ,

Notes 9th Bin 10:00 10:15

WSMR Commissary Landfill
Material Sampling

BIN No. B-888 Date 9/22/94



Sample Team GJ, JE, JG.

Notes #18 S 15:25 15:40

WSMR Commissary Landfill
Material Sampling

BIN No. B-890 Date 9/26/94

																				160
																				140
		103 (1)											113 (4)							120
																96 (3)				100
																				80
																				60
											31 (2)									40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

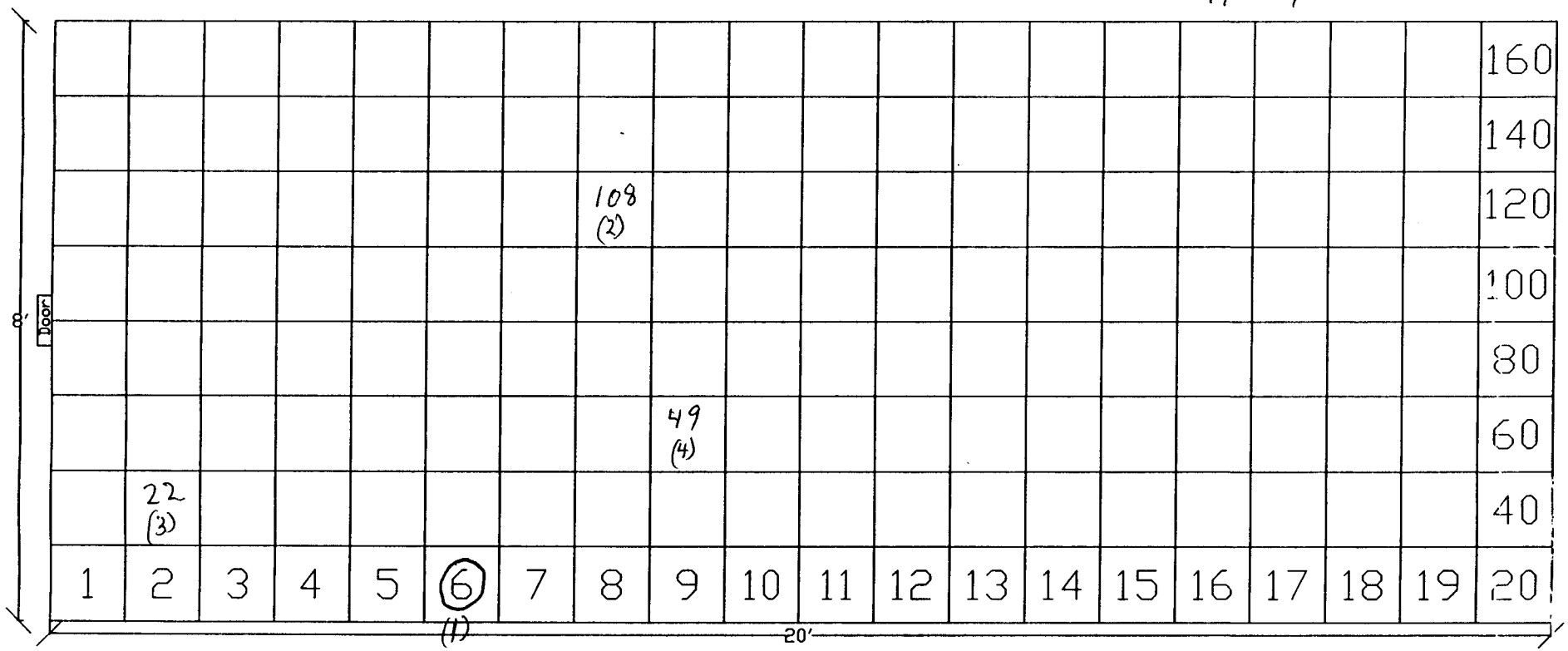
8' Door 20'

Sample Team _____

Notes ~~#35~~ (5) 14:06 14:10

WSMR Commissary Landfill
Material Sampling

BIN No. B-915 Date 9/28/94

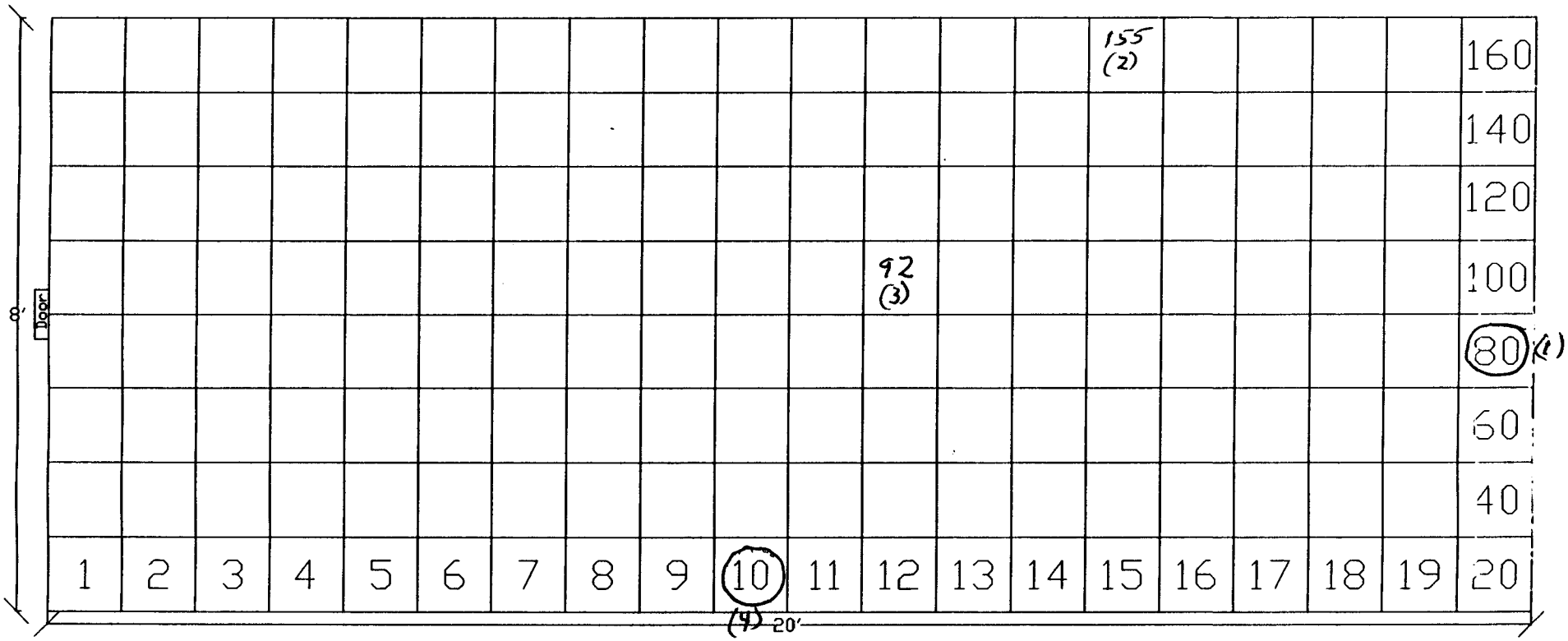


Sample Team _____

Notes #45 @ 10:50

WSMR Commissary Landfill
Material Sampling

BIN No. B-918 Date 9/22/94

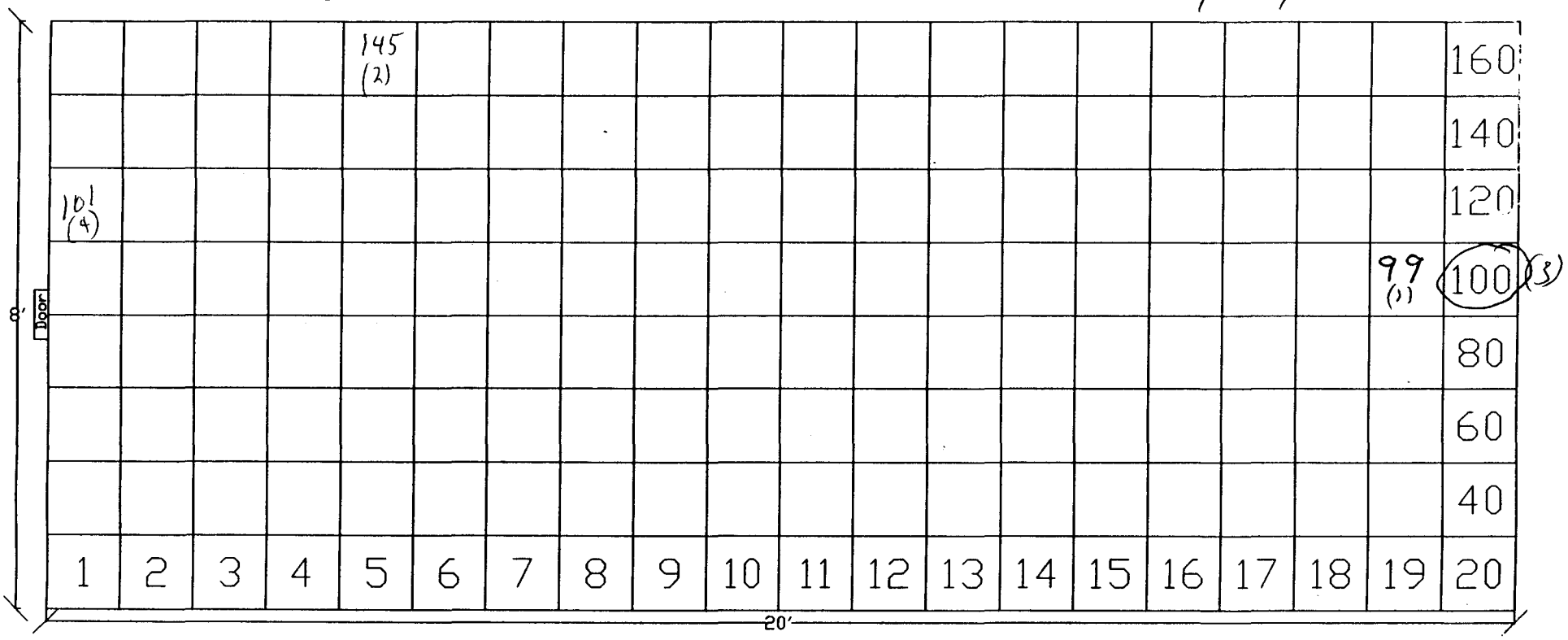


Sample Team GE, JG, GJ

Notes 10TH BIN 10:35 11:00

WSMR Commissary Landfill
Material Sampling

BIN No. B-936 Date 9/23/94

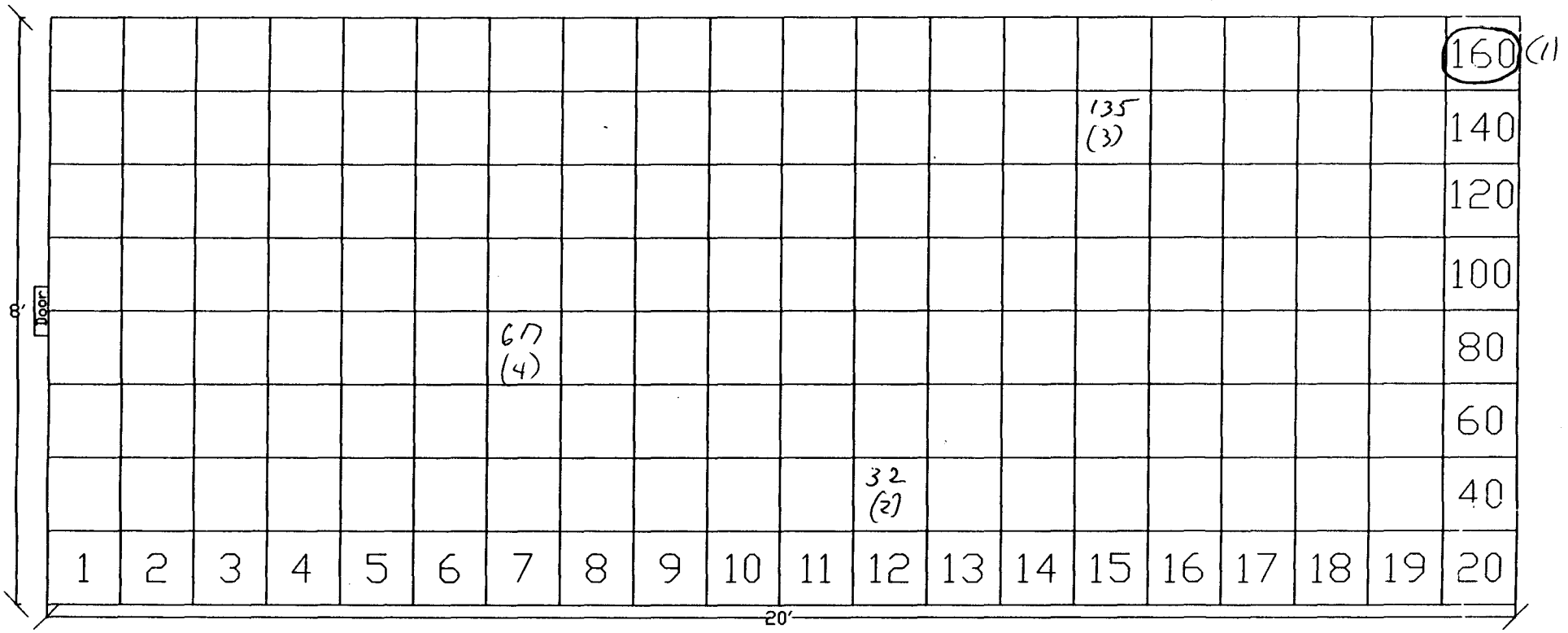


Sample Team _____

Notes #21 10:15 10:20

WSMR Commissary Landfill
Material Sampling

BIN No. B-960 Date 9/22/94



Sample Team GJ, GE, JG

Notes 15th BIN 1400(f)

WSMR Commissary Landfill
Material Sampling

BIN No. B-962 Date 9/23/94

					146 (4)															160
																				140
																				120
																				100
																	77 (1)			80
						47 (3)														60
												33 (2)								40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

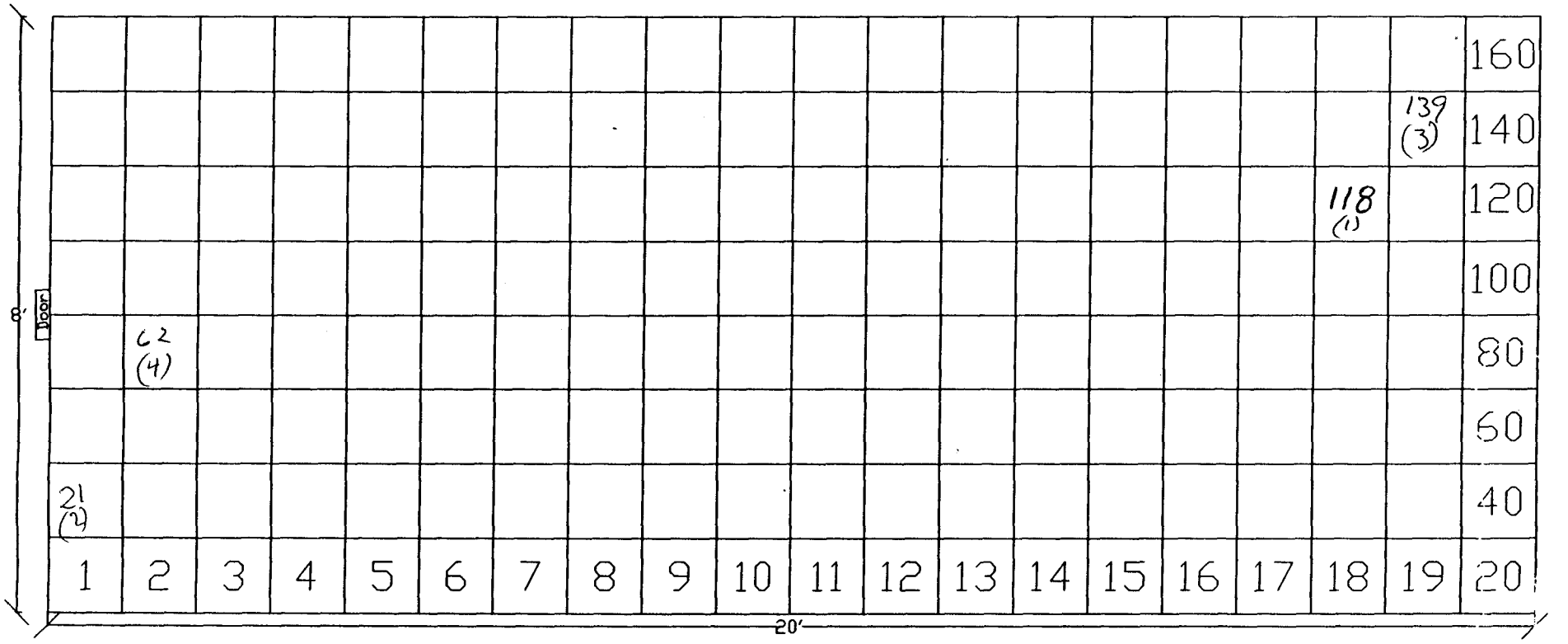
8' Door 20'

Sample Team _____

Notes #28 1345(5) 1355(6)

WSMR Commissary Landfill
Material Sampling

BIN No. B-965 Date 9/23/94

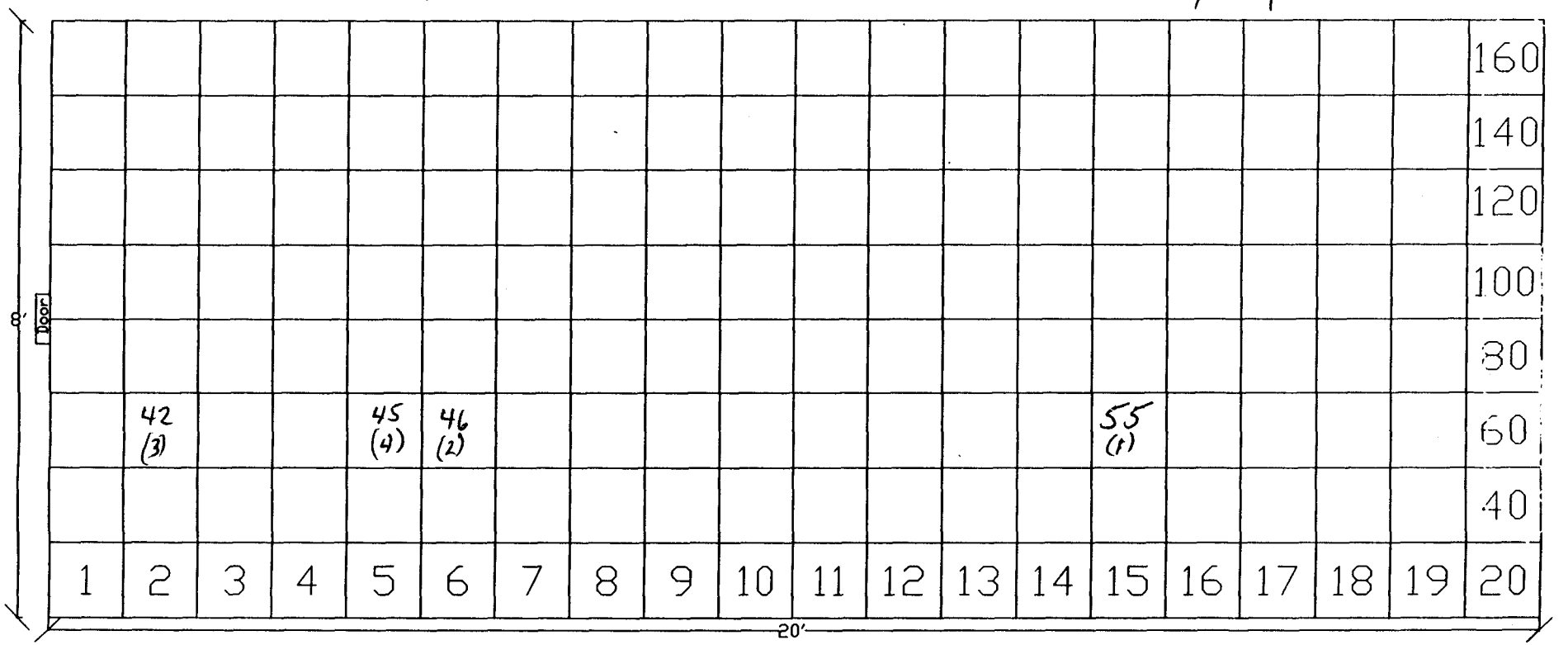


Sample Team _____

Notes #22 10:30 10:40

WSMR Commissary Landfill
Material Sampling

BIN No. B-972 Date 9/21/94

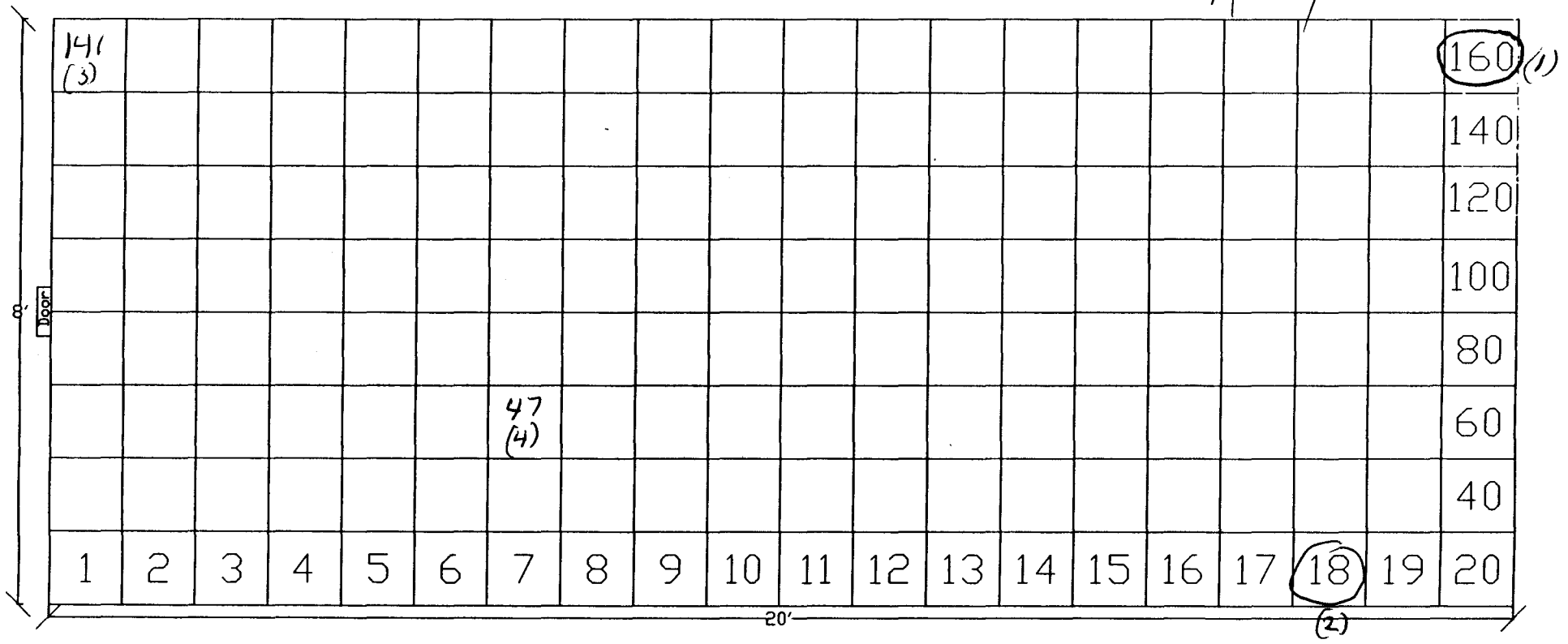


Sample Team ALJ, J.L., G.E.

Notes 11th Bin 8:45 finish

WSMR Commissary Landfill
Material Sampling

BIN No. B-974 Date 9/30/94

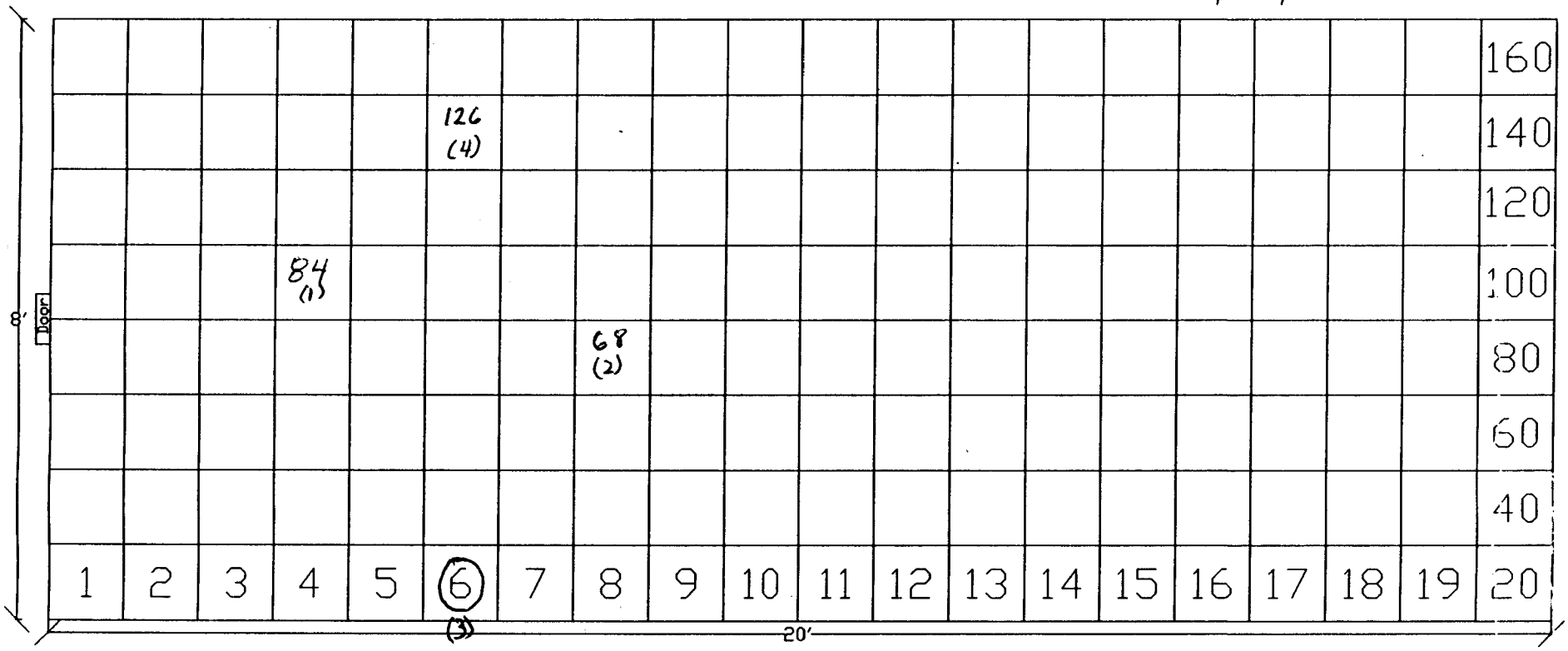


Sample Team

Notes #63 (F) 1530

WSMR Commissary Landfill
Material Sampling

BIN No. B-998 Date 9/21/94

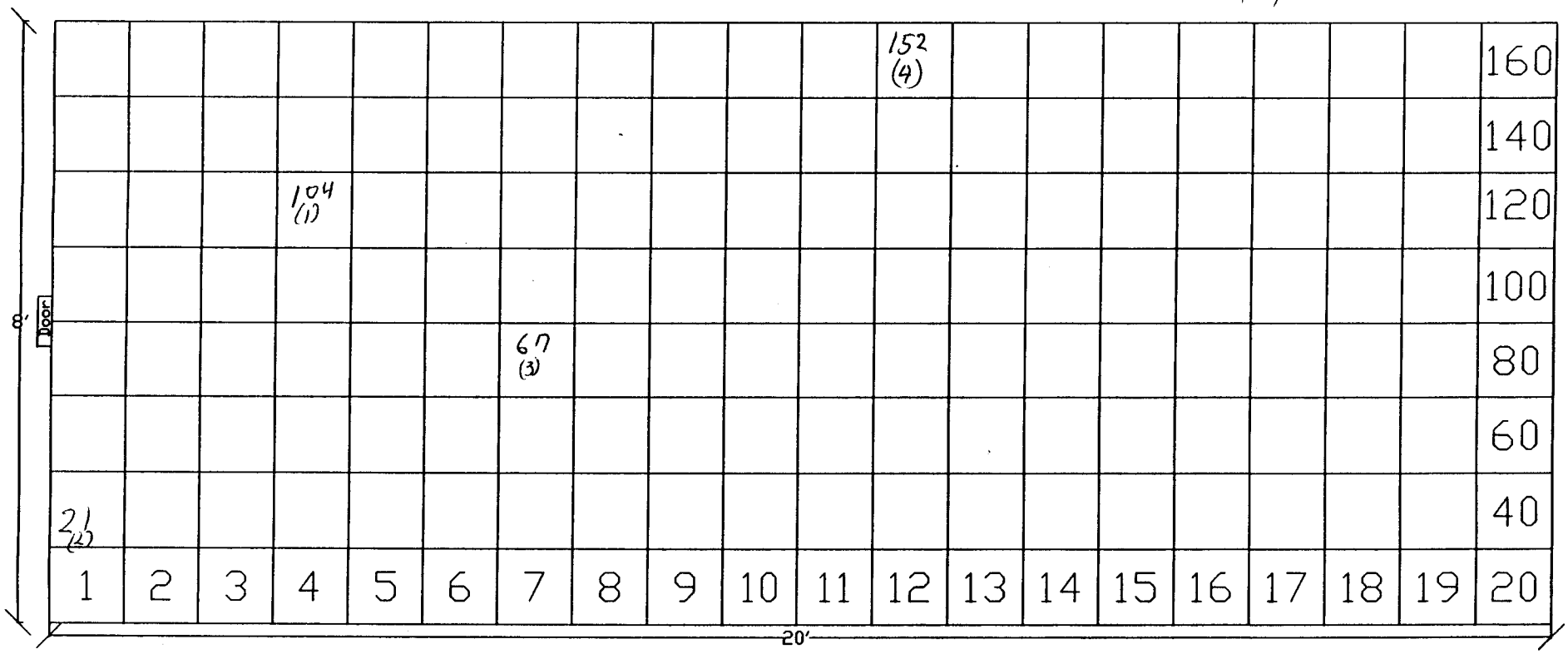


Sample Team GLT, GE, JG.

Notes 3rd BIN Start 2:50 3:10

WSMR Commissary Landfill
Material Sampling

BIN No. B-1007 Date 10/1/94

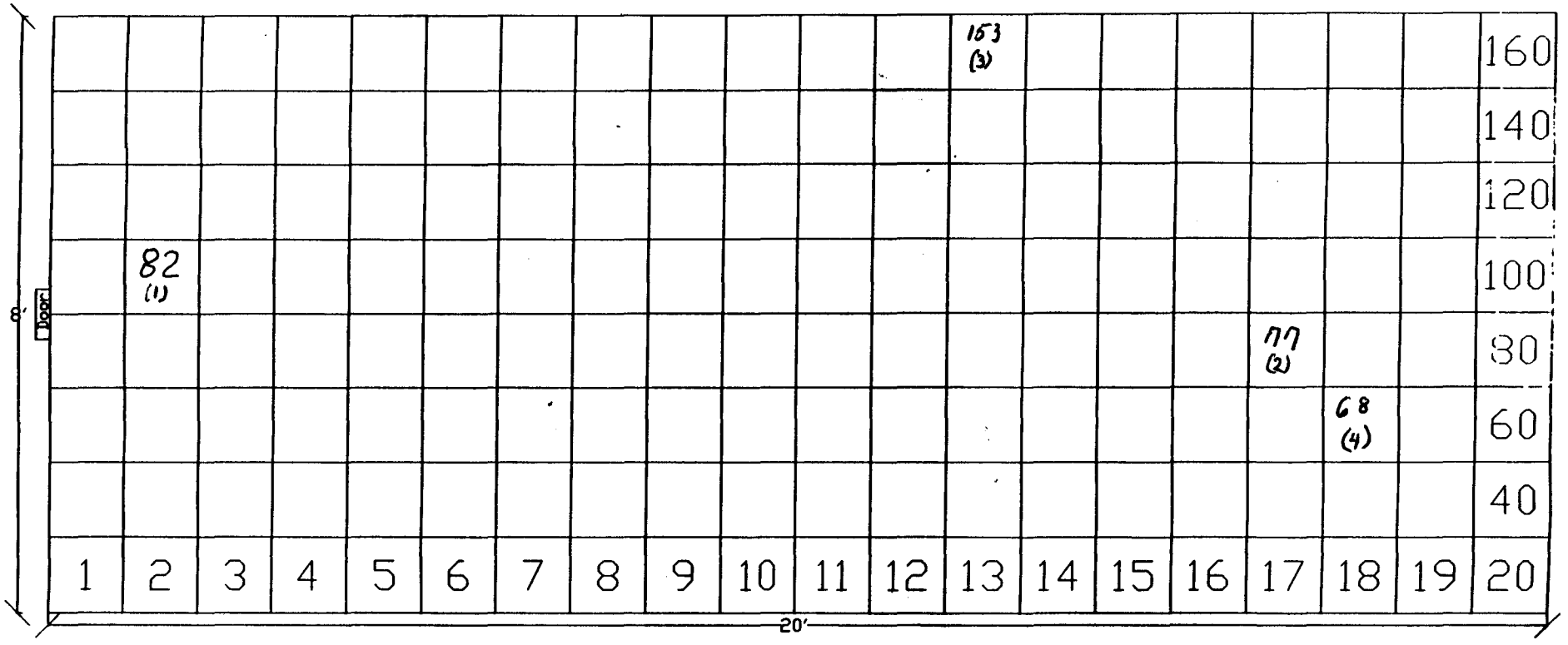


Sample Team _____

Notes #67 755

WSMR Commissary Landfill
Material Sampling

BIN No. B-1010 Date 9/21/94



Sample Team GLI, GE JG

Notes 1st BIN Finish @ 1345 - Do Not UNDU orange Straps

WSMR Commissary Landfill
Material Sampling

BIN No. B-1020 Date 10/3/94

			144 (2)																160
						127 (3)													140
																			120
			84 (1)																100
										71 (4)									80
																			60
																			40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

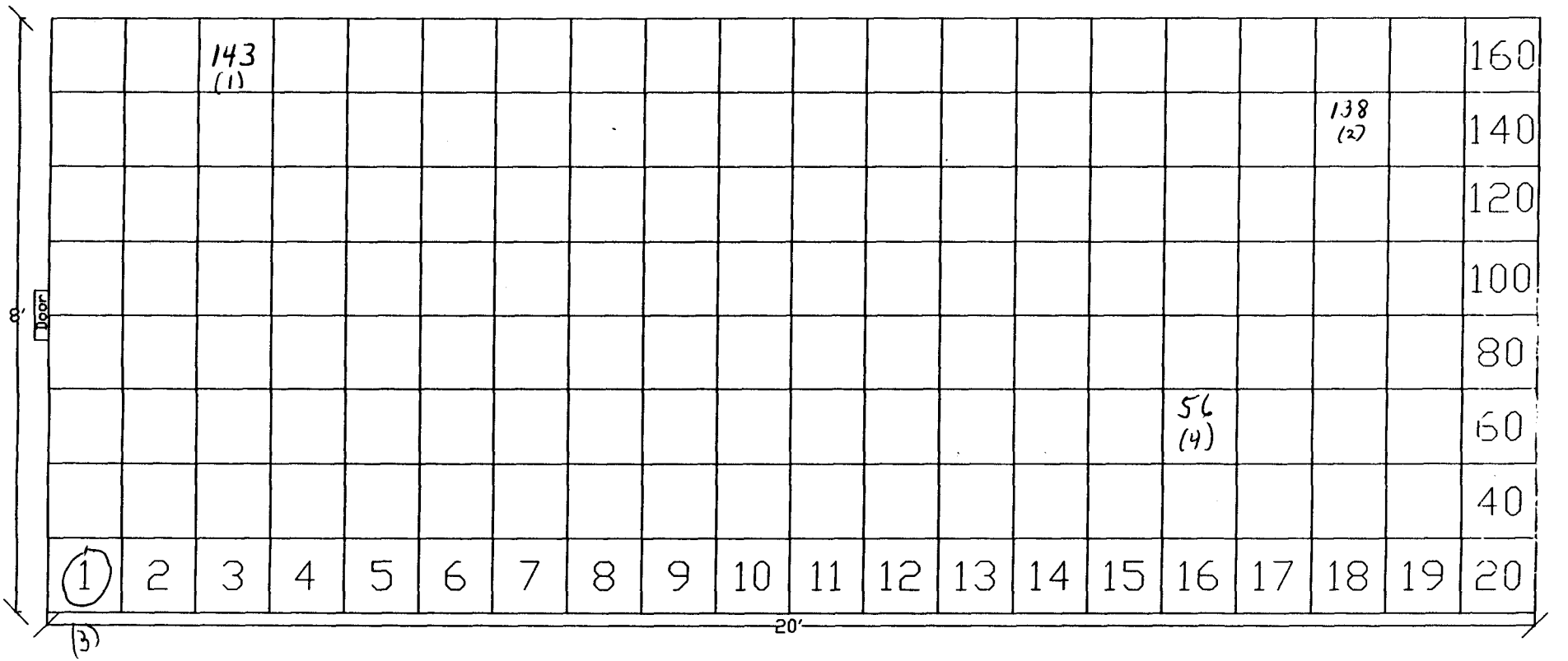
8' Door 20'

Sample Team

Notes #75 (F)(9:00)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1028 Date 9/23/94



Sample Team _____

Notes #23 11:15 11:25

WSMR Commissary Landfill
Material Sampling

BIN No. B-1032 Date 9/27/94

																				160
																				140
																				120
			84 (4)															98 (3)		100
																				80
																				60
														35 (1)						40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

8' Door

20' (2)

Sample Team _____

Notes #38 @ 1400

WSMR Commissary Landfill
Material Sampling

BIN No. B-1034 Date 9/22/94

															156 (4)					160
														135 (1)						140
																				120
																				100
																				80
																				60
21 (3)									29 (2)											40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

Door

8'

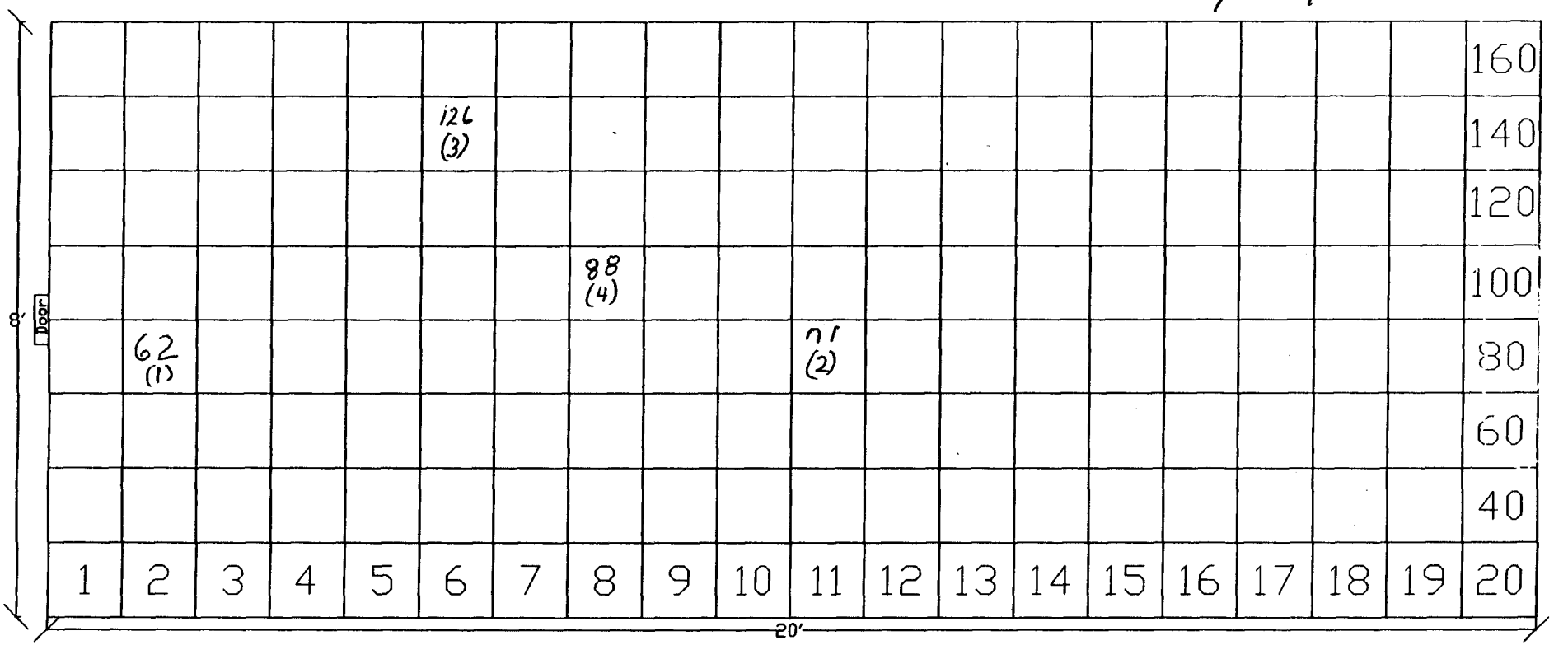
20'

Sample Team [illegible]

Notes 12th BIN START @ 12:30 12:50

WSMR Commissary Landfill
Material Sampling

BIN No. B-1036 Date 9/21/94

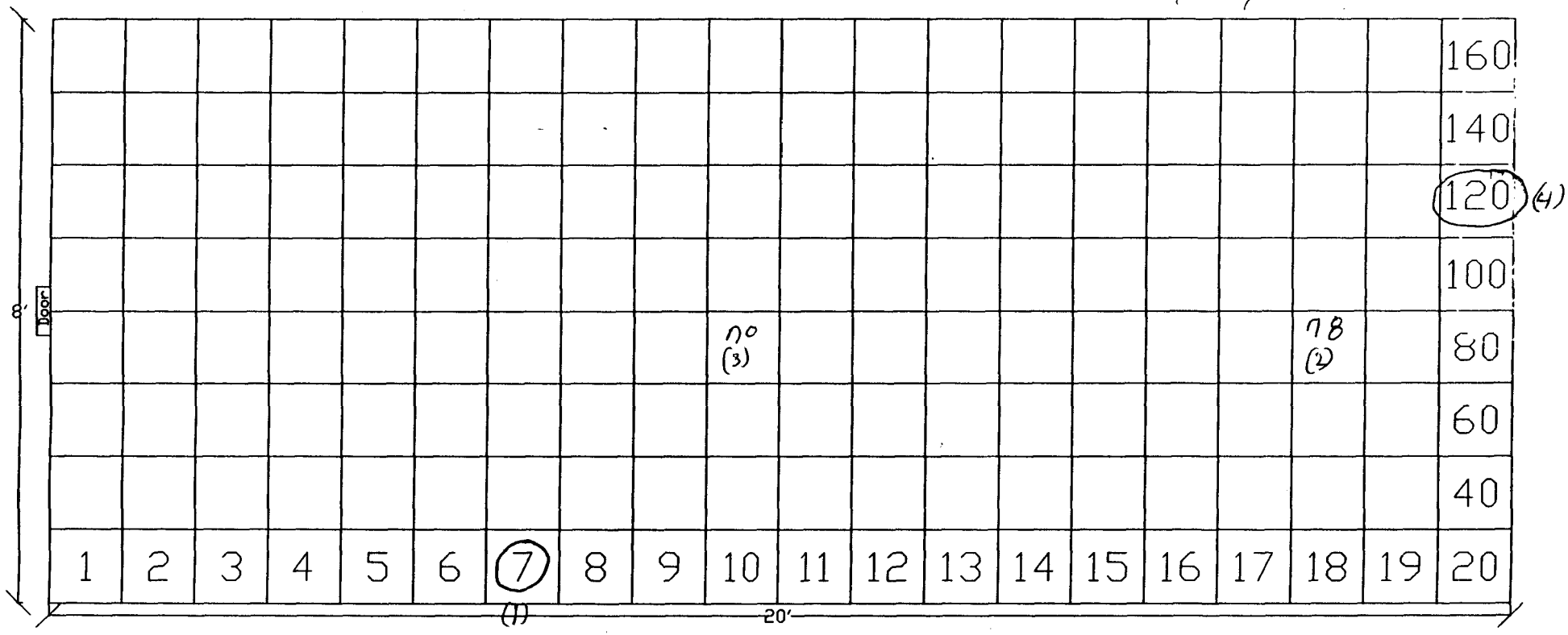


Sample Team CI, JG, GE

Notes 4TH BIN START 3:00 FINIS 3:45 Have to do decon of equipment after four samples are taken

WSMR Commissary Landfill
Material Sampling

BIN No. B-1038 Date 9/23/94

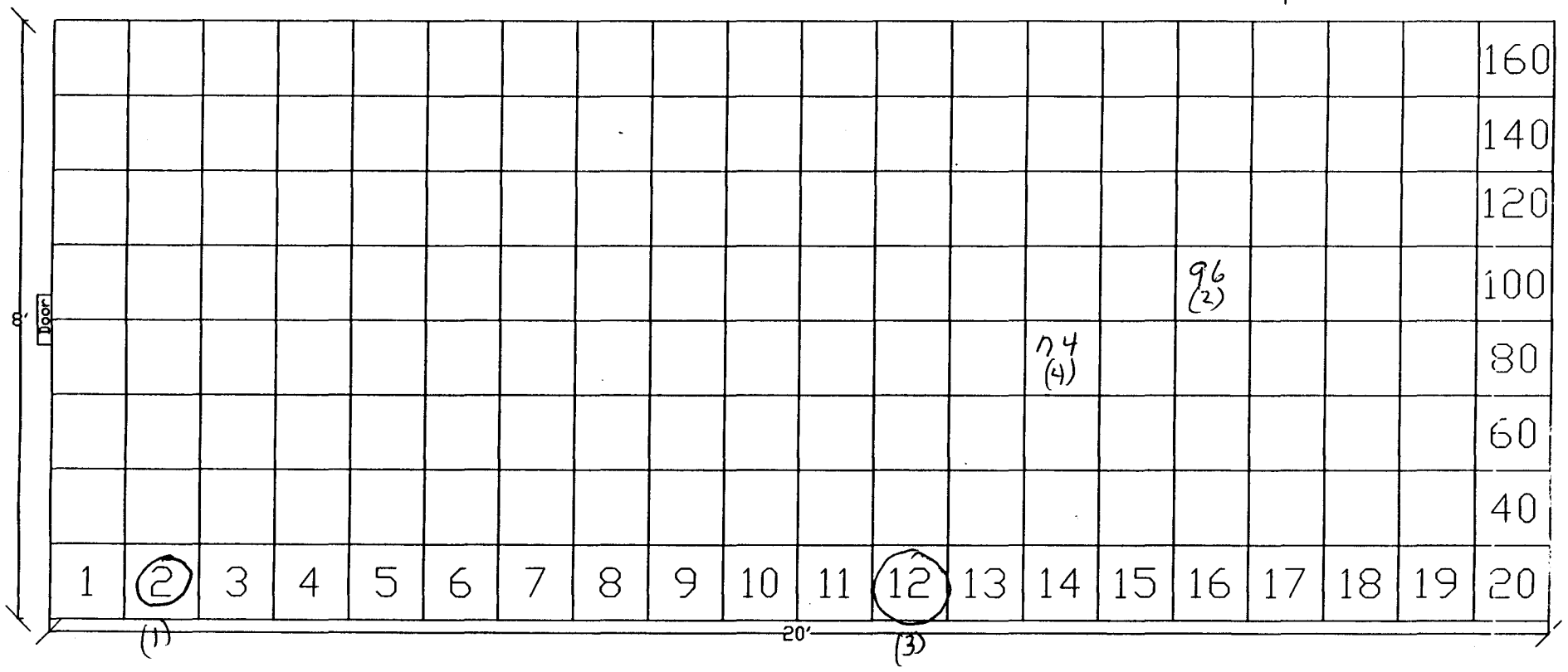


Sample Team J.G, G.E, G.J.

Notes #27 1349 (5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1040 Date 9/23/94

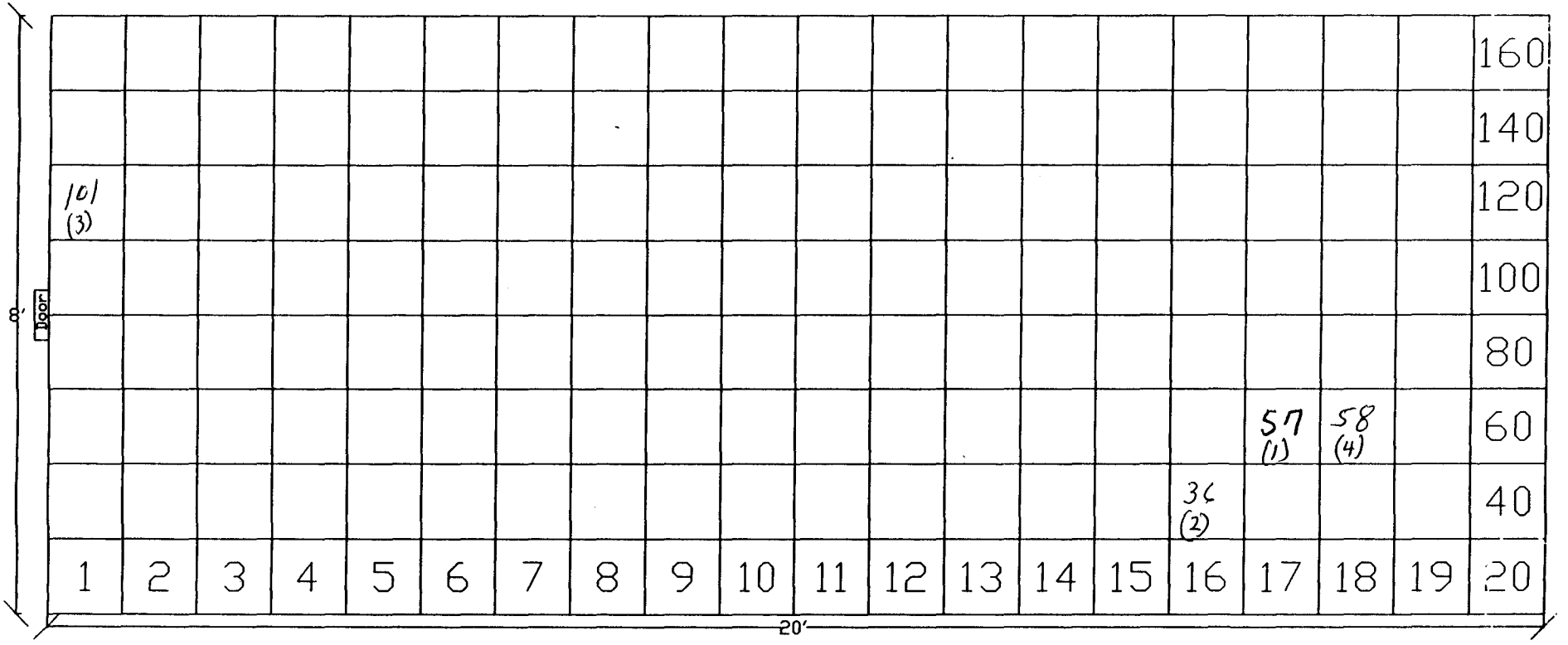


Sample Team

Notes #29 S 1355 P410

WSMR Commissary Landfill
Material Sampling

BIN No. B-1041 Date 9/28/94

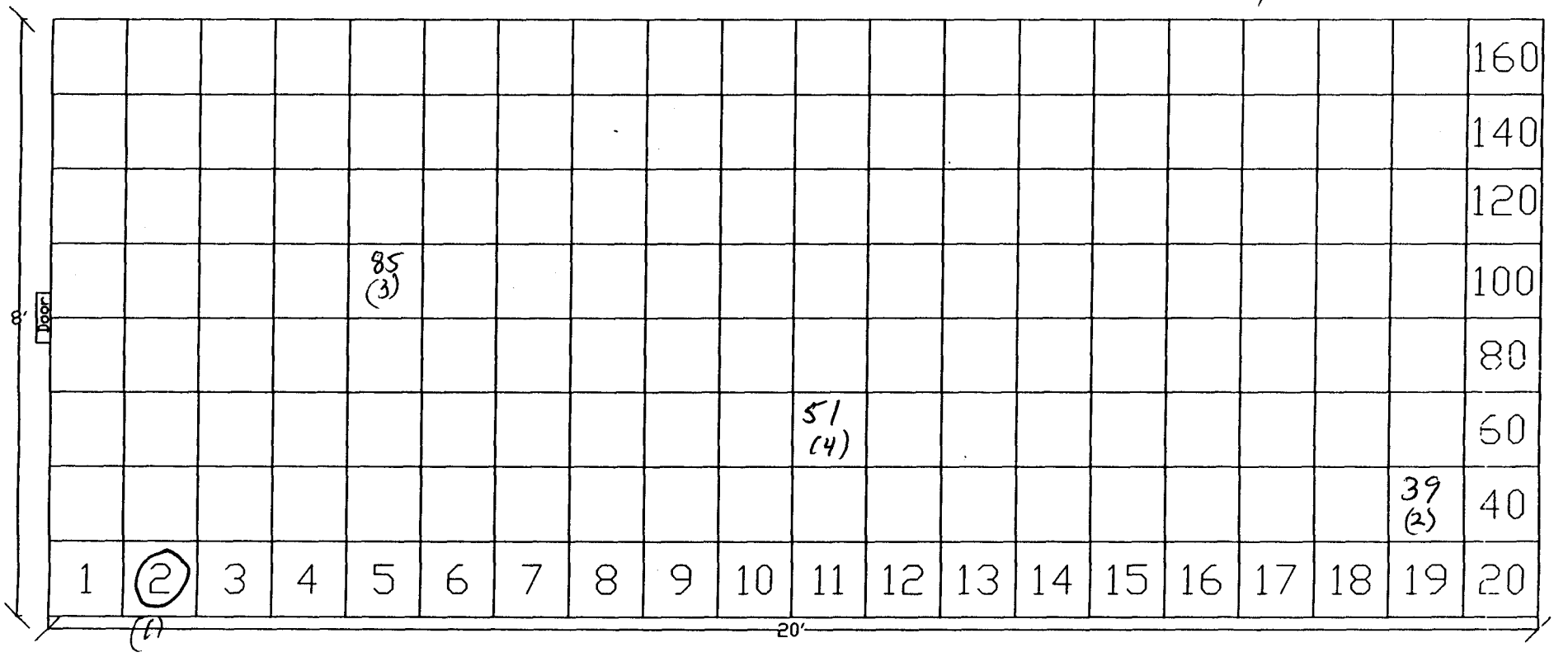


Sample Team _____

Notes #44 1640 (P)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1042 Date 10/1/94

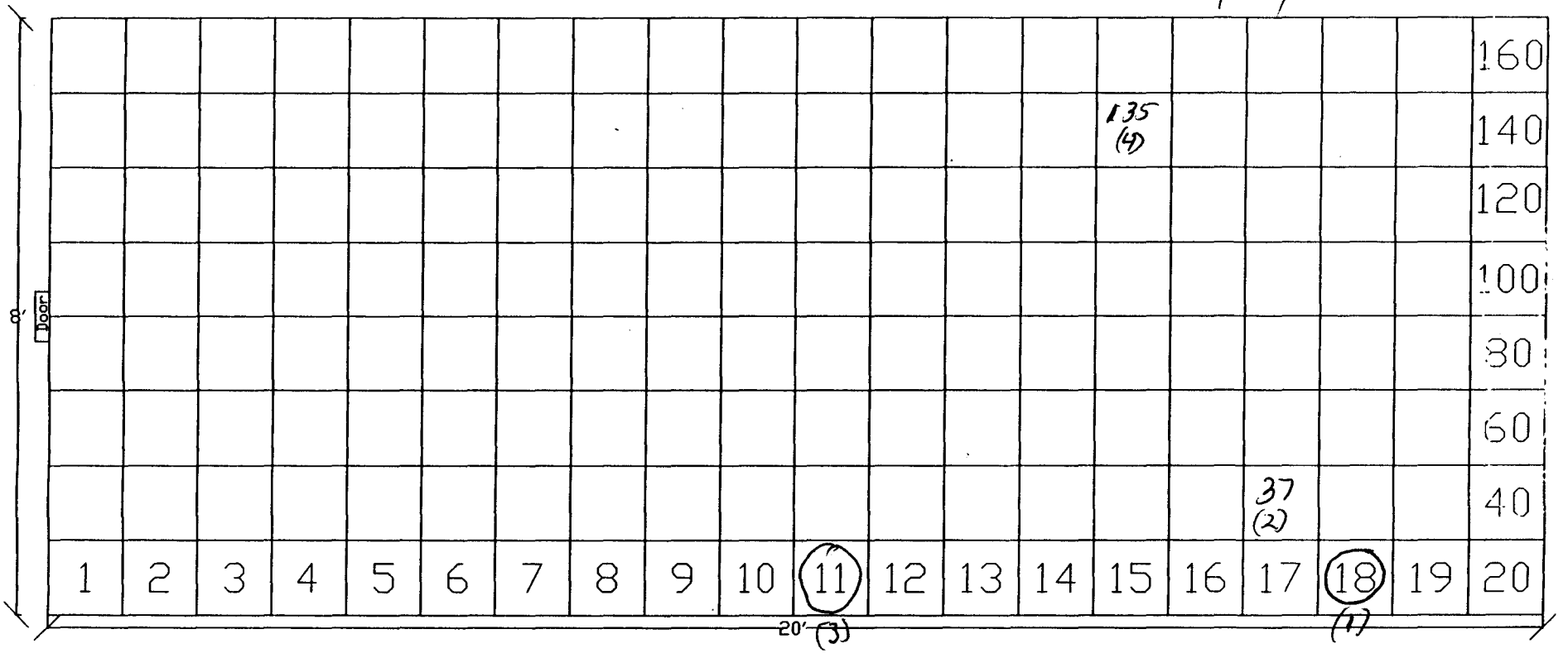


Sample Team _____

Notes #64 M25(P)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1046 Date 9/30/94

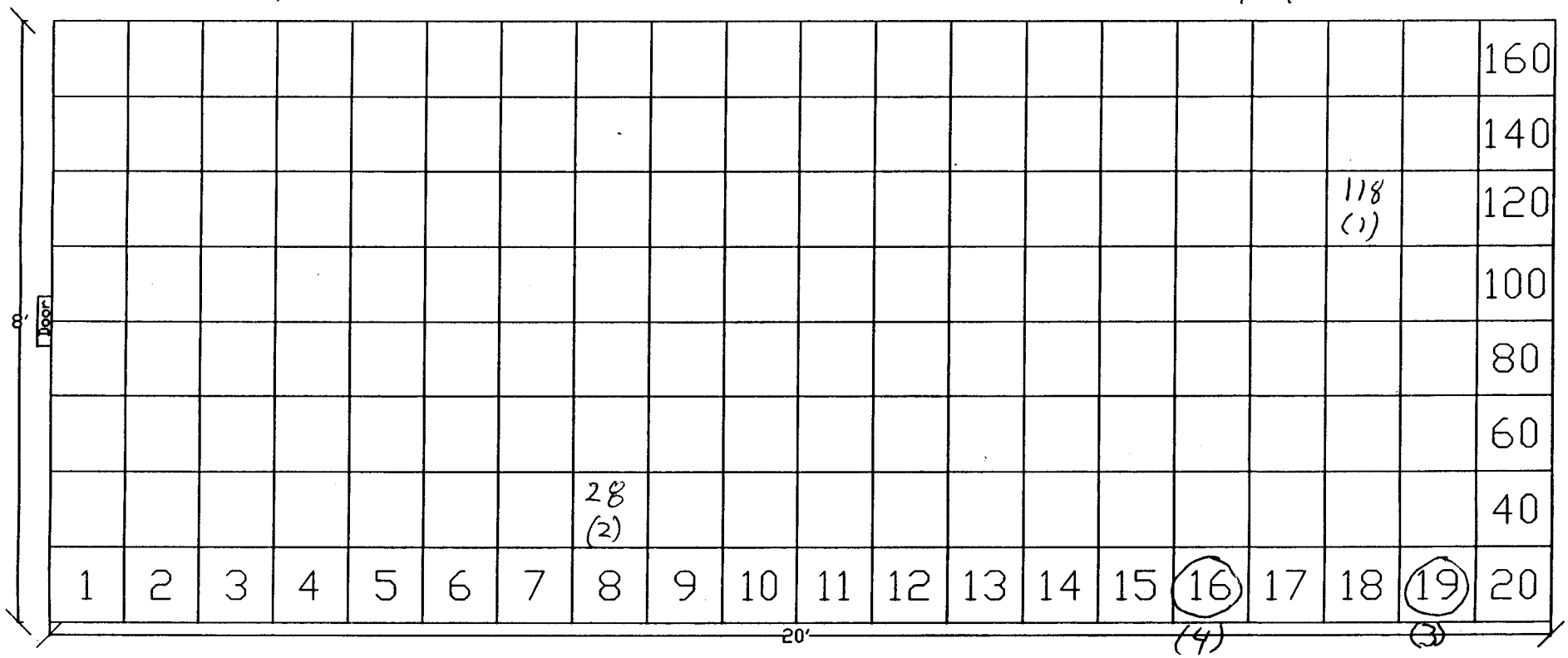


Sample Team _____

Notes #62 (F) 1525

WSMR Commissary Landfill
Material Sampling

BIN No. B-1051 Date 10/3/94

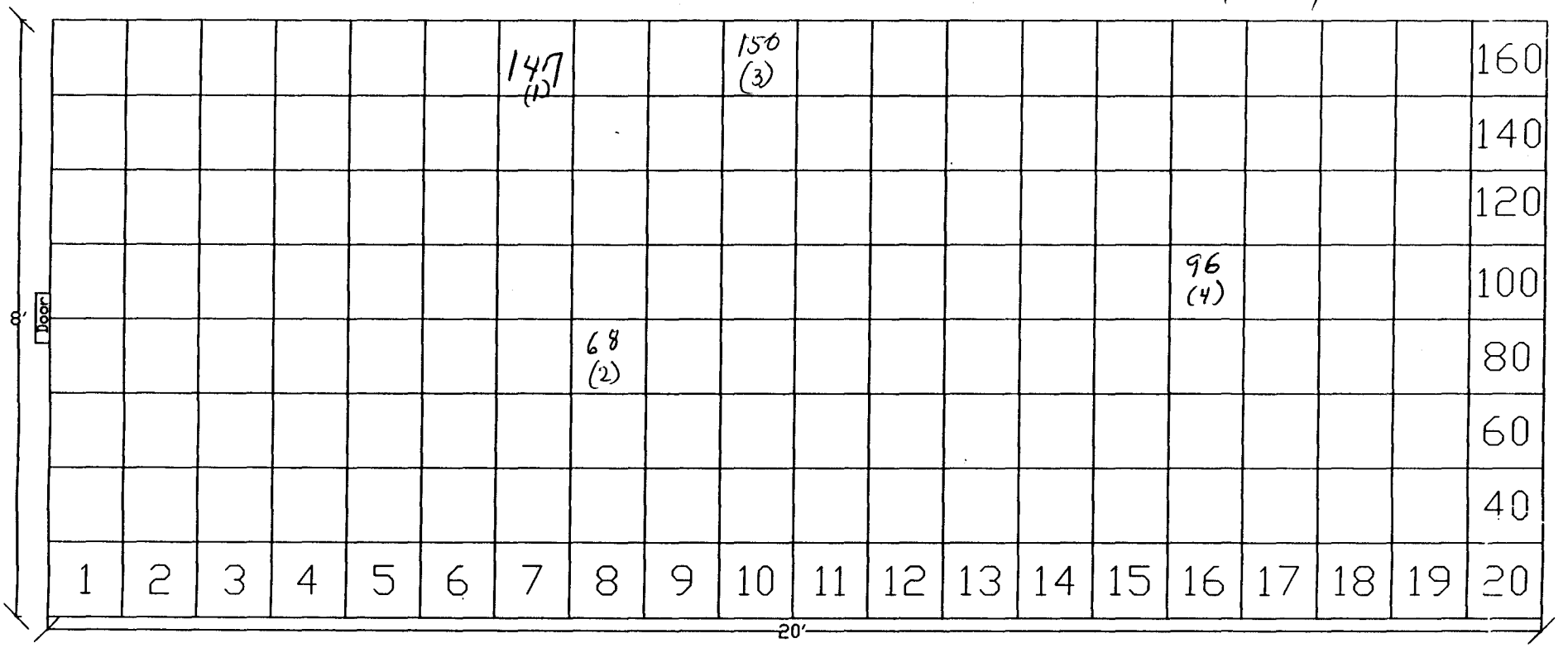


Sample Team _____

Notes #82 1050 (5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1056 Date 9/30/94

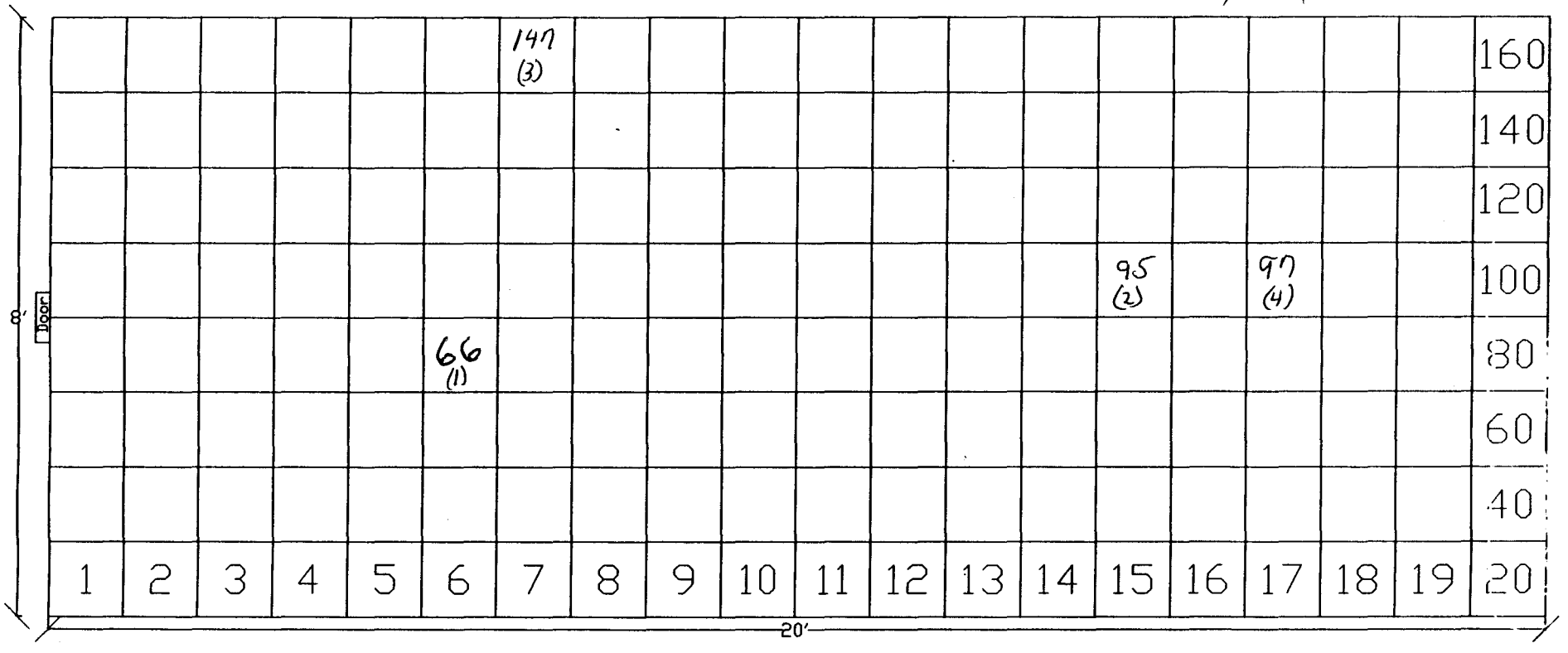


Sample Team

Notes #57 1400(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1063 Date 9/27/94

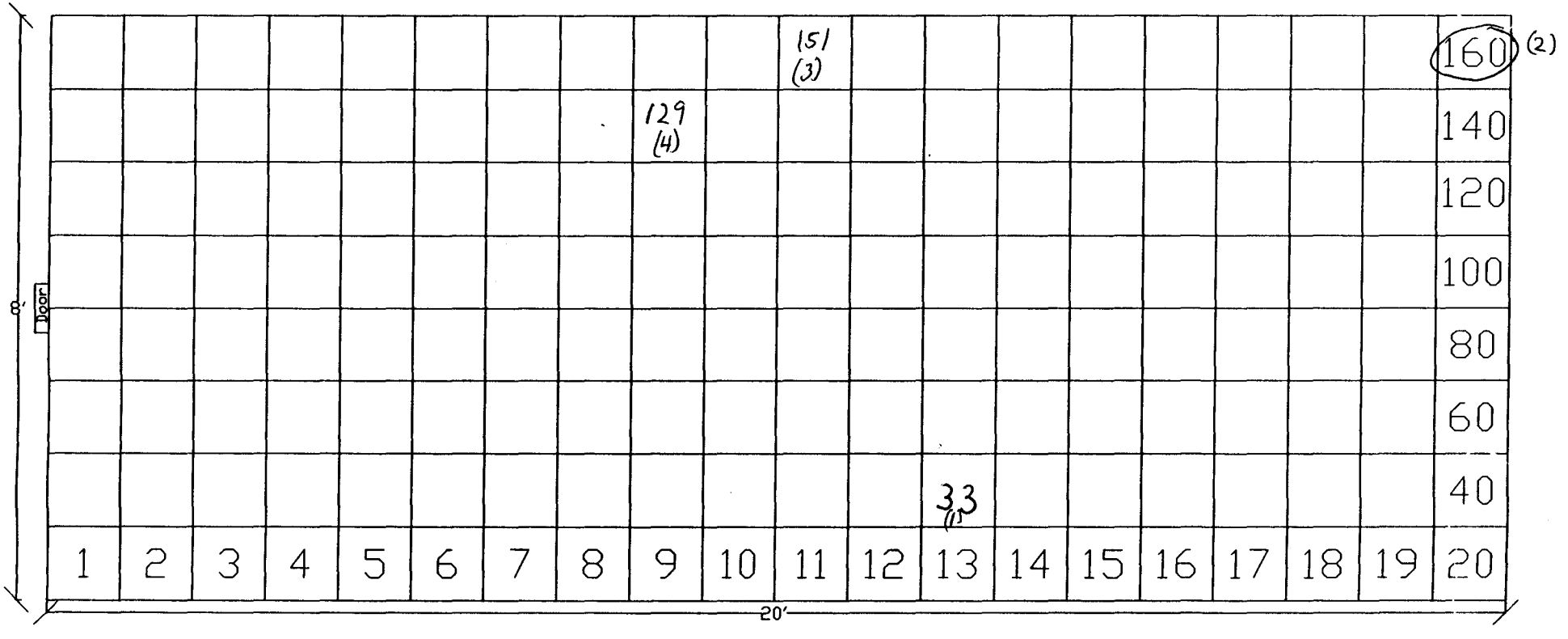


Sample Team _____

Notes #39 F 1410

WSMR Commissary Landfill
Material Sampling

BIN No. B-1064 Date 9/27/94

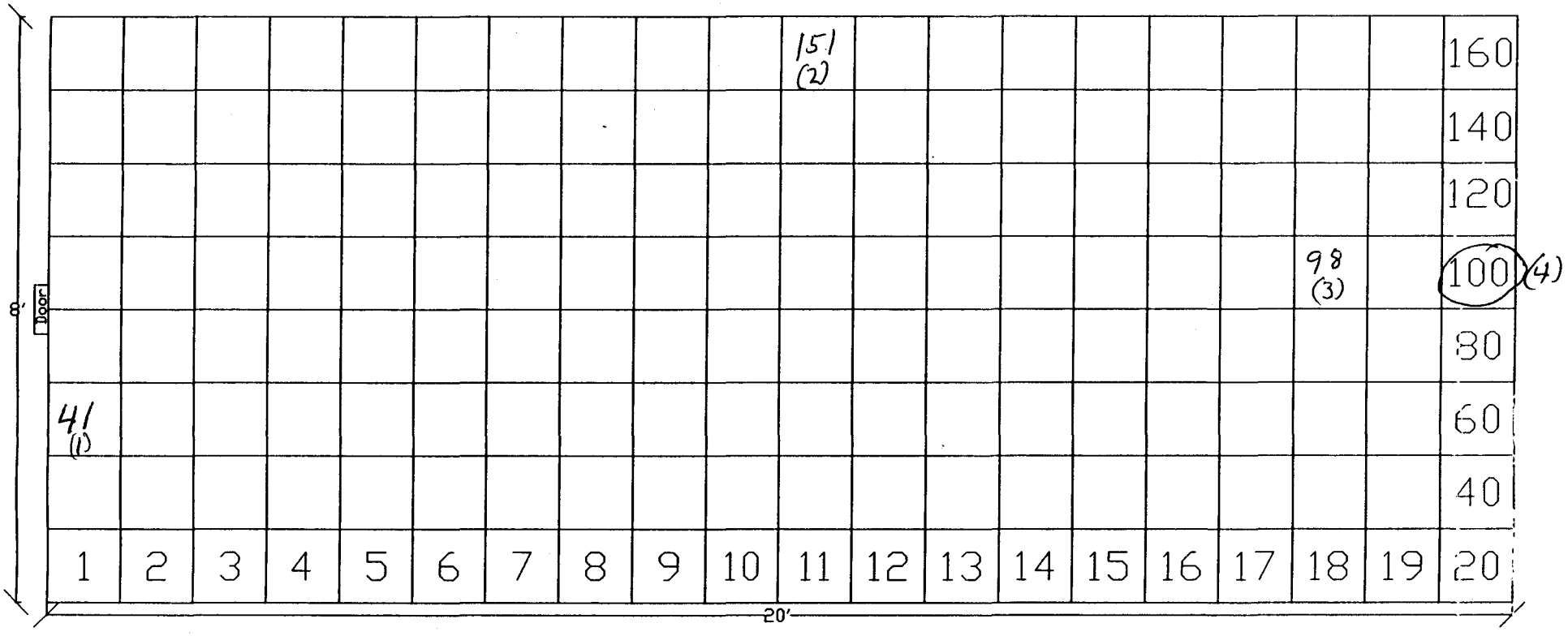


Sample Team _____

Notes #41 1515(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1065 Date 9/27/94

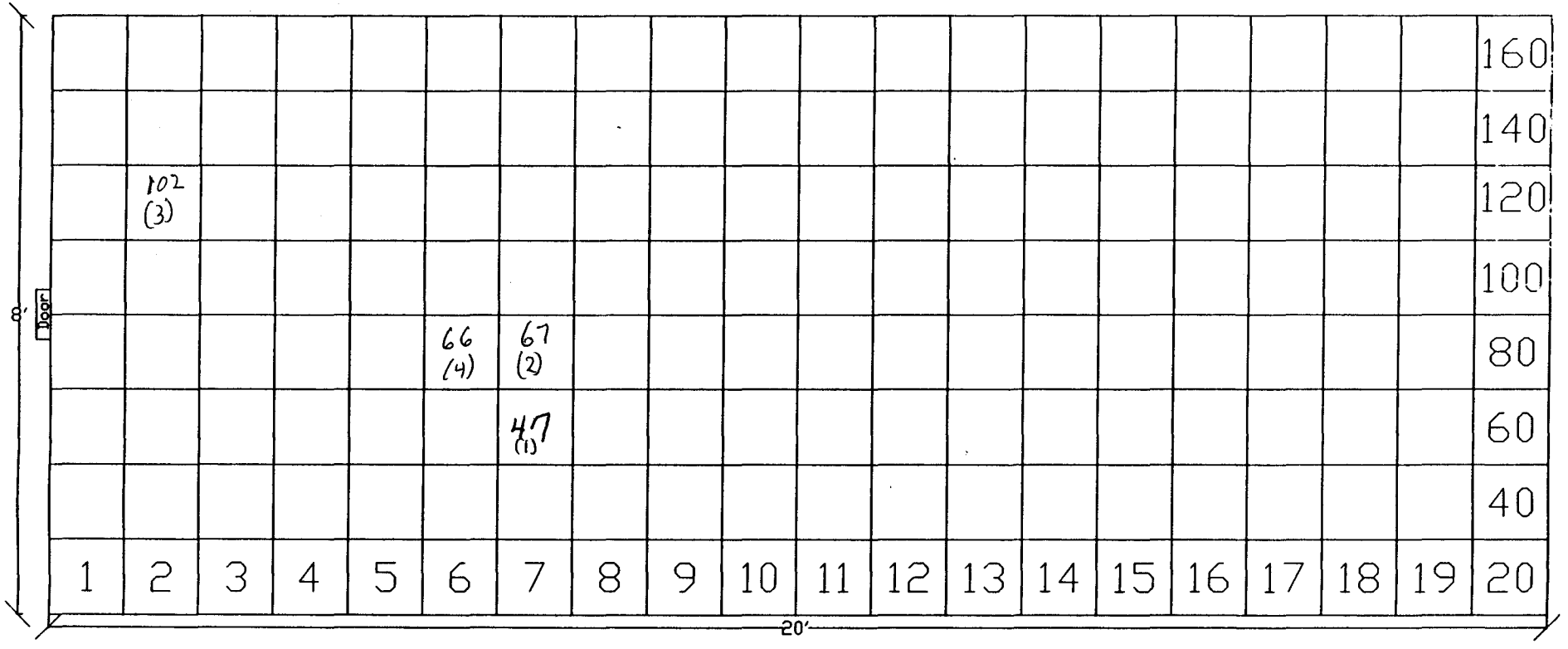


Sample Team _____

Notes #42 (*)1530

WSMR Commissary Landfill
Material Sampling

BIN No. B-1066 Date 9/23/94

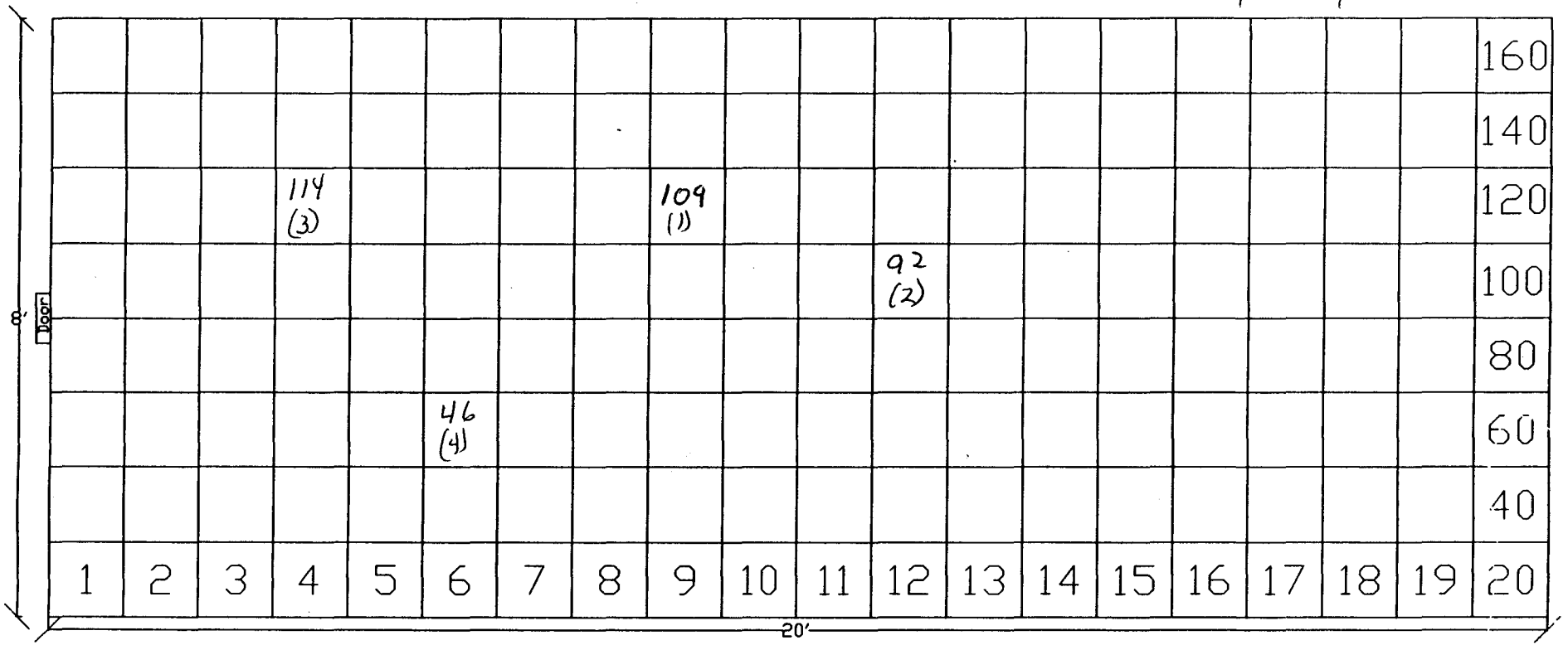


Sample Team _____

Notes #24 10:30 11:40

WSMR Commissary Landfill
Material Sampling

BIN No. B-1067 Date 9/23/94

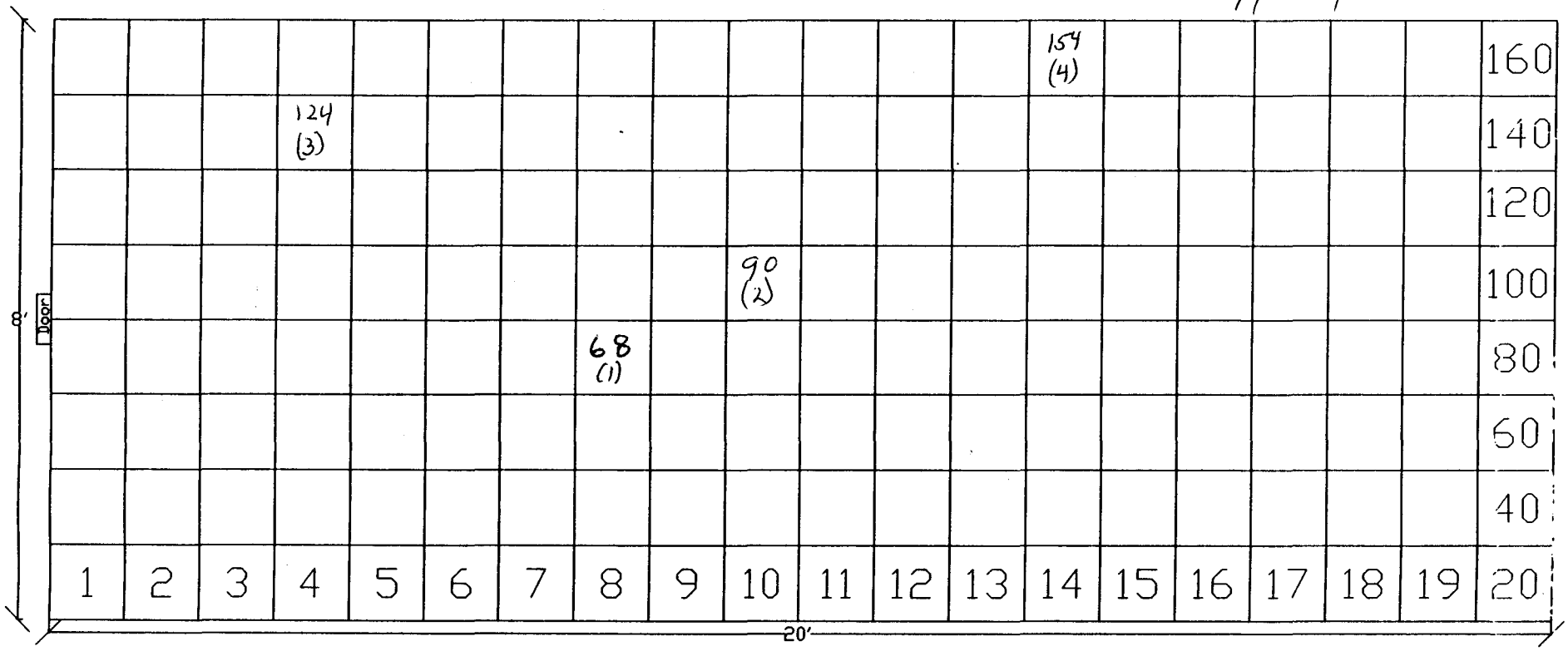


Sample Team JG, LF, GJ

Notes ~~1175~~ 1145 1200

WSMR Commissary Landfill
Material Sampling

BIN No. B-1068 Date 9/23/94

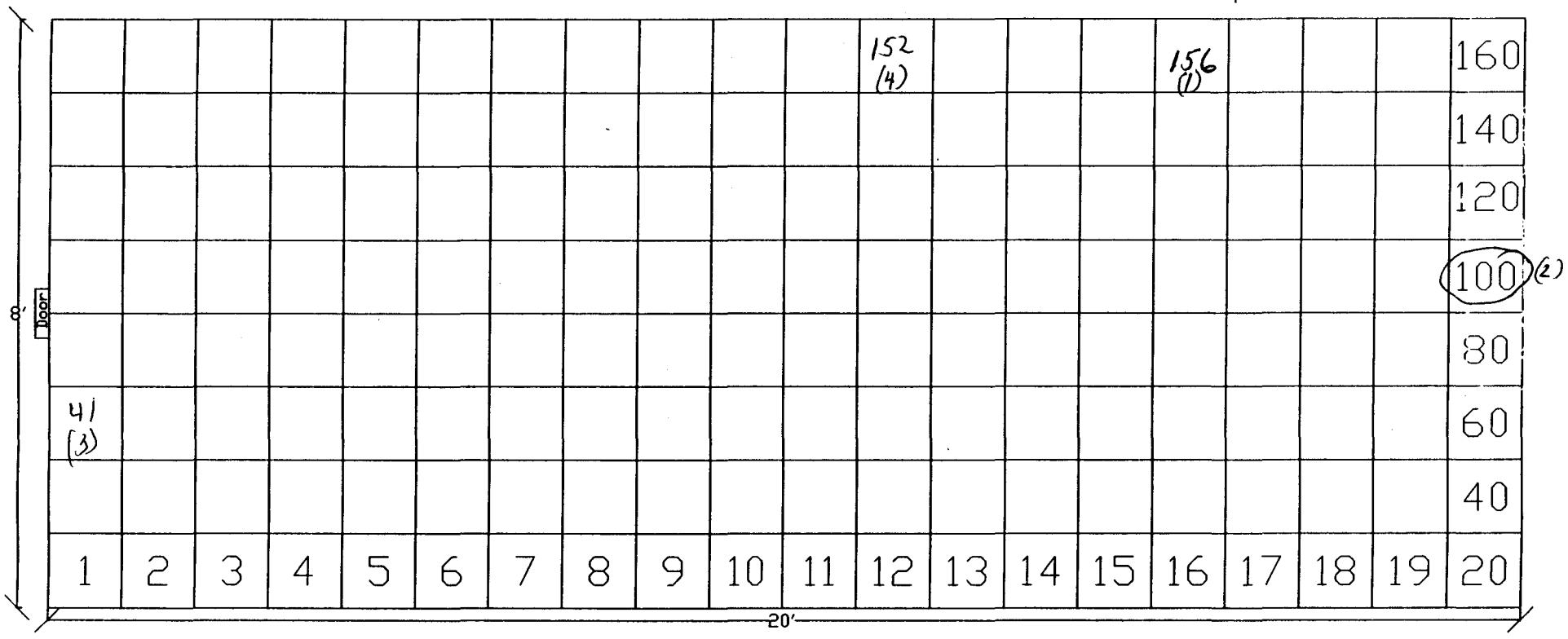


Sample Team _____

Notes #26 1200 12:10(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1069 Date 9/27/94

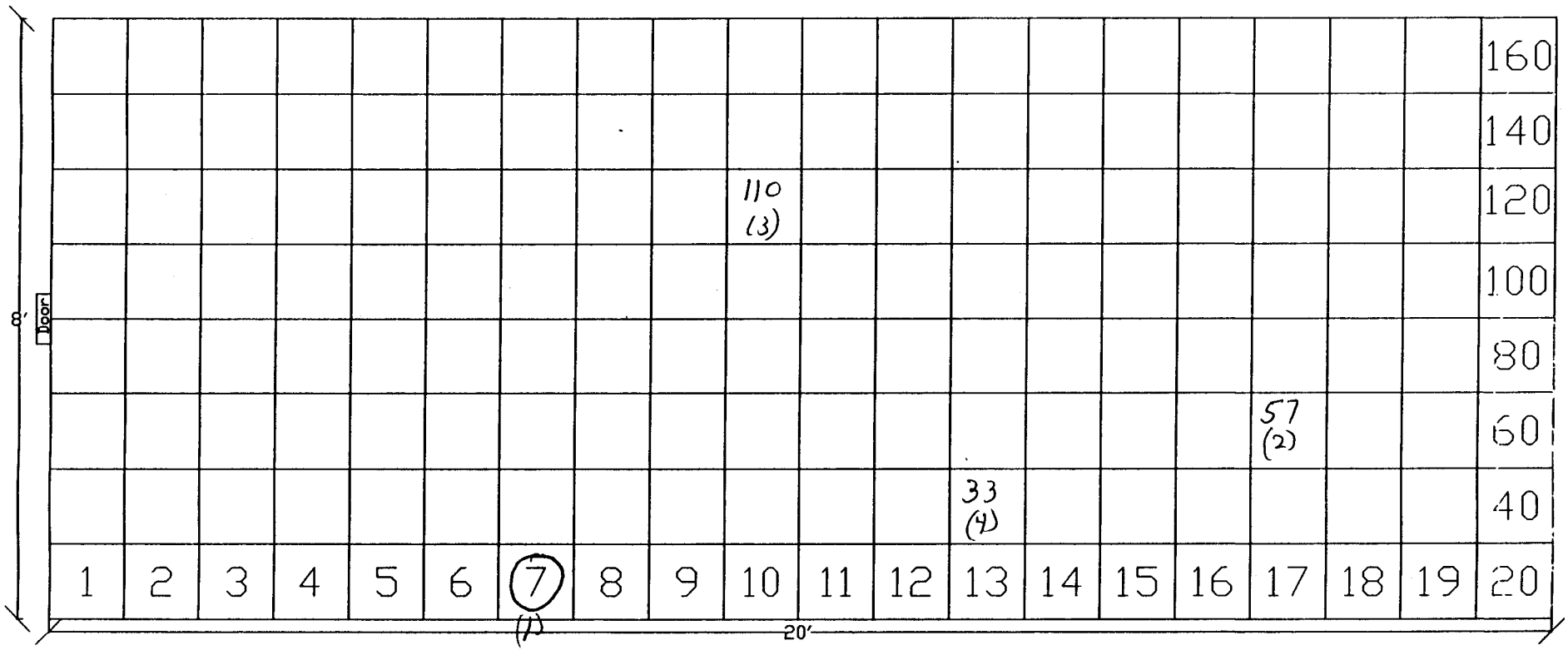


Sample Team _____

Notes #43 1545

WSMR Commissary Landfill
Material Sampling

BIN No. B-1070 Date 9/30/94

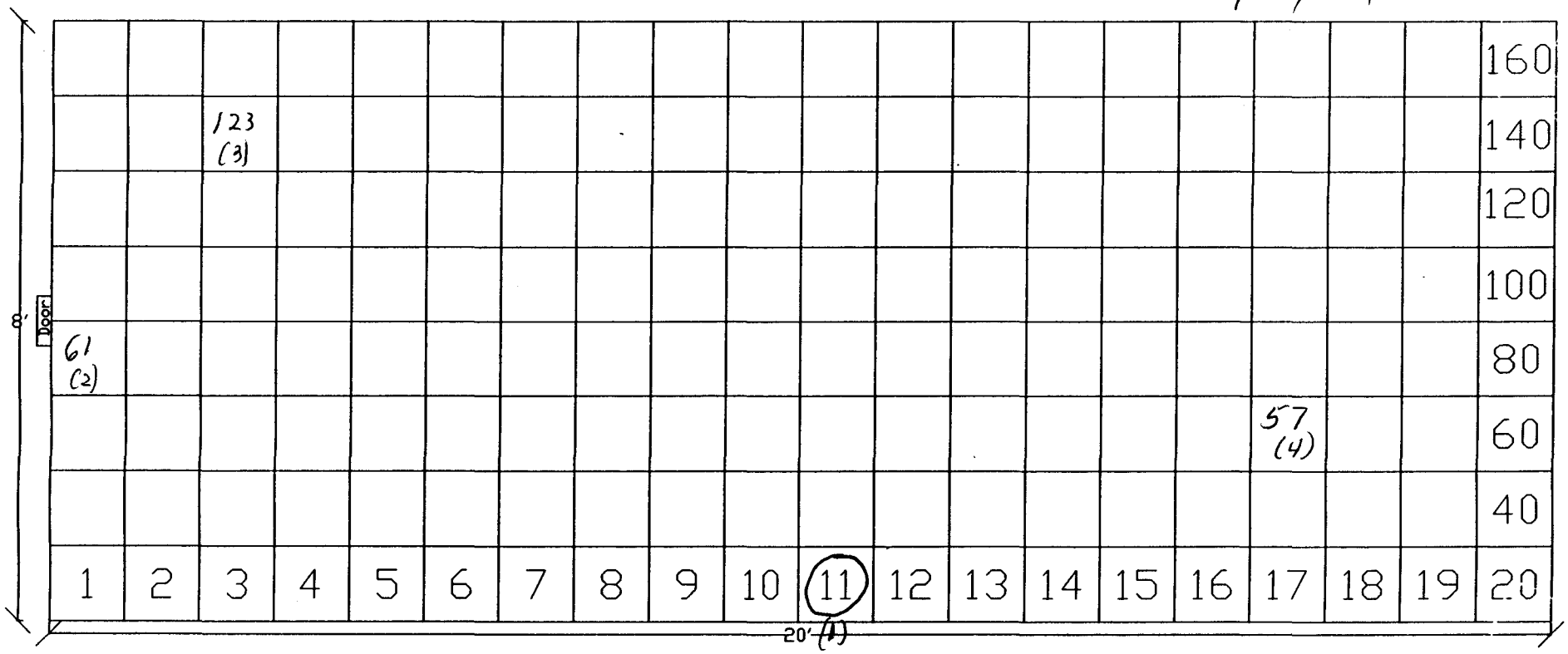


Sample Team _____

Notes #52 1115(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1071 Date 9/30/94

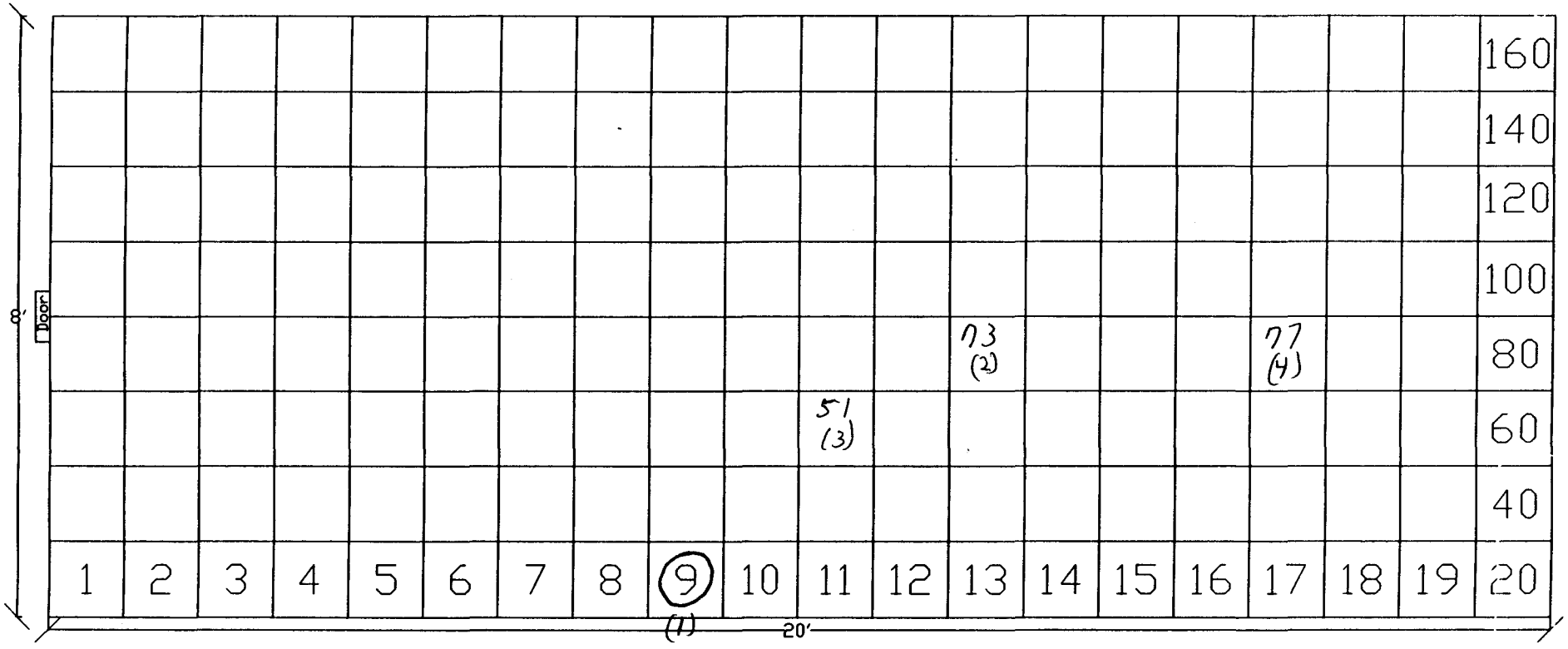


Sample Team _____

Notes ~~160~~ (A)1510

WSMR Commissary Landfill
Material Sampling

BIN No. B-1072 Date 9/30/94

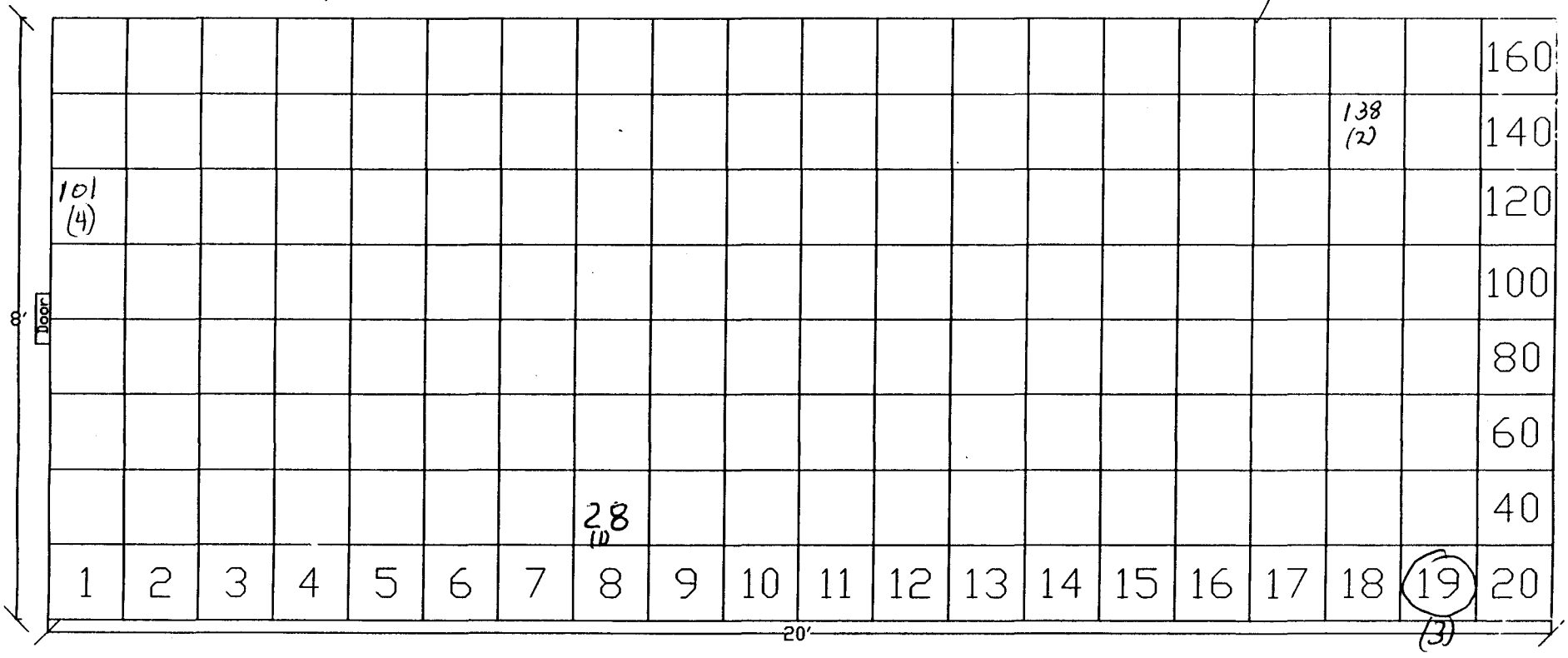


Sample Team _____

Notes #55 1135

WSMR Commissary Landfill
Material Sampling

BIN No. B-1073 Date 9/28/94

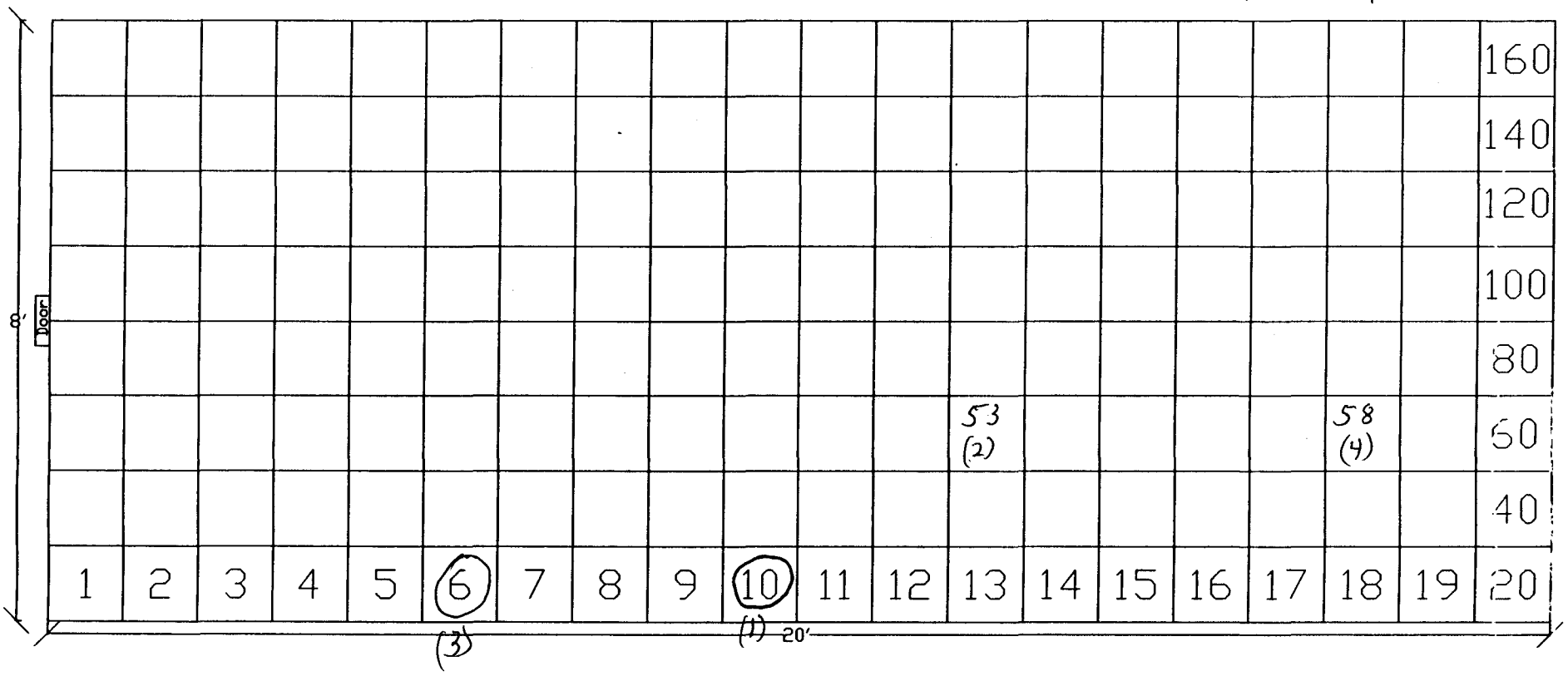


Sample Team _____

Notes #4M 11:00

WSMR Commissary Landfill
Material Sampling

BIN No. B-1014 Date 9/30/94

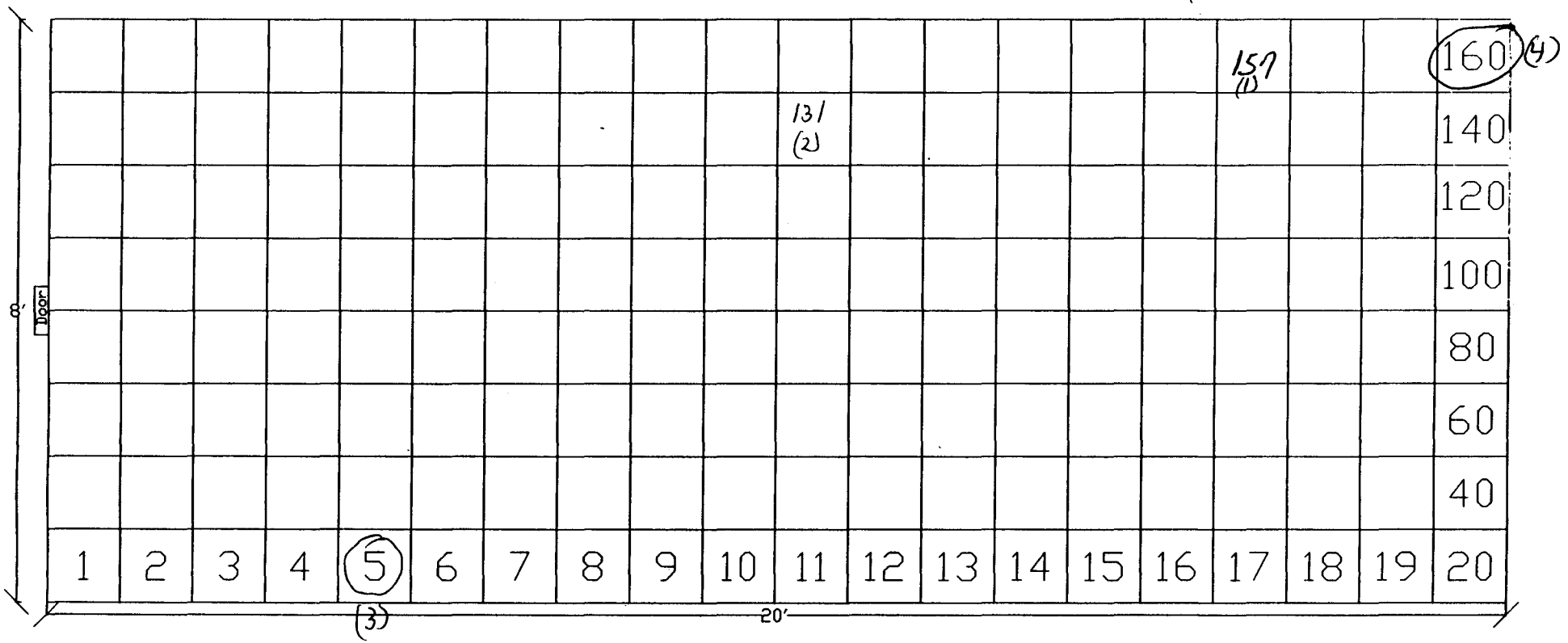


Sample Team _____

Notes #54 1125

WSMR Commissary Landfill
Material Sampling

BIN No. B-1075 Date 9/30/94

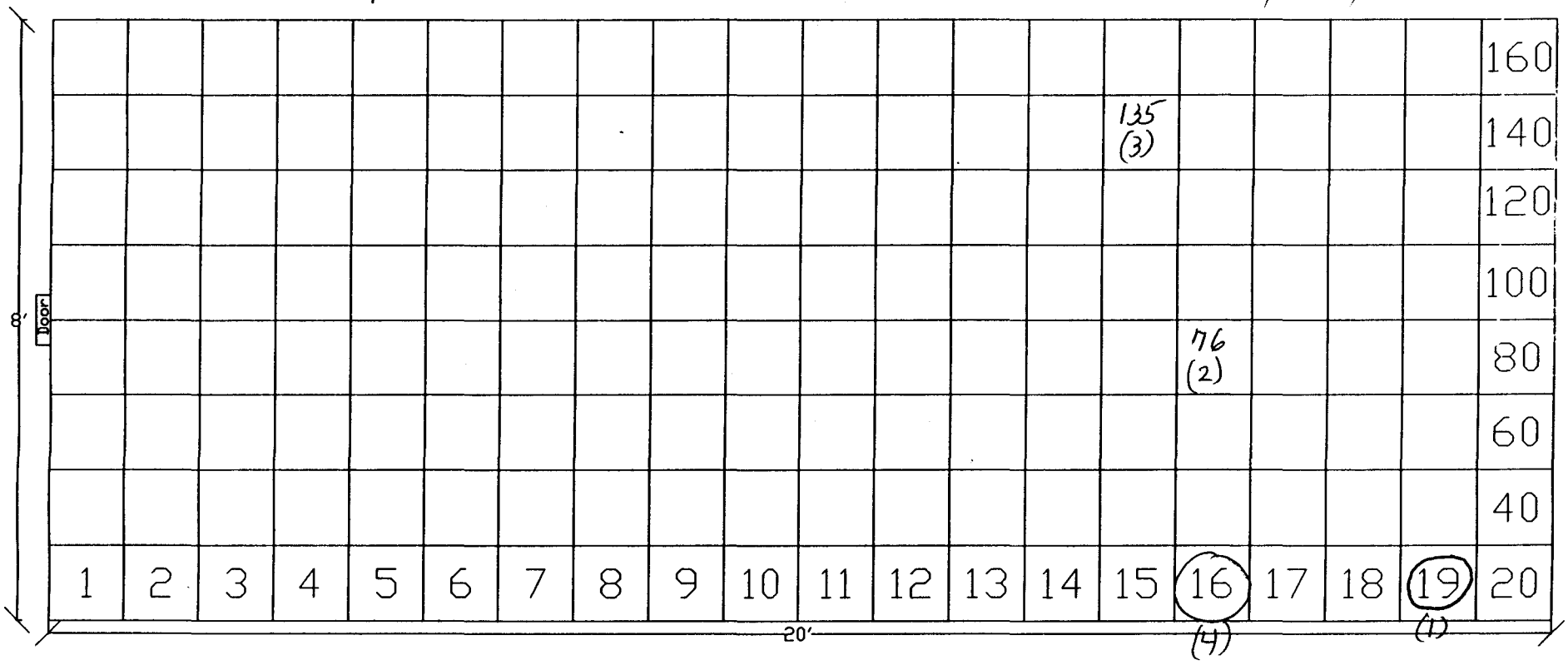


Sample Team

Notes #53 1125

WSMR Commissary Landfill
Material Sampling

BIN No. B-1076 Date 9/30/94



Sample Team _____

Notes #56 150(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1077 Date 9/30/94

																				160
	122 (4)			125 (3)																140
																				120
																				100
																				80
													53 (1)							60
																			39 (2)	40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

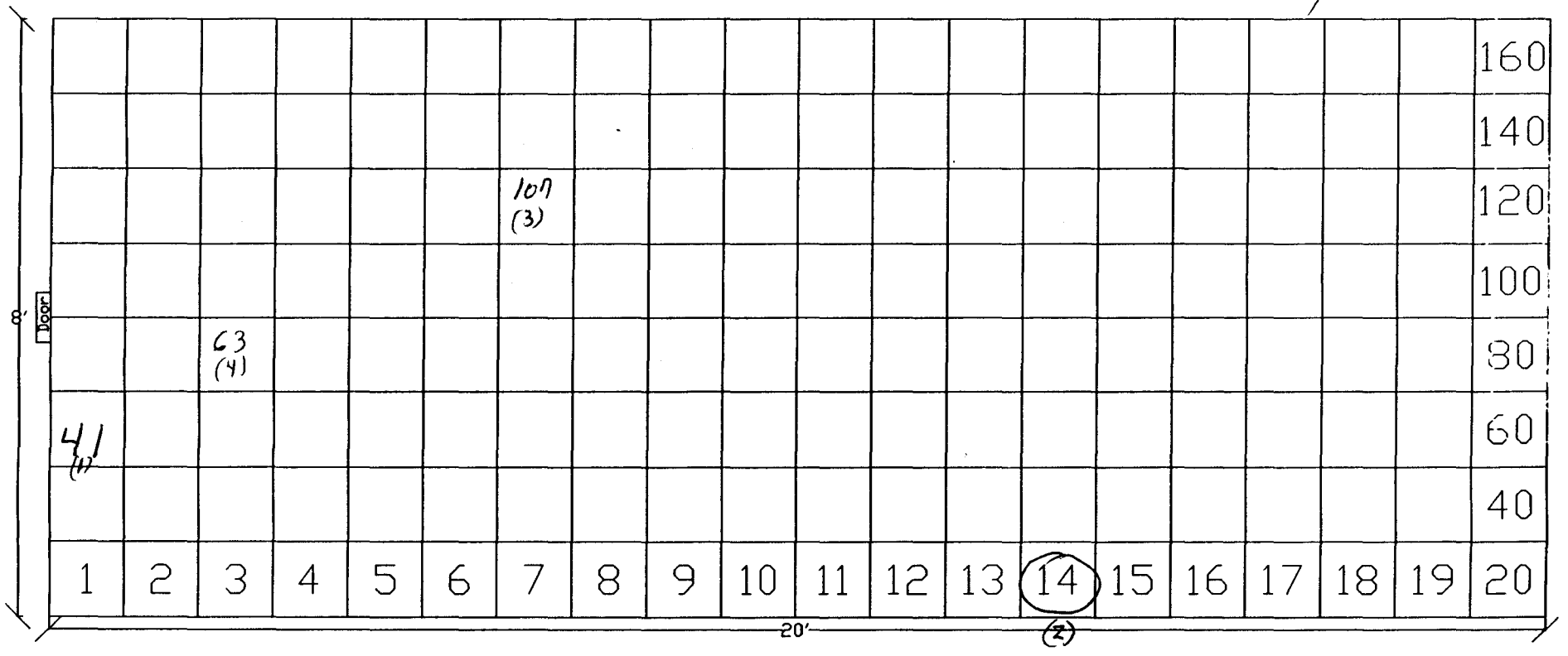
8' Door 20'

Sample Team

Notes #[redacted]51 1030 (F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1078 Date 9/30/94

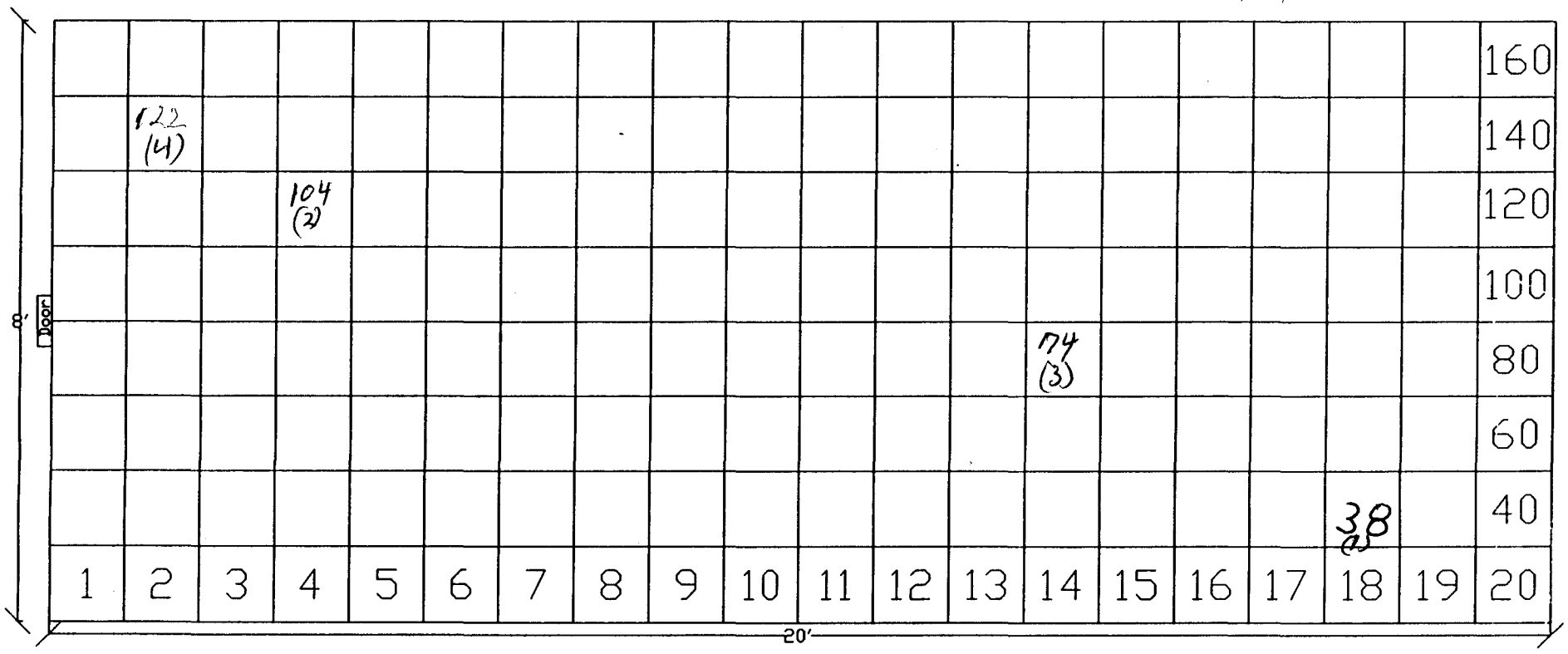


Sample Team

Notes 591420(5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1079 Date 10/1/94

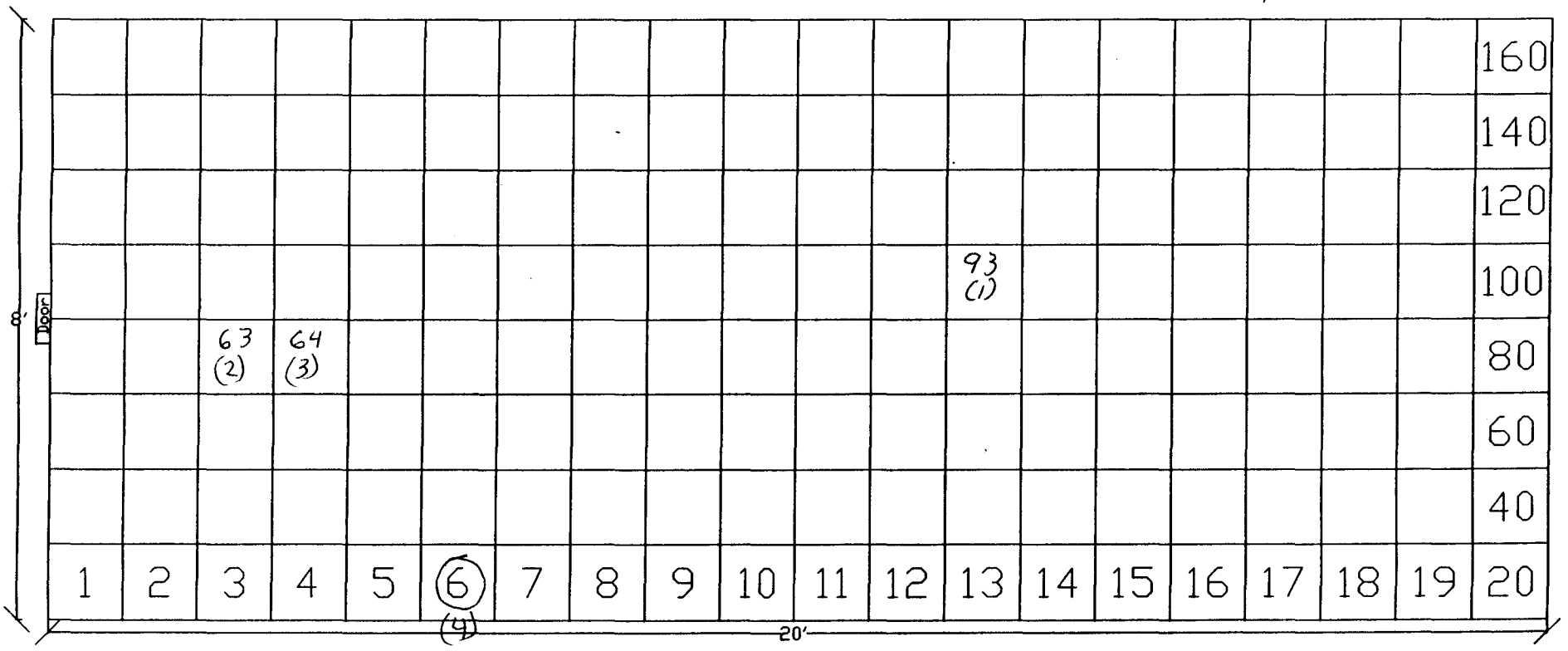


Sample Team _____

Notes #66 745(7)

WSMR Commissary Landfill
Material Sampling

BIN No. B-108 (1) Date 10/1/94



Sample Team _____

Notes #68 855(5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1081 Date 10/1/94

																				160
																				140
																			119 (4)	120
									90 (3)											100
																				80
																		58 (1)		60
				25 (2)																40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

8' Door 20'

Sample Team _____

Notes #71 915 (5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1082 Date 10/1/94

									150 (2)											160
																				140
																				120
			84 (4)											95 (1)						100
																				80
																				60
		23 (3)																		40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

8' Door 20'

Sample Team

Notes #69 (5) 91,00

WSMR Commissary Landfill
Material Sampling

BIN No. B-1083 Date 10/1/94

																	157 (3)			160
																	137 (4)			140
				105 (2)																120
																				100
						67 (1)														80
																				60
																				40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

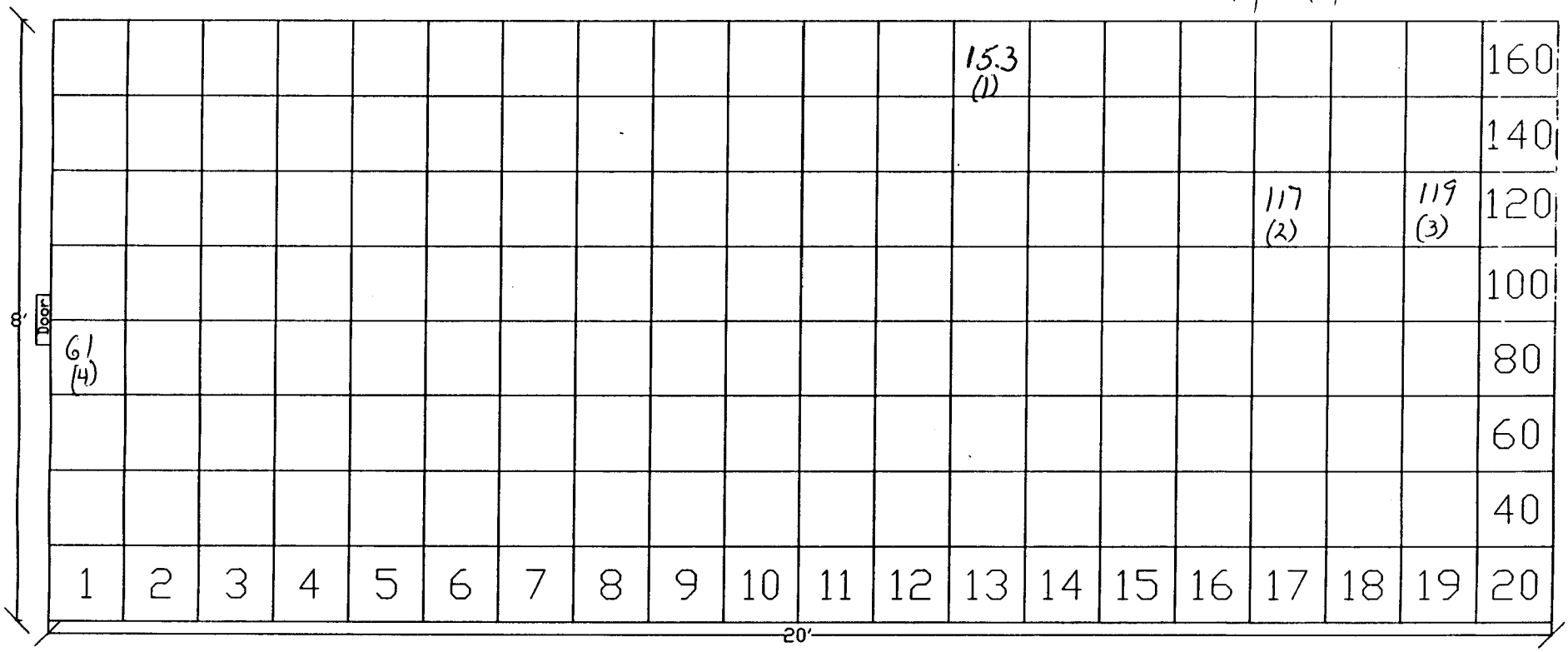
8' Door 20'

Sample Team _____

Notes ~~170~~ 905 (5)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1084 Date 9/27/94



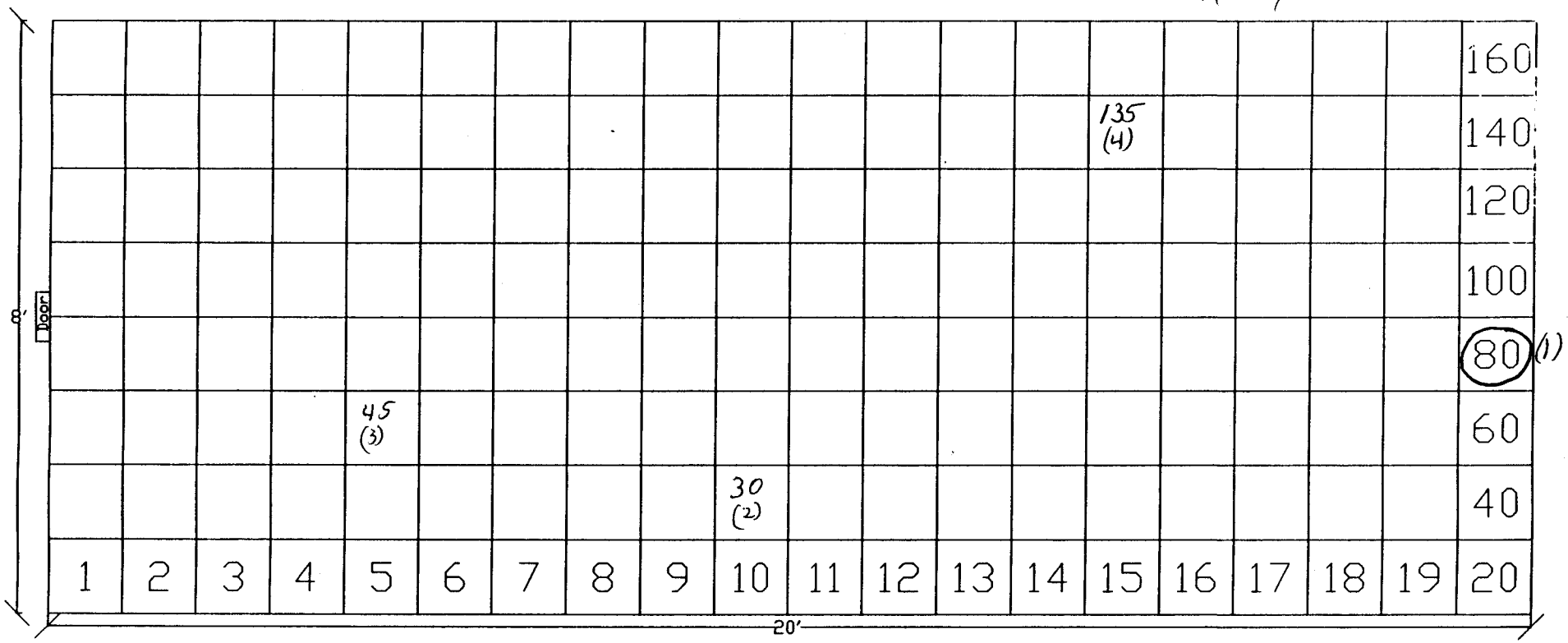
Sample Team _____

Notes #40 1420

X

WSMR Commissary Landfill
Material Sampling

BIN No. B-1085 Date 9/30/94

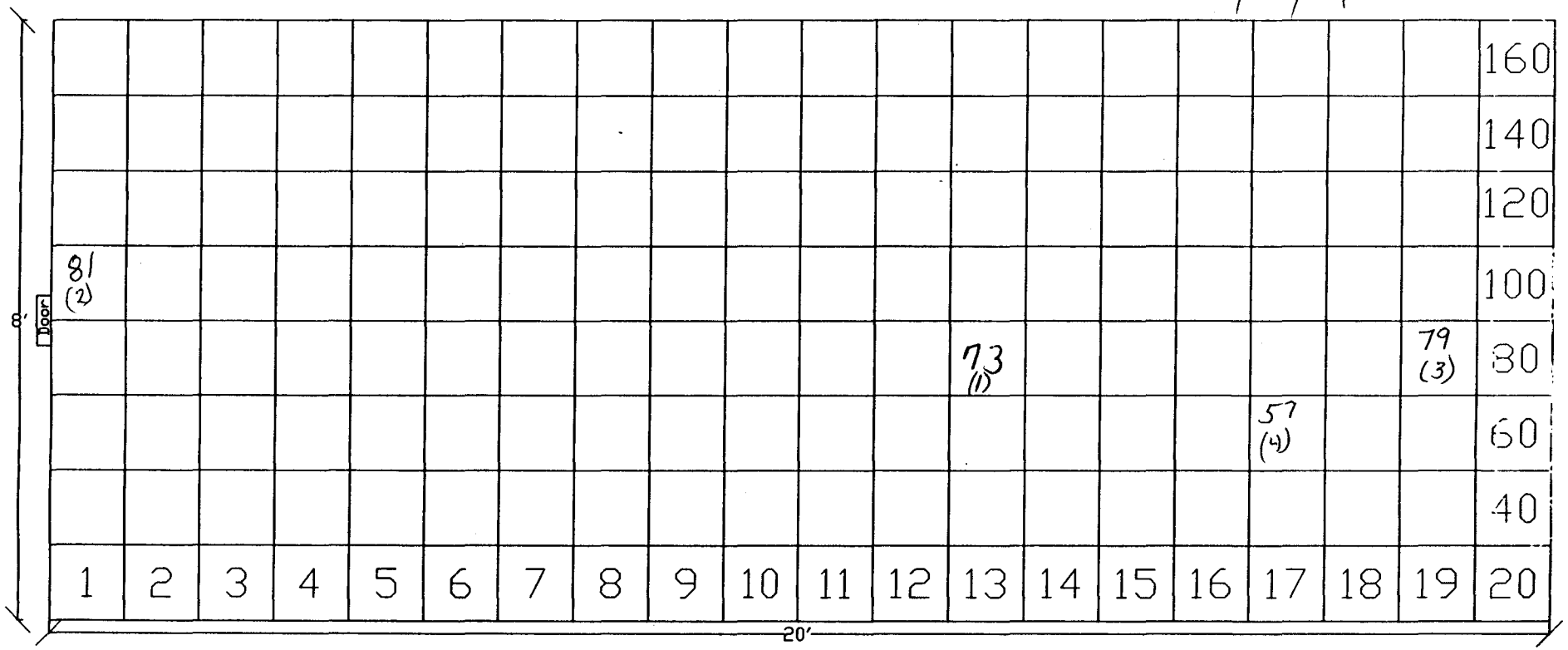


Sample Team _____

Notes #49 10:10 (F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1086 Date 9/30/94



Sample Team _____

Notes #50 1020

WSMR Commissary Landfill
Material Sampling

BIN No. B-1087 Date 10/3/94

		143 (3)																		160
																				140
														115 (1)						120
																				100
					66 (4)															80
																				60
							28 (2)													40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

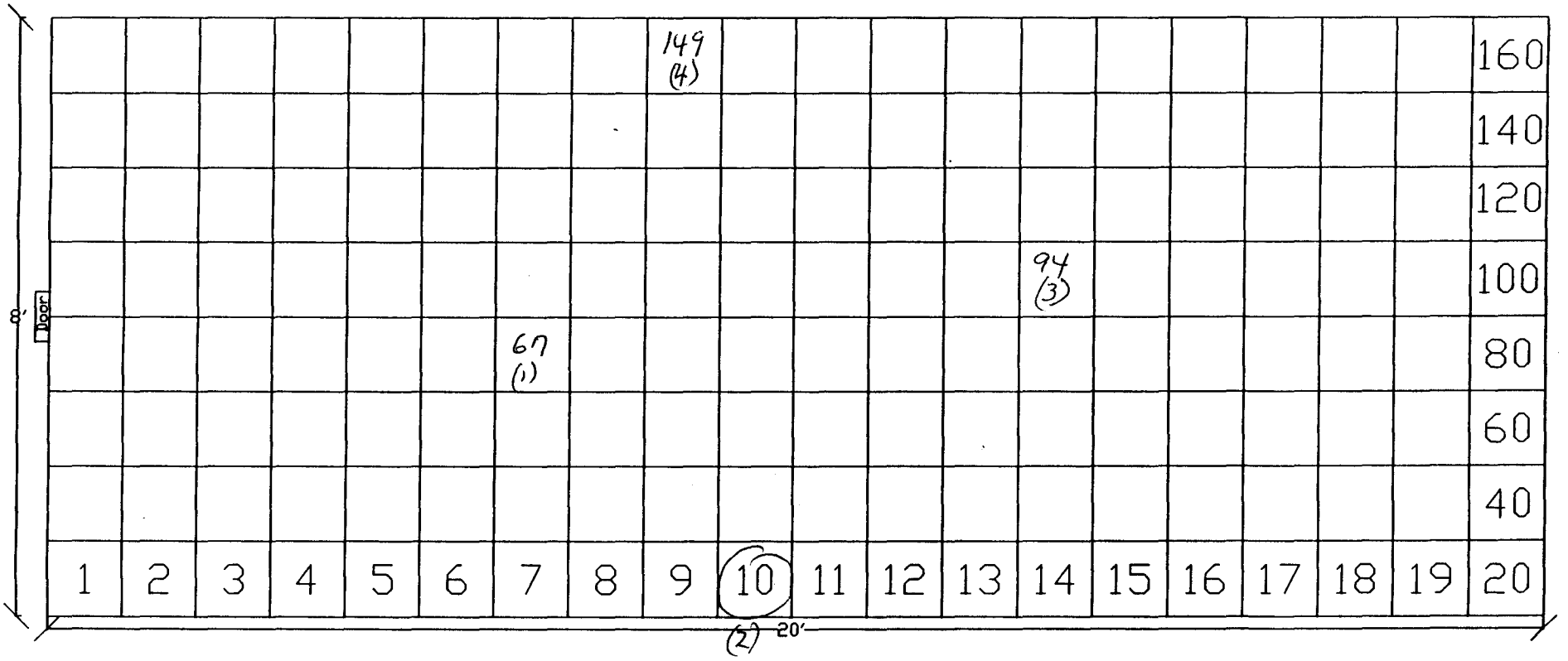
8' Door 20'

Sample Team

Notes #80 1030(F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1088 Date 10/3/94



Sample Team _____

Notes #81 10:40

WSMR Commissary Landfill
Material Sampling

BIN No. B-1089 Date 10/3/94

																				160
121 (2)			124 (3)																	140
																				120
				85 (1)			88 (4)													100
																				80
																				60
																				40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

8' Door

20'

Sample Team

Notes #79 1020 (F)

WSMR Commissary Landfill
Material Sampling

BIN No. B-1090 Date 10/3/94

														155 (2)					160
				125 (1)															140
	102 (3)																		120
																			100
																			80
																			60
						27 (4)													40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

8' Door 20'

Sample Team _____

Notes #78 0930(f)

APPENDIX F

ANALYTICAL RESULTS AND CHAIN OF CUSTODY

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS	
ASI / WSMR	555 S. TELSHOR SUITE 310	
CONTACT PERSON: G. JORDAN	LAS CRUCES NM. 88011	
TELEPHONE: 505 522 7229	PROJECT: COMMISSARY SWMU BINS	JOB/~~P.O. NO.~~: 600.11

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - Soil, O - Oil, T - Travel Blank, W - Water, G - Sludge, F - Field Blank, X - Other (specify) _____

SAMPLE / COOLER TEMPERATURE: rec'd on ice

*	SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	TCLP METALS	TCLP VOLATILES	TCLP SEMI VOLATILES	PCB - METHOD 8080	TCLP - PEST + HERB.					COMMENTS	LABORATORY IDENTIFICATION
*	B-1010	9/21	1345	WSMR COMMISSARY SWMU BINS	✓		S								✓	✓	✓	✓	✓					10-15 DAY TURN	6404351
*	B-854	9/21	1445	"	✓		S								✓	✓	✓	✓	✓					"	4352
*	B-998	"	1510	"	✓		S								✓	✓	✓	✓	✓					"	4353
*	B-1036	"	1545	"	✓		S								✓	✓	✓	✓	✓					"	4354
*	B-528	"	1600	"	✓		S								✓	✓	✓	✓	✓					"	4355
*	B-764	"	1650	"	✓		S								✓	✓	✓	✓	✓					"	4356
*	B-972	"	1745	"	✓		S								✓	✓	✓	✓	✓					"	4357
*	B-789	9/22	1000	"	✓		S								✓	✓	✓	✓	✓					"	4358
*	B-877	9/22	1015	"	✓		S								✓	✓	✓	✓	✓					"	4359
*	B-918	"	1100	"	✓		S								✓	✓	✓	✓	✓					"	4360
*	B-797	"	1130	"	✓		S								✓	✓	✓	✓	✓					"	4361
*	B-1034	"	1250	"	✓		S								✓	✓	✓	✓	✓					"	4362
*	B-828	"	1310	"	✓		S								✓	✓	✓	✓	✓					"	4363
	B-771	"	1340	"	✓		S								✓	✓	✓	✓	✓					"	4364
*	B-960	"		"	✓		S								✓	✓	✓	✓	✓					"	4365

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		9-22-94 16:55

REMARKS _____

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☐ Other (specify) _____

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT: ASI/WSMR	ADDRESS: 555 S. TELSHOR
CONTACT PERSON: GARY JORDAN	LAS CRUCES NM 88011
TELEPHONE: 505 522-7229	PROJECT: WSMR COMMISSARY BINS — JOB/~~P.O. NO.~~: 600-11

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): George ESQUEDA

SAMPLE TYPE CODES: S - Soil; O - Oil; T - Travel Blank; W - Water; G - Sludge; F - Field Blank; X - Other (specify) _____

SAMPLE/COOLER TEMPERATURE: need on ice

	SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	TCLP METALS	TCLP VOLATILES	TCLP-SEMI VOLAT.	TCLP-PEST-HERB.	PCB-8080				COMMENTS	LABORATORY IDENTIFICATION
x	B-706	9/22	1400	WSMR Comm. Sumo Bins			S								✓	✓	✓	✓	✓				10-15 DAY T/A	6404366
x	B-692	9/22	1500	WSM Com Sumo Bins			S								✓	✓	✓	✓	✓				" "	" 4367
x	B-888	9/22	1537	WSMR " "			S								✓	✓	✓	✓					" "	" 4368
x	B-872	9/22	1550	WSMR " " "			S								✓	✓	✓	✓	✓				not on coc when sample arrived	4369

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[illegible]		16:55 9-22-94

REMARKS _____

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☐ Other (specify) _____

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

Page 1 of ____

CLIENT: ASI / WSMR	ADDRESS: 555 S. TELSHOR
CONTACT PERSON: GARY JORDAN	LAS CRUCES, NM
TELEPHONE: (505) 522-7229	PROJECT: COMMISSARY SWMU BINS — JOB ~~P.O. NO.~~: 600611
FAX: (505) 522-7014	WESTECH QUOTE / CONTRACT NO.

• SEE FEE SCHEDULE •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - SOIL, O - OIL, G - SLUDGE, D - DRINKING WATER, W - WASTEWATER, T - TRAVEL BLANK, F - FIELD BLANK, X - OTHER (SPECIFY): ____

SAMPLE / COOLER TEMPERATURE:

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	NO. CONTAINERS	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	TCLP METALS	TCLP VOLATILES	TCLP SEMI VOLs	TCLP-PEST+HERB	PCB-8080	COMMENTS	LABORATORY IDENTIFICATION
B-868	9/23/94	1010	WSMR COMMISSARY SWMU				S								✓	✓	✓	✓	✓	10-15 DAY	6404393
B-936	"	1020	WSMR " "				S								✓	✓	✓	✓	✓		6404394
B-965	"	1040	" " "				S								✓	✓	✓	✓	✓		6404395
B-1028	"	1125	" " "				S								✓	✓	✓	✓	✓		6404396
B-1066	"	1140	" " "				S								✓	✓	✓	✓	✓		6404397
B-1067	"	1200	" " " "				S								✓	✓	✓	✓	✓		6404398
B-1068	"	1210	" " " "				S								✓	✓	✓	✓	✓		6404399
B-1090	"	1310	" " " "				S								✓	✓	✓	✓	✓		6404400
B-1038	"	1345	" " " "				S								✓	✓	✓	✓	✓		6404401
B-962	"	1355	" " "				S								✓	✓	✓	✓	✓		6404402
B-589	"	1420	" " "				S								✓	✓	✓	✓	✓		6404403
B-812	"	1515	" " "				S								✓	✓	✓	✓	✓		6404404
B-755	"	1530	" " "				S								✓	✓	✓	✓	✓		6404405
B-563	"	1545	" " "				S								✓	✓	✓	✓	✓		6404406

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		16:50 9-23-94

REMARKS ____

☐ Fax Results ☐ Special Detection Limits / Requirements

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☐ Other (specify) ____

623 ©94 WTI White – Laboratory; Yellow – Work File; Pink – Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

Page 1 of 1

CLIENT: ASI/WSMR	ADDRESS: 555 SOUTH TELSHOR
CONTACT PERSON: CARY JORDAN	LAS CRUCES NM 88011
TELEPHONE: (505) 522-7229	PROJECT: WSMR COMMISSARY / JOB / ~~P.O. NO.~~: 600.11
FAX: (505) 522-7014	WESTECH QUOTE / CONTRACT NO.

• SEE FEE SCHEDULE •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - SOIL, O - OIL, G - SLUDGE, D - DRINKING WATER, W - WASTEWATER, T - TRAVEL BLANK, F - FIELD BLANK, X - OTHER (SPECIFY): _____

SAMPLE/COOLER TEMPERATURE:

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	NO. CONTAINERS	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	TCLP METALS	TCLP VOLATILES	TCLP SEMI VOL	TCLP-PESTICIDES	PCB-8080	COMMENTS	LABORATORY IDENTIFICATION
B-641	9/26/94	1405	WSMR Comm. BINS				S								✓	✓	✓	✓	✓	10-15 DAY	6404441
B-890	9/26/94	1410	" " "				S								✓	✓	✓	✓	✓	"	6404442
B-628	9/26/94	1420	" " "				S								✓	✓	✓	✓	✓	"	6404443
B-852	9/26/94	1430	" " "				S								✓	✓	✓	✓	✓	"	6404444
B-1032	9/27/94	1400	" " "				S								✓	✓	✓	✓	✓	"	6404445
B-1063	9/27/94	1410	" " "				S								✓	✓	✓	✓	✓	"	6404446
B-1084	9/27/94	1420	" " "				S								✓	✓	✓	✓	✓	"	6404447
B-1064	9/27/94	1515	" " "				S								✓	✓	✓	✓	✓	"	6404448
B-1065	9/27/94	1530	" " "				S								✓	✓	✓	✓	✓	"	6404449
B-1069	9/27/94	1545	" " "				S								✓	✓	✓	✓	✓	"	6404450

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Mary Jordan	CARY JORDAN	[signature]		17:00 9-27-94

REMARKS _____

☐ Fax Results ☐ Special Detection Limits / Requirements

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☐ Other (specify) _____

623 ©94 WTI White – Laboratory; Yellow – Work File; Pink – Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS	
ASI/WSMR	555 S. TELSHOR	
CONTACT PERSON: GARY JORDAN	LAS CRUCES, NM	
TELEPHONE: (505) 522-7229	PROJECT: WSMR Comm. BINS	JOB/P.O. NO.: 600-11

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esquida
(PRINT NAME): GEORGE ESQUIDA

SAMPLE TYPE CODES: S - Soil, O - Oil, T - Travel Blank, W - Water, G - Sludge, F - Field Blank, X - Other (specify) _____

SAMPLE/COOLER TEMPERATURE:

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	TCLP METALS	TCLP VOL.	TCLP SEMI VOL	TCLP-PEST PCB-8080				COMMENTS	LABORATORY IDENTIFICATION
B-1041	9/28/94	1040	WSMR Comm. BINS			S								✓	✓	✓	✓				10-15 DAY TURN	6404473
B-915	9/28/94	1050	" " "			S								✓	✓	✓	✓					6404474
B-688	9/28/94	1055	" " "			S								✓	✓	✓	✓					6404475
B-1073	9/28/94	1100	" " "			S								✓	✓	✓	✓					6404476

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		9-28-94 16:14

REMARKS _____

SAMPLE PROCESS TURNAROUND TIME:
☒ Standard ☐ Other (specify) _____

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT: ASI/WSMR	ADDRESS: 555 S. TELSHOR SUITE 310
CONTACT PERSON: GARY JORDAN	LAS CRUCES NM
TELEPHONE: (505) 522-7229	PROJECT: WSMR Comm Bins / JOB/P.O. NO.: 600011

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esquela
(PRINT NAME): GEORGE Esquela

SAMPLE TYPE CODES: S - Soil, W - Water, X - Other (specify), O - Oil, G - Sludge, T - Travel Blank, F - Field Blank

SAMPLE / COOLER TEMPERATURE:

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	NO. CONTAINERS W/ PRESERVATIVES: Unpreserved	HNO_3	NaOH	H_2SO_4	HCl		HOLD (Do Not Analyze)	REQUESTED ANALYSES: TCLP-FULL	PCB-8080							COMMENTS	LABORATORY IDENTIFICATION
B-1077	9/30/94	1030	WSMR Comm Bins			S								✓	✓							10-15-DAYTOW	6404517
B-1086	"	1020	" "			S								✓	✓								" 4518
B-1085	"	1010	" "			S								✓	✓								4519
B-513	"	1000	" "			S								✓	✓								4520
B-1070		1115	" "			S								✓	✓								4521
B-1075		1120	" "			S								✓	✓								4522
B-1074		1130	" "			S								✓	✓								4523
B-1072		1135	" "			S								✓	✓								4524
B-1076		1350	" "			S								✓	✓								4525
B-1056		1400	" "			S								✓	✓								4526
B-713		1410	" "			S								✓	✓								4527
B-1078		1420	" "			S								✓	✓								4528
B-1071		1510	" "			S								✓	✓								4529
B-685		1515	" "			S								✓	✓								4530
B-1046		1525	" "			S								✓	✓								4531

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN			
		B Thompson		9/30/94 1700

REMARKS

SAMPLE PROCESS TURNAROUND TIME: ☒ Standard ☐ Other (specify)

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT: ASI/WSMR	ADDRESS: 555 S. TELSHOR
CONTACT PERSON: GARY JORDAN	LAS CRUCES, NM
TELEPHONE: 505 522-7225	PROJECT: WSMR Comm. BINS / JOB ~~P.O. NO.~~: 600611

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE Esqueda

SAMPLE TYPE CODES: S - Soil, W - Water, X - Other (specify), O - Oil, G - Sludge, T - Travel Blank, F - Field Blank

SAMPLE/COOLER TEMPERATURE: rec'd on ice

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	NO. CONTAINERS W/PRESERVATIVES: Unpreserved	HNO_3	NaOH	H_2SO_4	HCl	(Do Not Analyze) HOLD	REQUESTED ANALYSES: TCLP-FULL	PCB-8080	COMMENTS	LABORATORY IDENTIFICATION
B-974	9/30/94	1530	WSMR Comm BINS	✓		S							✓	✓	10-15 DAY TURN	6404540
B-1042	10/1/94	725	WSMR Comm. BINS	✓		S							✓	✓		" 4541
B-655	10/1/94	735	WSMR Comm BINS	✓		S							✓	✓		4542
B-1079	"	745	" " "	✓		S							✓	✓		4543
B-1007	"	755	" " "	✓		S							✓	✓		4544
B-1080	"	855	" " "	✓		S							✓	✓		4545
B-1082	"	900	" " "	✓		S							✓	✓		4546
B-1083	"	905	" " "	✓		S							✓	✓		4547
B-1081	"	915	" " "	✓		S							✓	✓		4548
B-50G	"	1030	" " "	✓		S							✓	✓		4549
B-810	"	1035	" " "	✓		S							✓	✓		4550
B-675	"	1040	" " "	✓		S							✓	✓		4551

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[illegible]		14:32 10-3-94

REMARKS: fax

SAMPLE PROCESS TURNAROUND TIME: ☐ Standard ☐ Other (specify) 10-15 days

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS	
ASI / WSMR	555 S. TEISHOR	
CONTACT PERSON: GARY JORDAN	LAS CRUCES, NM 88011	
TELEPHONE: 505-522-7229	PROJECT: WSMR Comm. BINS	JOB/~~P.O. NO.~~: 600-11

• REFER TO FEE SCHEDULE FOR ANALYSIS SELECTION •

SAMPLER (SIGNATURE): George Esqueda
(PRINT NAME): GEORGE ESQUEDA

SAMPLE TYPE CODES: S - Soil, O - Oil, T - Travel Blank, W - Water, G - Sludge, F - Field Blank, X - Other (specify) _____

SAMPLE / COOLER TEMPERATURE:

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	NO. CONTAINERS W/ PRESERVATIVES: Unpreserved	HNO_3	NaOH	H_2SO_4	HCl	(Do Not Analyze) HOLD	REQUESTED ANALYSES: TCLP FVT	PCB-8080	COMMENTS	LABORATORY IDENTIFICATION
B-1020	10/3/94	0900	WSMR Comm Bins	✓		S							✓	✓	10-15 DAY TURN	6404552
B-561	"	0910	" " "	✓		S							✓	✓		" 4553
B-805	"	0920	" " "	✓		S							✓	✓		4554
B-1090	"	0930	" " "	✓		S							✓	✓		4555
B-1089	"	1020	" " "	✓		S							✓	✓		4556
B-1087	"	1030	" " "	✓		S							✓	✓		4557
B-1088	"	1040	" " "	✓		S							✓	✓		4558
B-1051	"	1050	" " "	✓		S							✓	✓		4559

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Gary Jordan	GARY JORDAN	[signature]		14:32 10-3-94

REMARKS _____

SAMPLE PROCESS TURNAROUND TIME:
☒ Standard ☐ Other (specify) _____

623 ©93 WTI White - Testing Laboratory; Yellow - Department Job File; Pink - Client

TCLP METALS

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404549
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-50G
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.70	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	0.06	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404520
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-513
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	0.32	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404355
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-528
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.25	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-26-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-26-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-26-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-26-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404553
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-561
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.39	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	0.46	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404406
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-563
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	2.7	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404403
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-589
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.51	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.27	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404443
INVOICE NO.: 62141023
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-628
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	8.3	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404441
INVOICE NO.: 62141023
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-641
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	8.4	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404542
INVOICE NO.: 62141052
REPORT DATE: 10-14-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-655
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.68	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	1.4	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404551
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-675
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.60	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404530
INVOICE NO.: 62141048
REPORT DATE: 10-14-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-685
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404475
INVOICE NO.: 62141032
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-688
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.66	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	0.46	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404367
INVOICE NO.: 62141006
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-692
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.49	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404366
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-706
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.45	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.20	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404527
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-713
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.45	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	0.83	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404405
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-755
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.36	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404356
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-764
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.34	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-26-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-26-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-26-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-26-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404364
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-771
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.40	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	0.55	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404358
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-789
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.33	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404361
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-797
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.42	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404554
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-805
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.67	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	0.35	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404550
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-810
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.54	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	0.10	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	1.1	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404404
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-812
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.53	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.27	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404363
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY: AMP
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-828
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.49	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	0.50	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404444
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-852
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	2.0	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404352
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-854
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.26	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-26-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-26-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-26-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-26-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404393
INVOICE NO.: 62141012
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-868
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.48	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	15	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404369
INVOICE NO.: 62141006
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-872
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.47	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404359
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-877
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.35	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404368
INVOICE NO.: 62141006
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-888
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.35	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	0.70	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404442
INVOICE NO.: 62141023
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-890
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	3.4	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404474
INVOICE NO.: 62141032
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-915
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.43	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	0.23	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404360
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-918
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.59	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	0.29	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404394
INVOICE NO.: 62141012
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-936
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.70	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.23	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404365
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-960
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.47	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404402
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-962
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.64	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	g/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.22	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404395
INVOICE NO.: 62141012
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-965
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.58	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.48	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404357
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-972
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.47	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404540
INVOICE NO.: 62141052
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-974
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.61	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	2.1	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404353
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-998
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.26	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-26-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-26-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	09-26-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-26-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404544
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1007
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: N.Munir

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-11-94

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit
Arsenic (TCLP) .....:	<0.010	mg/L	0.010
Barium (TCLP) .....:	0.57	mg/L	0.20
Cadmium (TCLP) .....:	<0.05	mg/L	0.05
Chromium (TCLP) .....:	<0.10	mg/L	0.10
Lead (TCLP) .....:	0.49	mg/L	0.20
Mercury (TCLP) .....:	<0.010	mg/L	0.010
Selenium (TCLP) .....:	<0.010	mg/L	0.010
Silver (TCLP) .....:	<0.05	mg/L	0.05

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404351
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1010
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP)	<0.010	mg/L	0.010	09-26-94
Barium (TCLP)	0.33	mg/L	0.20	09-28-94
Cadmium (TCLP)	<0.05	mg/L	0.05	09-26-94
Chromium (TCLP)	<0.10	mg/L	0.10	09-26-94
Lead (TCLP)	<0.20	mg/L	0.20	09-26-94
Mercury (TCLP)	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP)	<0.010	mg/L	0.010	09-27-94
Silver (TCLP)	<0.05	mg/L	0.05	09-26-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404552
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1020
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.31	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404396
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1028
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.69	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.29	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404445
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1032
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.43	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404362
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1034
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	0.50	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-28-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-28-94
Lead (TCLP) .....:	1.7	mg/L	0.20	09-28-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-28-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404354
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1036
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-26-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	09-28-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-26-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-26-94
Lead (TCLP) .....:	1.3	mg/L	0.20	09-26-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-27-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-26-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404401
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1038
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.66	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.49	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404400
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1040
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.76	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.34	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404473
INVOICE NO.: 62141032
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1041
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.60	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	0.21	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404541
INVOICE NO.: 62141052
REPORT DATE: 10-14-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1042
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.72	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	0.94	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404531
INVOICE NO.: 62141048
REPORT DATE: 10-14-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1046
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.66	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404559
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1051
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.73	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	2.1	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404526
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1056
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.85	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	6.7	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404446
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1063
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.48	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404448
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1064
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.26	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.30	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404449
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1065
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.26	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	10	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404397
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1066
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.56	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.44	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404398
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1067
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.56	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	1.0	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404399
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1068
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	0.020	mg/L	0.010	09-29-94
Barium (TCLP) .....:	0.62	mg/L	0.20	10-01-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	52	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	09-29-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404450
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1069
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.32	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	0.77	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404521
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1070
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.60	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	1.2	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404529
INVOICE NO.: 62141048
REPORT DATE: 10-14-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1071
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.23	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404524
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1072
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.52	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	0.26	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404476
INVOICE NO.: 62141032
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1073
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.59	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	2.1	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404523
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1074
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.49	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404522
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1075
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.46	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404525
INVOICE NO.: 62141048
REPORT DATE: 10-14-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1076
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.64	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	11	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404517
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1077
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.53	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404528
INVOICE NO.: 62141048
REPORT DATE: 10-14-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1078
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	<0.20	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	0.06	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	1.8	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404543
INVOICE NO.: 62141052
REPORT DATE: 10-14-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1079
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better revovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.67	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	0.42	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404545
INVOICE NO.: 62141052
REPORT DATE: 10-14-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1080
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.63	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404548
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1081
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.69	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404546
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1082
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.68	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	0.41	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404547
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1083
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better revovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.65	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404447
INVOICE NO.: 62141023
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1084
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --

TCLP Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Barium (TCLP) .....:	0.26	mg/L	0.20	10-03-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	09-30-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	09-30-94
Lead (TCLP) .....:	1.3	mg/L	0.20	09-30-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-05-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-07-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	09-30-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404519
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1085
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.59	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	2.9	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404518
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1086
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better spike recovery.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Barium (TCLP) .....:	0.58	mg/L	0.20	10-11-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-10-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-10-94
Lead (TCLP) .....:	3.5	mg/L	0.20	10-10-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-11-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-17-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-10-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404557
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1087
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.74	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	2.7	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404558
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1088
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.41	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	1.8	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404556
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1089
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-13-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.53	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	0.35	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404555
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1090
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --

REMARKS -

Poor spike recovery for Selenium and Arsenic due to matrix interferences. 10X dilution showed 85% or better recovery on spike.

TCLP Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Arsenic (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Barium (TCLP) .....:	0.72	mg/L	0.20	10-14-94
Cadmium (TCLP) .....:	<0.05	mg/L	0.05	10-14-94
Chromium (TCLP) .....:	<0.10	mg/L	0.10	10-13-94
Lead (TCLP) .....:	<0.20	mg/L	0.20	10-13-94
Mercury (TCLP) .....:	<0.010	mg/L	0.010	10-14-94
Selenium (TCLP) .....:	<0.010	mg/L	0.010	10-12-94
Silver (TCLP) .....:	<0.05	mg/L	0.05	10-13-94

(1) Copy to Client

Managing Director

TCLP VOLATILES

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404549
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-50G
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404520
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-513
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene ..... :	<50	ug/L	50
Carbon tetrachloride ..... :	<50	ug/L	50
Chlorobenzene ..... :	<50.	ug/L	50.
Chloroform ..... :	<50.	ug/L	50.
1,2-Dichloroethane ..... :	<50.	ug/L	50.
1,1-Dichloroethylene ..... :	<50.	ug/L	50.
Methyl ethyl ketone ..... :	<1000	ug/L	1000
Tetrachloroethylene ..... :	<50.	ug/L	50.
Trichloroethylene ..... :	<50.	ug/L	50.
Vinyl Chloride ..... :	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404355
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-528
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404553
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-561
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404406
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-563
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-13-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404403
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-589
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404443
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-628
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404441
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-641
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404542
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-655
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404551
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-675
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404530
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-685
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404475
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-688
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404367
INVOICE NO.: 62141006
REPORT DATE: 10-13-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-692
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404366
INVOICE NO.: 62141006
REPORT DATE: 10-11-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-706
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404527
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-713
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene ..... :	<50	ug/L	50
Carbon tetrachloride ..... :	<50	ug/L	50
Chlorobenzene ..... :	<50.	ug/L	50.
Chloroform ..... :	<50.	ug/L	50.
1,2-Dichloroethane ..... :	<50.	ug/L	50.
1,1-Dichloroethylene ..... :	<50.	ug/L	50.
Methyl ethyl ketone ..... :	<1000	ug/L	1000
Tetrachloroethylene ..... :	<50.	ug/L	50.
Trichloroethylene ..... :	<50.	ug/L	50.
Vinyl Chloride ..... :	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404405
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-755
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-13-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404356
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-764
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404364
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-771
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-25-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404358
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-789
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404361
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-797
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-25-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404554
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-805
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404550
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-810
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404404
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-812
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-13-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404363
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-828
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-25-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404444
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-852
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404352
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-854
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404393
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-868
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404369
INVOICE NO.: 62141006
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-872
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404359
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-877
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404368
INVOICE NO.: 62141006
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-888
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404442
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-890
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene ..... :	<50	ug/L	50
Carbon tetrachloride ..... :	<50	ug/L	50
Chlorobenzene ..... :	<50.	ug/L	50.
Chloroform ..... :	<50.	ug/L	50.
1,2-Dichloroethane ..... :	<50.	ug/L	50.
1,1-Dichloroethylene ..... :	<50.	ug/L	50.
Methyl ethyl ketone ..... :	<1000	ug/L	1000
Tetrachloroethylene ..... :	<50.	ug/L	50.
Trichloroethylene ..... :	<50.	ug/L	50.
Vinyl Chloride ..... :	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404474
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-915
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404360
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-918
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404394
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-936
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene ..... :	<50	ug/L	50
Carbon tetrachloride ..... :	<50	ug/L	50
Chlorobenzene ..... :	<50.	ug/L	50.
Chloroform ..... :	<50.	ug/L	50.
1,2-Dichloroethane ..... :	<50.	ug/L	50.
1,1-Dichloroethylene ..... :	<50.	ug/L	50.
Methyl ethyl ketone ..... :	<1000	ug/L	1000
Tetrachloroethylene ..... :	<50.	ug/L	50.
Trichloroethylene ..... :	<50.	ug/L	50.
Vinyl Chloride ..... :	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404365
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-960
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-25-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404402
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-962
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404395
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-965
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404357
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-972
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404540
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-974
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404353
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-998
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404544
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY: MAN
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1007
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404351
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1010
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404552
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1020
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404396
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1028
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404445
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1032
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404362
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1034
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-25-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404354
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1036
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-24-94
ANALYSIS DATE .: 09-26-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404401
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1038
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404400
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1040
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404473
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1041
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404541
INVOICE NO.: 62141052
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1042
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404531
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1046
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404559
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1051
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404526
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1056
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404446
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1063
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404448
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1064
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404449
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1065
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404397
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1066
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404398
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1067
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404399
INVOICE NO.: 62141012
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1068
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-12-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404450
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1069
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404521
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1070
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404529
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1071
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404524
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1072
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404476
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1073
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404523
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1074
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404522
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1075
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404525
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1076
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404517
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1077
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404528
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1078
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene .....:	<50	ug/L	50
Carbon tetrachloride .....:	<50	ug/L	50
Chlorobenzene .....:	<50.	ug/L	50.
Chloroform .....:	<50.	ug/L	50.
1,2-Dichloroethane .....:	<50.	ug/L	50.
1,1-Dichloroethylene .....:	<50.	ug/L	50.
Methyl ethyl ketone .....:	<1000	ug/L	1000
Tetrachloroethylene .....:	<50.	ug/L	50.
Trichloroethylene .....:	<50.	ug/L	50.
Vinyl Chloride .....:	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404543
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1079
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404545
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1080
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404548
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1081
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404546
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1082
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404547
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1083
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404447
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1084
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404519
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1085
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404518
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1086
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404557
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1087
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404558
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1088
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene ..... :	<50	ug/L	50
Carbon tetrachloride ..... :	<50	ug/L	50
Chlorobenzene ..... :	<50.	ug/L	50.
Chloroform ..... :	<50.	ug/L	50.
1,2-Dichloroethane ..... :	<50.	ug/L	50.
1,1-Dichloroethylene ..... :	<50.	ug/L	50.
Methyl ethyl ketone ..... :	<1000	ug/L	1000
Tetrachloroethylene ..... :	<50.	ug/L	50.
Trichloroethylene ..... :	<50.	ug/L	50.
Vinyl Chloride ..... :	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404556
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1089
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-13-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404555
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1090
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Benzene	<50	ug/L	50
Carbon tetrachloride	<50	ug/L	50
Chlorobenzene	<50.	ug/L	50.
Chloroform	<50.	ug/L	50.
1,2-Dichloroethane	<50.	ug/L	50.
1,1-Dichloroethylene	<50.	ug/L	50.
Methyl ethyl ketone	<1000	ug/L	1000
Tetrachloroethylene	<50.	ug/L	50.
Trichloroethylene	<50.	ug/L	50.
Vinyl Chloride	<200	ug/L	200

(1) Copy to Client

Managing Director

TCLP SEMI-VOLATILES

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404549
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-50G
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404520
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-513
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404355
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-528
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-27-94
ANALYSIS DATE .: 09-28-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404553
INVOICE NO.: 62141052
REPORT DATE: 10-24-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-561
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-21-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404406
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-563
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-15-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404403
INVOICE NO.: 62141012
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-589
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404443
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-628
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404441
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-641
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404542
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-655
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404551
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-675
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404530
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-685
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-14-94
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404475
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-688
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404367
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-692
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404366
INVOICE NO.: 62141006
REPORT DATE: 10-11-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-706
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-06-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404527
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-713
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404405
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-755
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-15-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404356
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-764
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-27-94
ANALYSIS DATE .: 09-28-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404364
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-771
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404358
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-789
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404361
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY: TAV
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-797
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404554
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-805
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404550
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-810
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404404
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-812
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404363
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-828
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404444
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:

CLIENT SAMPLE ID : B-852
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404352
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-854
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-27-94
ANALYSIS DATE .: 09-28-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404393
INVOICE NO.: 62141012
REPORT DATE: 10-11-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-868
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-06-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404369
INVOICE NO.: 62141006
REPORT DATE: 10-11-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-872
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-06-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404359
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-877
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404368
INVOICE NO.: 62141006
REPORT DATE: 10-11-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-888
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-06-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404442
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-890
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404474
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-915
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404360
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-918
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404394
INVOICE NO.: 62141012
REPORT DATE: 10-11-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-936
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-06-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404365
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-960
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404402
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-962
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404395
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-965
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404357
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-972
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404540
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-974
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404353
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-998
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-27-94
ANALYSIS DATE .: 09-28-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404544
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1007
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404351
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1010
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-27-94
ANALYSIS DATE .: 09-28-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404552
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1020
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404396
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1028
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404445
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1032
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404362
INVOICE NO.: 62141006
REPORT DATE: 10-04-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1034
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 10-01-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404354
INVOICE NO.: 62141006
REPORT DATE: 10-03-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1036
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-27-94
ANALYSIS DATE .: 09-28-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404401
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1038
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404400
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1040
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404473
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1041
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404541
INVOICE NO.: 62141052
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1042
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404531
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1046
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-14-94
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404559
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1051
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404526
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1056
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404446
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1063
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404448
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1064
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404449
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1065
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404397
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1066
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404398
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1067
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404399
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1068
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-08-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404450
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1069
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404521
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1070
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404529
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1071
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404524
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1072
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404476
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1073
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404523
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1074
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404522
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1075
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404525
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1076
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404517
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1077
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404528
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1078
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404543
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1079
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404545
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1080
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404548
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1081
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404546
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1082
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404547
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1083
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404447
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1084
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404519
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1085
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404518
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1086
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-18-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404557
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1087
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404558
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1088
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404556
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1089
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-13-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404555
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1090
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Organic TCLP Semi - Volatiles

DATA TABLE

Parameter	Result	Unit	Detection Limit
Chlordane	<0.03	mg/L	0.03
o-Cresol	<200.	mg/L	200.
m-Cresol	<200.	mg/L	200.
p-Cresol	<200.	mg/L	200.
Cresol	<200.	mg/L	200.
2,4-D	<10.	mg/L	10.
1,4-Dichlorobenzene	<7.5	mg/L	7.5
2,4-Dinitrotoluene	<0.13	mg/L	0.13
Endrin	<0.02	mg/L	0.02
Heptachlor	<0.008	mg/L	0.008
Hexachlorobenzene	<0.13	mg/L	0.13
Hexachloro-1,3-butadiene	<0.5	mg/L	0.5
Hexachloroethane	<3.0	mg/L	3.0
Lindane	<0.4	mg/L	0.4
Methoxychlor	<10.	mg/L	10.
Nitrobenzene	<2.0	mg/L	2.0
Heptachlor epoxide	<0.008	mg/L	0.008
Pentachlorophenol	<100.	mg/L	100.
Pyridine	<5.0	mg/L	5.0
Toxaphene	<0.5	mg/L	0.5
2,4,5-Trichlorophenol	<400.	mg/L	400.
2,4,6-Trichlorophenol	<2.0	mg/L	2.0
2,4,5-TP (Silvex)	<1.0	mg/L	1.0

(1) Copy to Client

Managing Director

METHOD 8080-PCB'S

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404549
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-50G
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404520
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-513
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-11-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404355
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-528
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404553
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-561
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404406
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-563
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404403
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-589
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404443
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-628
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404441
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-641
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404542
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-655
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404551
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-675
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404530
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-685
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404475
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-688
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404367
INVOICE NO.: 62141006
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-692
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404366
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-706
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404527
INVOICE NO.: 62141048
REPORT DATE: 10-21-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-713
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-17-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404405
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-755
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404356
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-764
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404364
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-771
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404358
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-789
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404361
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-797
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404554
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-805
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404550
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-810
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404404
INVOICE NO.: 62141012
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-812
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404363
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-828
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404444
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-852
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404352
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-854
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404393
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY: MAN
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-868
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404369
INVOICE NO.: 62141006
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-872
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404359
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-877
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404368
INVOICE NO.: 62141006
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-888
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404442
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-890
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-26-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404474
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-915
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404360
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-918
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404394
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-936
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404365
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-960
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-22-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404402
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-962
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-11-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404395
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-965
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404357
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-972
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404540
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-974
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404353
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-998
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-22-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404544
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1007
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404351
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY: AMP
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1010
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404552
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1020
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404396
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1028
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404445
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1032
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404362
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1034
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-26-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404354
INVOICE NO.: 62141006
REPORT DATE: 09-29-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1036
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-21-94
SUBMITTAL DATE : 09-22-94
EXTRACTION DATE: 09-23-94
ANALYSIS DATE .: 09-27-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404401
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1038
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-11-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404400
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1040
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404473
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1041
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404541
INVOICE NO.: 62141052
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1042
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404531
INVOICE NO.: 62141048
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1046
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404559
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1051
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404526
INVOICE NO.: 62141048
REPORT DATE: 10-21-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1056
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-17-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404446
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1063
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404448
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1064
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404449
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1065
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404397
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1066
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404398
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1067
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404399
INVOICE NO.: 62141012
REPORT DATE: 10-13-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1068
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary SWMU
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-23-94
SUBMITTAL DATE : 09-23-94
EXTRACTION DATE: 10-06-94
ANALYSIS DATE .: 10-12-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404450
INVOICE NO.: 62141023
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1069
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404521
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1070
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404529
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1071
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404524
INVOICE NO.: 62141048
REPORT DATE: 10-21-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1072
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-17-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404476
INVOICE NO.: 62141032
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1073
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-28-94
SUBMITTAL DATE : 09-28-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404523
INVOICE NO.: 62141048
REPORT DATE: 10-21-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1074
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-17-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404522
INVOICE NO.: 62141048
REPORT DATE: 10-21-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1075
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-17-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404525
INVOICE NO.: 62141048
REPORT DATE: 10-21-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1076
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: 10-17-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404517
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1077
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404528
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1078
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404543
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1079
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404545
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1080
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-01-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016 .....:	<100.	ug/Kg	100.
PCB 1221 .....:	<2500.	ug/Kg	2500.
PCB 1232 .....:	<660.	ug/Kg	660.
PCB 1242 .....:	<300.	ug/Kg	300.
PCB 1248 .....:	<100.	ug/Kg	100.
PCB 1254 .....:	<100.	ug/Kg	100.
PCB 1260 .....:	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404548
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1081
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404546
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1082
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404547
INVOICE NO.: 62141052
REPORT DATE: 10-20-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1083
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: 10-18-94
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404447
INVOICE NO.: 62141023
REPORT DATE: 10-18-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1084
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Commissary Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-27-94
SUBMITTAL DATE : 09-27-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-17-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404519
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1085
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404518
INVOICE NO.: 62141048
REPORT DATE: 10-19-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1086
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: C. Warner

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 09-30-94
SUBMITTAL DATE : 09-30-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-19-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404557
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1087
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404558
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1088
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404556
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1089
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-13-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

10737 Gateway West, No. 100
El Paso, Texas 79935-4906
(915) 592-3591 • fax 592-3594

CLIENT ADVANCED SCIENCES INC.
555 S. TELSHOR STE 310
LAS CRUCES, NM 88001

SAMPLE NO. : 6404555
INVOICE NO.: 62141052
REPORT DATE: 10-17-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-1090
SAMPLE TYPE .....: Soil
SAMPLED BY .....: G. Esqueda
SUBMITTED BY ....: G. Jordan
SAMPLE SOURCE ...: WSMR Comm Bins
ANALYST .....: A. Skornia

AUTHORIZED BY : G. Jordan
CLIENT P.O. : 600.11
SAMPLE DATE ...: 10-03-94
SUBMITTAL DATE : 10-03-94
EXTRACTION DATE: --
ANALYSIS DATE .: 10-20-94

Method 8080 - PCB'S

DATA TABLE

Parameter	Result	Unit	Detection Limit
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<2500.	ug/Kg	2500.
PCB 1232	<660.	ug/Kg	660.
PCB 1242	<300.	ug/Kg	300.
PCB 1248	<100.	ug/Kg	100.
PCB 1254	<100.	ug/Kg	100.
PCB 1260	<200.	ug/Kg	200.

(1) Copy to Client

Managing Director

Appendix C-3
SWMU 163: Approval Letter from NMED Dated February 16, 1995

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

WSMR Environment & Safety Tech Lib
2 8800 00032709 9

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

GARY E. JOHNSON
GOVERNOR

February 16, 1995

Brigadier General Jerry L. Laws
Commander
U.S. Army White Sands Missile Range
White Sands Missile Range, N.M. 88002-5000

RE: Approval of Corrective Action at the Commissary Landfill site

Dear General Laws:

The Ground Water Protection and Remediation Bureau of the New Mexico Environment Department is in receipt of the Commissary Landfill Trench Sampling Report dated October 24, 1994, and the Commissary Landfill Trench Excavation Material Sampling Report dated December 1, 1994. These Reports are hereby approved pursuant to Section 1-203 of the New Mexico Water Quality Control Commission regulations.

If ground-water contamination occurs as a result of this landfill, or if additional information becomes available indicating that these corrective actions are inadequate, further efforts may be required. If you have any questions, please feel free to call Dave Morgan at 827-2754. Thank you for your cooperation in this matter.

Sincerely,

Marcy Leavitt, Chief
Ground Water Protection and Remediation Bureau

xc: Thomas A. Ladd, Director, Environment and Safety, White Sands Missile Range
Hector Magallanes, SWMU Program Manager, White Sands Missile Range
Gary McGinnis, Environmental Specialist, District III, NMED

Revised[B1]

Release Assessment Report

SWMUs 107, 121, 122, 123, and 163
SWMU 107 Temperature Test Facility Evaporation Tank;
SWMUs 121, 122, and 123 the Asphalt Tanks at Stallion Range;
SWMU 163 Abandoned Disposal Trench at New Commissary

White Sands Missile Range

October 2013

Shaw Environmental, Inc.
(A CB&I Company)
1401 Enclave Parkway, Suite 250
Houston, Texas 77077

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.
PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE *(DD-MM-YYYY)* 10/17/2013	**2. REPORT TYPE** ~~Revised Final~~Release Assessment Report	**3. DATES COVERED** *(From - To)* October 2013
4. TITLE AND SUBTITLE Revised Release Assessment Report SWMUs 107, 121, 122, 123, and 163 SWMU 107- Temperature Test Facility Evaporation Tank SWMUs 121, 122 and 123- Asphalt tanks at Stallion Range SWMU 163- Abandoned Disposal Trench at New Commissary		**5a. CONTRACT NUMBER** W91ZLK-05-D-0017 **5b. GRANT NUMBER** **5c. PROGRAM ELEMENT NUMBER**
6. AUTHOR(S) Caitlin LaChance – Shaw Environmental, Inc (A CB&I Company)		**5d. PROJECT NUMBER** 139791 **5e. TASK NUMBER** Task Order 08
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Shaw Environmental, Inc. (A CB&I Company) 1401 Enclave Parkway, Suite 250 Houston, TX 77077		**5f. WORK UNIT NUMBER** **8. PERFORMING ORGANIZATION REPORT NUMBER** ACA08-037
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Department of the Army U.S. Army Garrison White Sands Benito Avalos, Environmental Division (Bldg 163) White Sands Missile Range, NM 88002		**10. SPONSOR/MONITOR'S ACRONYM(S)** **11. SPONSORING/MONITORING AGENCY REPORT NUMBER**

12. DISTRIBUTION AVAILABILITY STATEMENT

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The Release Assessment Report has been prepared for submission to the New Mexico Environment Department (NMED) Hazardous Waste Bureau, as required by Appendix 8, Table 8-2 of the Resource Conservation and Recovery Act (RCRA) Permit No. NM2750211235, containing the elements found in Permit Section VI.F.1. White Sands Missile Range (WSMR) was issued Hazardous Waste Permit No. NM2750211235 by the U.S.Environmental Protection Agency (EPA) on October 24, 1989 under the authority of RCRA, Part B. Before January 1, 1996, the EPA was the Administrative Authority for the permit; on January 1, 1996, the NMED became the Administrative Authority. The Solid Waste Management Units (SWMUs) included in this report are listed in Table 8-2 in the WSMR RCRA Permit (NMED, 2009) as having an outstanding requirement for a release assessment. The SWMUs included in this report have been part of previous investigations and/or remediation and are not newly identified. However, this Release Assessment Report is prepared to fulfill the requirement listed in Table 8-2 of the WSMR RCRA Permit.

15. SUBJECT TERMS
Release Assessment Report

16. SECURITY CLASSIFICATION OF:			**17. LIMITATION OF ABSTRACT**	**18. NUMBER OF PAGES**	**19a. NAME OF RESPONSIBLE PERSON**
a. REPORT Unclassified	**b. ABSTRACT** Unclassified	**c. THIS PAGE** Unclassified	None	52	Benito Avalos **19b. TELEPHONE NUMBER (*Include area code*)** 575-678-5359

Revised
Release Assessment Report

SWMUs 107, 121, 122, 123, and 163
SWMU 107 Temperature Test Facility Evaporation Tank; SWMUs 121, 122, and 123 the Asphalt Tanks at Stallion Range; SWMU 163 Abandoned Disposal Trench at New Commissary

White Sands Missile Range, New Mexico
ACA08-037

October 2013

Prepared for:

U.S. Army Garrison White Sands
Directorate of Public Works, Environmental Division
White Sands Missile Range, NM 88002-5048

Prepared by:

Shaw Environmental, Inc
A CB&I Company
1401 Enclave Parkway, Suite 250
Houston, Texas 77077

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

Table of Contents

List of Figures ..... **iii**
List of Appendices ..... **iii**
Acronyms and Abbreviations ..... **iv**

1.0 Introduction **1-1**
1.1 Facility Description 1-2
1.2 Environmental Setting 1-2
1.2.1 Geographic Setting 1-2
1.2.2 Climate 1-2
1.2.3 Geology and Soil Types 1-3
1.2.4 Hydrogeology 1-4
1.3 Land Use 1-4
1.3.1 Current Land Use 1-4
1.3.2 Future Land Use 1-5
2.0 SWMU 107 Temperature Test Facility Evaporation Tank **2-1**
2.1 SWMU 107 Description and Operational History 2-1
2.1.1 Site Description 2-1
2.1.2 Operational History 2-1
2.2 SWMU 107 Previous Assessments/Investigations 2-2
2.2.1 RCRA Facility Assessment 2-3
2.2.2 Closure Activities 2-3
2.3 Conclusion 2-4
3.0 SWMUs 121 – 123 Asphalt Tanks at Stallion Range **3-1**
3.1 SWMUs 121 – 123 Description and Operational History 3-1
3.1.1 Site Description 3-1
3.1.2 Operational History 3-1
3.2 SWMUs 121 – 123 Previous Assessments/Investigations 3-2
3.2.1 RCRA Facility Assessment 3-2
3.2.2 Phase I RCRA Facility Investigation 3-2
3.2.3 Closure Activities: Tank Removal 3-3
3.3 Conclusion 3-4
4.0 SWMU 163 Commissary Landfill Trench **4-1**
4.1 SWMU 163 Description and Operational History 4-1
4.1.1 Site Description 4-1
4.1.2 Operational History 4-1
4.2 SWMU 163 Previous Assessments/Investigations 4-1
4.2.1 Initial Characterization 4-1
4.2.2 Closure Activities 4-2
4.3 Conclusion 4-3
5.0 References **5-1**

List of Figures

Figure 1-1 Location Map of SWMU 107, SWMUs 121 - 123, and SWMU 163 , Release Assessment Report, White Sands Missile Range, NM
Figure 1-2 WSMR Main Post Geologic Map, SWMU 107, and SWMU 163, Release Assessment Report, White Sands Missile Range, NM
Figure 1-3 WSMR Stallion Range Geologic Map, SWMUs 121 - 123, Release Assessment Report, White Sands Missile Range, NM
Figure 2-1 Site Location Map, SWMU 107, Release Assessment Report, White Sands Missile Range, NM
Figure 3-1 Site Location, Asphalt Tanks at Stallion Range, SWMUs 121 - 123 , Release Assessment Report, White Sands Missile Range, NM
Figure 4-1 Site Plan, SWMU 163, Release Assessment Report, White Sands Missile Range, NM

List of Appendices

Appendix A-1 SWMU 107: Decision Document
Appendix A-2 SWMU 107: WSMR Letter to NMED Regarding RFI Activities at TTF
Appendix A-3 SWMU 107: WSMR Letter to NMED Regarding TTF Closure Data
Appendix B-1 SWMUs 121 – 123: 1993 Tank Closure Report
Appendix B-2 SWMUs 121 – 123: 1995 EPA Statement of Basis
Appendix B-3 SWMUs 121 – 123: 2000 EPA Letter Validating the Statement of Basis
Appendix C-1 SWMU 163: 1994 Trench Sampling Report
Appendix C-2 SWMU 163: 1994 Trench Excavation Material Sampling Report
Appendix C-3 SWMU 163: Approval Letter from NMED Dated February 16, 1995

139791, ZZ2020 • October 2013 • ACA08-037

REVISED RELEASE ASSESSMENT REPORT, SWMUS 107, 121 THROUGH 123, AND 163

Acronyms and Abbreviations

°F	degree(s) Fahrenheit
amsl	above mean sea level
ASI	Advanced Sciences Inc.
bgs	below ground surface
EPA	U.S. Environmental Protection Agency
MEVATEC	MEVATEC Corporation
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NMED	New Mexico Environment Department
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SSL	soil screening level
~~STP~~	~~Sewage Treatment Plant~~
SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWMU	Solid Waste Management Unit
TCA	trichloroethane
TCE	trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbon
TTF	Temperature Test Facility
UST	Underground Storage Tank
VCA	voluntary corrective action
VOC	volatile organic compound
VSI	Visual Site Inspection
WSMR	White Sands Missile Range
WTS	White Sands Technical Services

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

1.0 INTRODUCTION

This Release Assessment Report has been prepared for submission to the New Mexico Environment Department (NMED) Hazardous Waste Bureau, as required by Appendix 8, Table 8-2 of the Resource Conservation and Recovery Act (RCRA) Permit No. NM2750211235, containing the elements found in Permit Section VI.F.1. White Sands Missile Range (WSMR) was issued Hazardous Waste Permit No. NM2750211235 by the U.S. Environmental Protection Agency (EPA) on October 24, 1989 under the authority of RCRA, Part B. Before January 1, 1996, the EPA was the Administrative Authority for the permit; on January 1, 1996, the NMED became the Administrative Authority. The Solid Waste Management Units (SWMUs) included in this report are listed in Table 8-2 in the WSMR RCRA Permit (NMED, 2009) as having an outstanding requirement for a release assessment. The SWMUs included in this report have been part of previous investigations and/or remediations and are not newly identified. However, this Release Assessment Report is prepared to fulfill the requirement listed in Table 8-2 of the WSMR RCRA Permit (NMED, 2009). The SWMUs in this release assessment report are shown in **Figure 1-1**. The SWMUs include the following:

- SWMU 107 ~~(WSMR-35)~~ the Temperature Test Facility Evaporation Tank
- ~~SWMUs 116, 117, and 118 (WSMR-75) Rhodes Canyon Subgrade Asphalt Tanks~~
- SWMUs 121, 122, and 123 ~~(WSMR-67)~~ the Asphalt Tanks at Stallion Range
- ~~SWMUs 125 and 126 (WSMR-77) Veterinary Clinic and McAffee Clinic Incinerators~~
- ~~SWMU 137 (WSMR-56) Paint Shop Sump~~
- ~~SWMU 153 (WSMR-58) Vandal Burial Site~~
- SWMU 163 ~~(WSMR-72)~~ Abandoned Disposal Trench at New Commissary

Table 8-2 of the RCRA Permit also includes Rhodes Canyon Subgrade Asphalt Tanks (SWMUs 116, 117, and 118); Veterinary Clinic and McAffee Clinic Incinerators (SWMUs 125 and 126); Paint Shop Sump (SWMU 137); and Vandal Burial Site (SWMU 153) as requiring a Release Assessment. However, according to an NMED letter dated August 28, 2013, the 2012 investigations conducted at SWMUs 116, 117, 118, 125, 126, 137 and 153 meet and replace the requirement for a Release Assessment Report (NMED, 2013). Therefore, these sites have not been included in this Release Assessment Report.

139791, ZZ2020 • October 2013 • ACA08-037

This Release Assessment Report presents the historical records available for SWMUs discussed in this release assessment report and the specifications of all wastes managed and any hazardous wastes that have been released within each SWMU. Available historical records for each site have been summarized.

1.1 Facility Description

WSMR is a U.S. Army Development Test Command Installation established in 1945. WSMR is the largest land area military installation in the United States, encompassing approximately 3,200 square miles of land in Doña Ana, Socorro, Lincoln, Otero, and Sierra Counties in south-central New Mexico. The installation is approximately 99 miles long (north to south) and 25 to 40 miles wide (east to west) (White Sands Technical Services [WTS], 2006). WSMR was established on July 9, 1945, as White Sands Proving Ground (the name was changed in 1958) to be the nation's testing range for the newly developed missile weapons. The New Mexico desert was selected as the testing range. The sparse population, almost year-round clear weather, and excellent visibility affording relatively easy recovery of spent missiles contributed to establishing the base in this location.

WSMR is located in the Tularosa Basin of south-central New Mexico, and portions of WSMR extend west into the Jornada del Muerto Basin. The headquarters (Main Post) area of WSMR is located at the southwestern corner of the installation, approximately 27 miles east-northeast of Las Cruces, New Mexico, and 45 miles north of El Paso, Texas. The main entrance to WSMR is on U.S. Highway 70, east from Interstate 25 at Exit 6.

1.2 Environmental Setting

1.2.1 Geographic Setting

Topographic relief across WSMR is dominated by two prominent geomorphic features, the San Andres Mountains and the Tularosa Basin. The average elevation of the Tularosa Basin is 4,000 feet above mean sea level (amsl). The San Andres range trends north-south along the western side of the missile range and varies in elevation from 5,700 feet amsl at San Augustin Pass, where Highway 70 crosses the mountains, to more than 9,000 feet amsl at Salinas Peak, the highest point on WSMR.

1.2.2 Climate

Average annual precipitation measured at gauging stations in the Tularosa Basin, southeast of the WSMR Main Post, is 10.8 inches per year. About 50 percent of the annual precipitation falls in the months of July through September in southern New Mexico. The average high temperature in the summer is about 92 degrees Fahrenheit (°F) with the lows reaching 65°F. During the winter months, the average high is about 57°F, and the average low is about 36°F. Average annual humidity readings are only 37 percent. Wind is a climatic

139791, ZZ2020 • October 2013 • ACA08-037

factor at WSMR from February through May, as westerly winds can reach about 40 miles per hour.

1.2.3 Geology and Soil Types

~~1.2.3.1 Regional Geology~~

WSMR lies within the Mexican Highland Section of the Basin and Range Province. This province is characterized by a series of tilted fault blocks forming longitudinal, asymmetric ridges, or mountains, and broad intervening basins. The geology of WSMR consists predominantly of the Tularosa Basin and surrounding mountain ranges. The San Andres, San Augustin, and Oscura Mountains border the Tularosa Basin on the west, and the Sacramento Mountains form the eastern border. A narrow region of north-south–trending, large-displacement normal faulting separates the mountains from the basin, thus resulting in the change in relief across the missile range (**Figure 1-1**). The majority of WSMR property, including most test facilities, is located within the Tularosa Basin (WTS, 2006).

The Tularosa Basin contains thick sequences of Tertiary- and Quaternary-age alluvial and bolson fill deposits. These sediments, more than 5,000 feet in thickness in some areas, consist mainly of silt, sand, gypsum, and clay weathered from the surrounding mountain ranges. The average elevation of the basin floor is 4,000 feet amsl, and surface features consist of flat sandy areas, sand dunes, basalt flows, and playas (dry lake beds) (**Figures 1-2 and~~through~~ 1-34**; WTS, 2006).

The nature of the bolson-fill deposits varies both laterally and vertically throughout the Tularosa Basin. Coarse-grained, poorly-sorted sediments deposited near mountain fronts grade into finer-grained, well-sorted sediments toward the center of the basin (Kelly and Hearne, 1976). Sediments farther from the mountain fronts also contain a greater percentage of clay and gypsum. Vertically, the sediments are reported to become finer-grained and more consolidated until reaching a laterally continuous clay unit about 1,000 feet below ground surface (Kelly and Hearne, 1976).

In general, the stratigraphy is represented by unconsolidated to partially consolidated, fine- to medium-grained sand with subordinate amounts of clay. Caliche is present as discrete layers and nodules throughout the stratigraphic section. Although no faults within the basin fill are mapped within the immediate area, Quaternary faulting is known to exist within the region. These faults are reported to occur within the unconsolidated bolson sediments, trend north to south, and are most common near the mountain fronts.

139791, ZZ2020 • October 2013 • ACA08-037

1.2.4 Hydrogeology

~~1.2.4.1 Regional Hydrogeology~~

Surface hydrogeology at WSMR is characterized by low precipitation, high evapotranspiration rates, and high soil infiltration. During the summer season, when thunderstorm activity is most common, playas within the basin may contain standing water. The arroyos that drain the surrounding mountain ranges usually contain water only following heavy precipitation events. The Tularosa Basin is a closed basin with no surface water drainage outside of WSMR (WTS, 2006).

The WSMR Main Post obtains its potable water supply from an aquifer located in the upper bolson deposits. The majority of groundwater recharge to this aquifer occurs through the coarse, unconsolidated Tertiary/Quaternary alluvial fan deposits and arroyos along the eastern flank of the Organ, San Augustin, and San Andres Mountains. To the east, groundwater becomes more mineralized, primarily with sulfate and chloride. Groundwater flow direction is generally toward the center of the Tularosa Basin.

Recharge to the regional aquifer is from precipitation falling on the mountain ranges and alluvial fans, which border the bolson on the west (WTS, 2006). This precipitation infiltrates the unconsolidated, relatively coarse deposits of the alluvial fans, and the resultant groundwater flows toward the center of the Tularosa Basin, generally to the east-southeast. To the east, groundwater becomes more mineralized, primarily with sulfate and chloride, most likely due to the slow lateral migration rate of groundwater from recharge to discharge areas in the presence of readily soluble minerals in the bolson sediments. However, groundwater flow direction within the western Tularosa Basin region is presumed to discharge to the south as underflow into the contiguous, northern Hueco Basin of western Texas. No surface expressions of groundwater discharge have been reported within the western Tularosa Basin (WTS, 2006).

1.3 Land Use

1.3.1 Current Land Use

WSMR is withdrawn public domain land controlled by the U.S. Department of Defense. For safety and security reasons, access to WSMR is restricted to authorized military and civilian personnel. Residential areas are limited to concentrated tracts at the Main Post and several uprange command and control centers. The land on the missile range is predominantly used to stage tests of aerial weapons systems. Although much of the weapons testing occurs in the airspace above WSMR, designated support, launch, and impact areas have been established.

The five~~twelve~~ SWMUs discussed in this proposal (SWMU 107, ~~SWMUs 116, 117, and 118~~, SWMUs 121, 122, and 123, ~~SWMUs 125 and 126,~~ ~~SWMU 137, SWMU 153~~, and

SWMU 163) are located within the facility boundary, which is an industrial setting where public access is restricted by fences and military police.

1.3.2 Future Land Use

The U.S. Department of Defense will continue its primary mission at WSMR for the foreseeable future. Public access to the approximately 3,200 square miles of land comprising the missile range will continue to be restricted.

SWMU 107~~ (WSMR-35)~~, ~~SWMUs 116, 117 and 118 (WSMR-75),~~ SWMUs 121, 122, and 123~~ (WSMR-67)~~, ~~SWMUs 125 and 126 (WSMR-77)~~, ~~SWMU 137 (WSMR-56)~~, ~~SWMU 153 (WSMR-58)~~ and SWMU 163~~ (WSMR-72)~~ will remain within the facility boundary, an industrial setting with public access restricted by fences and military police.

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

2.0 SWMU 107 ~~(WSMR-35)~~ TEMPERATURE TEST FACILITY EVAPORATION TANK

This section summarizes relevant historical information contained in available WSMR documents. The following subsections provide a site description, operational history, wastes managed, and any hazardous waste released, or potentially released for each individual SWMU, as well as a summary of relevant environmental information contained in the available reports.

Results and conclusion from the historical reports summarized below have not been re-evaluated or interpreted as part of the preparation of this document. The information below provides documentation of release (or potential release) of hazardous waste or hazardous constituents, as well as documentation of the location and circumstances of the release.

2.1 SWMU 107 Description and Operational History

2.1.1 Site Description

The Temperature Test Facility (TTF) is located 1.5 miles east of the Main Post on Nike Avenue (**Figure 2-1**). SWMU 107 ~~(WSMR-35)~~ was an evaporation tank that was installed within the former evaporation pond (SWMU 104) and was installed prior to the construction of the new stainless steel evaporation tank (SWMU 105). The evaporation tank (SWMU 107) had a capacity of 25,000 gallons and was installed as an interim measure to store any overflow from the TTF (Kearney, 1988). The dimensions of the evaporation tank are unknown.

2.1.2 Operational History

The TTF, completed in early 1984, was designed to simulate extreme weather conditions by inducing a wide range of temperature and climatic variations. The completed facility consisted of a main test building, several underground storage tanks (UST) with ancillary piping, and a surface evaporation pond (MEVATEC Corporation [MEVATEC], 2000). Originally, methylene chloride was used to cool the test chamber and was recycled via the USTs. In 1983, methylene chloride was flushed from the TTF to the evaporation pond (SWMU 104) due to leaks within the system. The methylene chloride subsequently eroded the polyvinyl chloride liner in the evaporation pond and leaked into the soil beneath it.

In response to the release, WSMR removed the polyvinyl chloride liner and replaced the liner with an impermeable RCRA cap, covering the soil contamination beneath the evaporation pond and the surrounding area (Section 1, paragraph 5, page 1, MEVATEC, 2000; **Appendix A-1**). Standing liquid in the pond was collected, placed into drums, and

139791, ZZ2020 • October 2013 • ACA08-037

transferred to the Hazardous Waste Storage Facility. The contaminated soil beneath the evaporation pond (SWMU 104) was not excavated. Between 1984 and 1986, the 25,000-gallon tank (SWMU 107) was installed as an interim measure to store any overflow of methylene chloride from the TTF (Section 1, paragraph 4, page 1, MEVATEC, 2000; **Appendix A-1**). SWMU 107 consisted of a closed, steel, cylindrical tank horizontally mounted on a concrete pad inside the former evaporation pond (SWMU 104). The 25,000 gallon evaporation tank was used as an interim measure prior to the construction of the 220,000 gallon stainless steel evaporation tank, SWMU 105. SWMU 105 was constructed to replace the former evaporation pond which failed to contain the methylene chloride spill due to the liner failure. In 1990, an impermeable, engineered cap was installed that covered the soil contamination beneath the evaporation pond and in the surrounding area (Section 1, paragraph 5, page 1, MEVATEC, 2000; **Appendix A-1**). Before installing the cap at the former evaporation pond (SWMU 104), the 25,000-gallon tank (SWMU 107) was decontaminated, dismantled, and removed (Section 3.4, paragraph 1, page 6, MEVATEC 2000; **Appendix A-1**). This former evaporation pond (SWMU 104) is a hazardous waste management unit described as having completed closure in the WSMR RCRA Permit (NMED, 2009). The vadose zone beneath the evaporation pond was successfully treated using a soil vapor extraction (SVE) system as part of SWMU 108 to address contamination from the historic methylene chloride spill (Section 1, paragraph 5, page 1, MEVATEC, 2000; **Appendix A-1**). The 220,000 gallon evaporation tank (SWMU 105) was closed in place and approved by the Hazardous Waste Bureau of NMED in 1998 (Section 2.2.7.2, page 16, BAE Systems, 2003)

~~There is no documented evidence of a release or previous sampling activities at SWMU 107 (WSMR-35). No evidence of a release was observed during the visual site inspection (VSI) conducted by A.T. Kearney in May 1988. The RCRA Facility Assessment (RFA) reported that the potential for the release of contaminants to soil, groundwater, surface water, and air, as well as production of subsurface gas from SWMU 107 (WSMR-35) was "low" (Kearney, 1988).~~

2.2 SWMU 107 Previous Assessments/Investigations

The TTF Evaporation Tank, identified during the RCRA Facility Assessment (RFA) (Kearney, 1988), was decontaminated and dismantled by Rinchem (MEVATEC, 2000; **Appendix A-1**). No unit-specific environmental investigations were conducted for SWMU 107; however a number of investigations were conducted at the TTF following the discovery of a release at SWMU 104. Investigations were performed to characterize and delineate the impacts to soil beneath and surrounding surface impoundment, and to determine if the release had impacted the underlying groundwater. The RFI report documenting the

139791, ZZ2020 • October 2013 • ACA08-037

investigation activities was submitted to NMED on August 15, 1996 (Woodward Clyde, 1996, **Appendix A-2**). ~~RCRA Facility Investigation ()~~.

2.2.1 RCRA Facility Assessment

The RFA consisted of a Preliminary Review/Visual Site Inspection (VSI), which involved a search of facility records of hazardous waste-related activity at and a visual inspection of SWMU 107. The RFA report was issued in August 1988 (Kearney, 1988).

The records search found no documented evidence of a release or previous sampling activities at SWMU 107. No evidence of a release was observed during the VSI (Kearney, 1988). The RFA reported that the potential for the release of contaminants to soil, groundwater, surface water, and air, as well as production of subsurface gas from SWMU 107, was "low" (Section 5.65.2, page 5-103, Kearney, 1988).

2.2.2 Closure Activities

WSMR elected to ~~perform~~ remove the evaporation tank, ~~a voluntary corrective action (VCA) at~~ SWMU 107. Tank decontamination and closure were selected as the remedy (Section 3.4~~3.3~~, MEVATEC, 2000; **Appendix A-1**). The decision was based on several factors. An engineered cap was to be constructed over the former evaporation pond (SWMU 104). In order to construct the cap, removal of SWMU 107 was necessary. Removing SWMU 107 would eliminate the potential for a release from the tank (Section 3.3, MEVATEC, 2000; **Appendix A-1**). Tank decontamination and removal were performed by Rinchem in May 1990. The decontamination procedures were conducted in accordance with Attachment A of the TTF Closure Plan (WSMR, 1989). The tank was dismantled and rolled onto 10-milliliter plastic sheeting laid out over the entire work surface area (MEVATEC 2000; **Appendix A-1**). Sludge in the tank was shoveled and pumped into steel drums using spark-proof shovels and a heavy-duty sludge pump. The tank interior was decontaminated using hot steam and water with low sudsy, biodegradable soap. The tank was also rinsed with clean water four additional times. After removal, the tank was disposed of (Section 3.4, page 6, MEVATEC 2000; **Appendix A-1**).

Rinsate samples were collected as part of the tank cleaning process and analyzed for methylene chloride, tetrachloroethylene (PCE), toluene, 1,1,1-trichloroethane (TCA), 1,1,2-TCA, and trichloroethylene (TCE) for waste management purposes. Toluene was the only analyte detected at 3.8 milligrams per liter (mg/L) (Section 3.4, MEVATEC, 2000; **Appendix A-1**). This rinsate sample was collected just prior to the four additional washes with clean water and could explain the measurable toluene concentration.

Confirmatory soil samples were not collected around the tank since the tank did not exhibit any evidence of leaks and because any visually observed evidence of leaks beneath the

evaporation pond liner may have been the result of the original release from the evaporation pond (SWMU 104) (Section 2.1, page 5, BAE Systems, 2003). An SVE system (SWMU 108) was used to remediate the soil beneath the evaporation pond that was impacted by the historic methylene chloride spill (Section 1, paragraph 5, MEVATEC, 2000; **Appendix A-**1). On January 21, 2011, WSMR submitted a Corrective Action Complete petition for SWMU 108 and is currently under review by NMED.

~~2.2~~2.3 Conclusion

~~SWMU 107 was constructed of steel and installed as an interim storage tank prior to the construction of a new stainless steel tank (SWMU 105). It is unknown whether this unit actually received waste. The potential waste stream is primarily wastewater/condensate with the expected low concentration of hazardous constituents (methylene chloride); however, there is low potential for release to all media. The suggested action of the RFA was to recommend SWMU 107 for no further action (Kearney, 1988).~~The TTF evaporation tank was identified during the RFA. ~~RFI~~Closure activities at SWMU 107 involved cleaning, removal and disposal of the tank. These clean closure activities were documented in the Decision Document (MEVATEC, 2000; Appendix A-1). The Decision Document is an Army internal report for documenting Army decisions regarding the selected response actions for the site. The Temperature Test Facility Spill Site Closure Plan and Closure Data referenced in the Decision Document were submitted to NMED separately in September 2003 (WSMR, 1990; **Appendix A-3**).

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

~~3.0 SWMUS 116 – 118 (WSMR-75) RHODES CANYON SUBGRADE ASPHALT TANKS~~

~~3.1 SWMUs 116 – 118 Description and Operational History~~

~~3.1.1 Site Description~~

~~SWMUs 116, 117, and 118 (WSMR-75) consists of the Subgrade Tanks at Rhodes Canyon and are located approximately 60 miles north of the WSMR Main Post near the intersection of Range Routes 7 and 6 (Figure 3-1). SWMUs 116, 117, and 118 were later administratively combined into SWMU 116 and are depicted as such on Figure 3-1. Each SWMU contained one 2,500-gallon, steel tank that was partially buried and believed to have been used for oil or fuel storage. The center tank was only slightly exposed above the surface and appeared to be in poor condition. The visible portion of the other tanks appeared to be in good condition (Kearney, 1988). A hydrocarbon odor was noted near one tank. WSMR personnel did not know when the tanks might have been used or for what purpose. The tanks and an unknown quantity of soil are believed to have been removed in approximately 1994.~~

~~3.1.2 Operational History~~

~~Based upon visual observation in 1988, the steel tanks appeared to be 15 to 20 years old and the tanks were likely used to store fuel or oil (Kearney, 1988). During the VSI, conducted by A.T. Kearney in May 1988, the tanks were noted to be empty and abandoned. The tanks are believed to have been removed sometime around 1994, along with some soil. WSMR personnel did not know the dates of operation and for what purpose the tanks were used.~~

~~No documented evidence of a release has been reported for SWMUs 116, 117, and 118. The RFA reported that the possibility of release to soil and groundwater was "moderate" based on the lack of release controls, the in-ground location of the tanks, and the unknown nature of the materials managed during operation (Kearney, 1988).~~

~~3.2 Conclusion~~

~~No information is available to indicate that hazardous wastes may have been managed in these tanks. The tanks appeared to be abandoned and empty; however, the tanks may formerly have stored oil or fuels. Based on the unknown materials managed during the operational history and the in-ground location of the tanks, there was moderate potential for release of contaminants to the soil, groundwater, and air. The suggested action of the RFA was to recommend SWMUs 116-118 for no further action at the time (Kearney, 1988). If the tanks are to be returned to active service, the integrity of the tanks should be verified prior to use.~~

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

~~4.0~~3.0 SWMUS 121 – 123 ~~(WSMR-67)~~ ASPHALT TANKS AT STALLION RANGE

~~4.1~~3.1 SWMUs 121 – 123 Description and Operational History

~~4.1.1~~3.1.1 Site Description

SWMUs 121, 122, and 123~~ (WSMR-67)~~, located north of the Stallion Range Center just west of the Stallion Gate security checkpoint, consisted of three inactive, subgrade tanks (**Figure ~~4~~3-1**). Two tanks were steel and one was aluminum (Kearney, 1988).

~~4.1.2~~3.1.2 Operational History

Three sub-grade storage tanks were used in the 1960s during the paving of the Stallion Range Center roads (Advance Sciences Inc. [ASI], 1993). The storage tanks were labeled Tank 1 (SWMU 121), Tank 2 (SWMU 122), and Tank 3 (SWMU 123). Tanks 1 and 2 were constructed of plate steel. Tank 3 was constructed of aluminum. Each storage tank had a capacity of approximately 15,000 gallons and dimensions of 26 feet in length by 9 feet in diameter (Section 1, page 1, ASI, 1993; **Appendix B-1**).

Located on the side of a terraced hill, soil extended approximately halfway up the sides of the tanks on their northern end, while the soil on the southern ends of the tanks only extended approximately 1/8 up the tanks sides (ASI, 1993). The tanks were neither fully aboveground nor underground. One of the tanks appeared to be severely collapsed (Section 5.76.1, page 5-118, Kearney, 1988). The visible portions of the other two tanks appeared to be in good condition. All three tanks appeared to be empty and abandoned based upon the visual survey. No piping or vent lines were observed to be connected to or associated with the tanks (Section 2.1, page 1, ASI, 1993).

A tar-like odor was apparent on the downwind side of the tanks. The ground on the north side of the tanks appeared to be stained with a tar-like substance that looked dry, dark, and cracked and appeared to have been there a long time~~ (Kearney, 1988)~~. Facility personnel were unable to provide a list of materials which may have been managed within the tanks, the age of the tanks, and the dates of operation of the units (Section 5.76.1, page 5-118, Kearney, 1988).

~~The RFA reported that the potential for the release of contaminants to soil, groundwater, air, and production of subsurface gas from SWMUs 121, 122, and 123 (WSMR-67) was "moderate." For surface water, the RFA reported that the potential for release to surface water was "low" due to the absence of a nearby surface water body (Kearney, 1988).~~

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

3.2 SWMUs 121 – 123 Previous Assessments/Investigations

The Stallion Asphalt Tanks, SWMUs 121, 122, and 123 were identified during the RFA visual site inspection (Kearney, 1988). The three SWMUs were also investigated during the Phase I RFI ~~(IT Corporation, 1992)~~ ~~(RFI~~ (IT Corporation, 1992), and were closed in August 1993 (ASI, 1993).

3.2.1 RCRA Facility Assessment

The RFA consisted of a search of the WSMR records of hazardous waste-related activity at SWMUs 121, 122, and 123 and a visual inspection of the sites in May 1988 (Kearney, 1988).

The three tanks were partially below grade with one of the tanks severely collapsed. The visible portions of the other two tanks appeared to be in good condition. All three tanks appeared to be empty and abandoned based upon a visual survey. A tar-like odor was apparent on the downwind side of the tanks. The ground on the north side of the tanks appeared to be stained with a tar-like substance that looked dry, dark, and cracked and appeared to have been there a long time (Section 5.76.1, page 5-118, Kearney, 1988). Facility personnel were unable to provide information on these tanks (Kearney, 1988).

The RFA concluded that the potential for the release of contaminants to soil, groundwater, air, and production of subsurface gas from SWMUs 121, 122, and 123 was "moderate." For surface water, the RFA concluded that the potential for release to surface water was "low" due to the absence of a nearby surface water body (Section 5.76.2, page 5-119, Kearney, 1988).

3.2.2 Phase I RCRA Facility Investigation

The Phase I RFI was conducted in late February through April 1992 to determine whether a release of hazardous constituents occurred from SWMUs 121, 122, and 123 to the surrounding soil. The sampling plan was designed to characterize the site and to aid in determining whether additional site characterization or remediation was necessary (IT Corporation, 1992). The Phase I RFI included soil vapor sampling and soil sampling. The sampling locations are provided in Figure 2-38 of the Phase I RFI Report (Section 2.14, IT Corporation, 1992).

Soil vapor samples were collected from ten locations surrounding the three tanks. Soil samples were collected from eight site characterization locations at a depth of 0 feet below ground surface (bgs), 2 feet bgs, 5 feet bgs, and 10 feet bgs. Soil samples were analyzed for volatile organic compounds (VOC~~s~~), semivolatile organic compounds (SVOC~~s~~), polychlorinated biphenyls (PCB~~s~~), organochlorine pesticides, organophosphorous pesticides and herbicides (Section 2.14.3, page 2-37, IT Corporation, 1992).

139791, ZZ2020 • October 2013 • ACA08-037

The soil vapor sampling did not measure any elevated volumetric concentrations. All concentrations for inorganic, VOCs, SVOCs, and PCBs/pesticide constituents detected during the Phase I RFI were below the NMED residential soil screening levels (SSLs). The most common constituents detected were acetone, barium, and lead. Acetone was determined to be the result of using isopropyl alcohol to decontaminate equipment, and acetone is an oxidation product of isopropyl alcohol (IT Corporation, 1992). Barium concentrations were far below the NMED residential SSL, and the results were typically at or below concentrations found at background locations. Lead concentrations were also far below the NMED residential SSL (NMED, 2012). A summary of the analytical results are provided in Table 2-13 of the Phase I RFI Report (Section 2.14, page 2-36, IT Corporation, 1992).

In September 1993, the EPA approved the Phase I RFI report and stated that SWMUs 121, 122, and 123 were among the "twenty-four (24) of the thirty-eight (38) SWMUs [that] require no further investigation and can be delisted or removed from WSMRs corrective action permit" (EPA, 1995; **Appendix B-2**). The EPA reconfirmed their decision in a letter to WSMR in April 2000 (EPA, 2000; **Appendix B-3**).

3.2.3 Closure Activities: Tank Removal

In 1993, WSMR performed a voluntary corrective action (VCA) to remove two storage tanks and excavate soil (ASI, 1993; **Appendix B-1**). The field work for the VCA was performed on April 26, 1993, and consisted of the removal of the two tanks and 3 feet of soil beneath and around the tanks (ASI, 1993; **Appendix B-1**). Tanks 1 and 2 were removed on June 28, 1993, and 3 feet of soil was excavated from beneath the tanks. A total of four soil samples were collected at the bottom of the excavation floor (3 feet bgs) and analyzed for total petroleum hydrocarbon (TPH); TPH ranged from 61 to 3,800 milligrams per kilogram (mg/kg) TPH (Section 3.2, page 5, ASI, 1993; **Appendix B-1**). The complete analytical data package can be found in Appendix C of the Final Closure Report (ASI, 1993; **Appendix B-1**). Since the contents of the tank were asphalt-related, TPH concentrations have been compared to the NMED-established residential direct exposure level for waste oil. The measured TPH concentrations are greater than the NMED-established residential direct exposure level for waste oil of 3,000 mg/kg TPH (NMED, 2012). The detected TPH concentrations maybe attributed to asphalt which is not a regulated hazardous waste and is relatively immobile and hence may not be considered a constituent of concern.

The asphalt emulsion in tanks 1, 2 and 3 were removed in June 1993 and April 1993 respectively and transported for recycling to Koch Materials Company located in Albuquerque, New Mexico. Tanks 1 and 2 were transported for recycling to Tom Black's Enterprises, a scrap recycler located in Doña Ana, New Mexico (Section 3.1, page 4, ASI,

1993; **Appendix B-1**). The third tank was removed at a later unknown date and is not present at the site. A records search did not yield information regarding removal of Tank 3.

~~4.2~~3.3 Conclusion

~~The potential for release is moderate to high based on the lack of release controls, the apparent age and condition of the tanks, the in-ground location, and unknown nature of the materials managed, and the observed ground stain. No information is available to indicate the contents of these tanks. Based on the VSI, the tanks appear to be abandoned asphalt emulsion tanks. Identification of the contents and confirmation of the integrity of the tanks is warranted. The suggested action of the RFA is to conduct an RCRA Facility Investigation (RFI) at these units (Kearney, 1988)~~. The Stallion Asphalt Tanks were identified during the RFA. SWMUs 121, 122 and 123 were investigated as part of the Phase I RFI which was approved by the EPA as indicated in the Statement of Basis provided by the EPA (EPA, 1995). The EPA reconfirmed their decision in a letter to WSMR in 2000 (EPA, 2000). Tank removal and closure activities were conducted in September 1992 and documented in the Final Closure Report (ASI, 1993; **Appendix B-1**). The Final Closure Report is provided in **Appendix B-1** of this report for review (ASI, 1993).

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

~~5.0 SWMU 125 AND 126 (WSMR-77) VETERINARY CLINIC AND MCAFFEE CLINIC INCINERATORS~~

~~5.1 SWMUs 125 and 126 Description and Operational History~~

~~5.1.1 Site Description~~

~~SWMU 125 (WSMR-77), located in the southeastern portion of the WSMR Main Post, approximately 50 feet south of Building 1834 (Figure 5-1). SWMU 125 (WSMR-77) was a 3 by 5 by 2 feet high gas-fired unit mounted outside on a 6-inch concrete slab next to the Veterinary Clinic. SWMU 126 (WSMR-77), located in the northwest portion of the WSMR Main Post, was a double-hearth incinerator located inside of Building 530 (Figure 5-1).~~

~~5.1.2 Operational History~~

~~SWMU 125 (WMSR-77), the Veterinary Clinic Incinerator, was formerly used to dispose of "red bag" waste and "sharps" generated at the waste clinic. At the time of the visual inspection, conducted by A.T. Kearney in May 1988, the incinerator was mounted onto a 6-inch thick concrete slab. The installation and exact start-up date is unknown and the unit has not been used since 1986 (Kearney, 1988). Waste which was formerly incinerated at SWMU 125 was later disposed of at McAffee Clinic (SWMU 126). No hazardous wastes were managed within this unit, and no history of a release at this site is documented.~~

~~The potential for release to soil or groundwater at SWMU 125 was considered "low" based on the design and function of the unit and the management of non-hazardous waste (Kearney, 1988).~~

~~SWMU 126 (WSMR-77), the McAffee Clinic Incinerator, was formerly used to dispose of clinical wastes (infectious waste, needles, syringes) that had been sterilized in a nearby autoclave prior to incineration. Clinical wastes incinerated were generated at both the McAffee and Veterinary Clinics. A sign was noted on the incinerator that stated "to be used for biological waste only." Residue and ash from the incineration was placed into bags and disposed of in the Sanitary Landfill (SWMU 86) on the Main Post. Double doors on the south side of the building mark the exterior access point of the unit. The start-up date is unknown and the unit was decommissioned in 1988. No hazardous wastes were managed within this unit and no history of a release at this site is documented.~~

~~The RFA reported that the potential for release to soil or groundwater at SWMU 126 was "low" based on the design and function of the unit and the management of non-hazardous waste (Kearney, 1988).~~

139791, ZZ2020 • October 2013 • ACA08-037

~~5.2 Conclusion~~

~~The potential for release to soil and groundwater is low based on the design and function of the units and the indication that no hazardous constituents were ever managed at SWMUs 125 and 126. SWMU 125 is no longer in use and residue/ash from SWMU 126 is disposed of in the sanitary landfill on WMSR. The suggested action of the RFA is that both SWMUs 125 and 126 be recommended for no further action (Kearney, 1988).~~

139791, ZZ2020 • October 2013 • ACA08-037

~~6.0 SWMU 137 (WSMR-56) PAINT SHOP SUMP~~

~~6.1 SWMU 137 Description and Operational History~~

~~6.1.1 Site Description~~

~~SWMU 137 (WSMR-56), located at the northeast end of Building 1742 on the Main Post (Figure 6-1), is a sump located outside of the 4,321 square foot Building. The paint shop sump is square (3 by 3 feet) and 3 feet deep with 3 inch concrete walls (Kearney, 1988). The head of the steel drain pipe is exposed in the northern face of the sump. A square metal cover (42 by 42 inches) is in place over the sump and is flush with the surrounding asphalt-covered ground surface adjacent to Building 1742. Wastewater generated from the paint spray booth located inside Building 1742 was discharged to a concrete sump. Sludge (mixture of water and solids), paint, and other debris (trash, leaves, and sediment) were separated by gravity and transferred by gravity flow to the Sewage Treatment Plant (STP) (IT Corporation, 1992). The sump drain pipe intersects the STP sewer line approximately 6 feet directly north of the sump. The sludge was removed periodically and disposed of as hazardous waste; however, the frequency of sludge removal is not known and was not documented.~~

~~6.1.2 Operational History~~

~~Operations at the site began in 1968 (IT Corporation, 1992); however, Building 1742 is no longer used as a paint shop. During the visual surface inspection, conducted by A.T. Kearney in May 1988, paint drips and stains were observed on the asphalt around the sump and on the metal cover. There is no history of release from this unit.~~

~~The RFA reported that the potential for release to soil/groundwater was "low" (Kearney, 1988). The RFA also determined that a low potential existed for a release to surface water and air, and no potential existed for generation of subsurface gas (Kearney, 1988).~~

~~6.2 Conclusion~~

~~There is low potential for release to all media; however, effluent lines from this unit drain to the STP. Due to the age of the sump, there is a high potential for past and ongoing discharges of hazardous constituents to the STP. Sludge and sediment in the sump and in the sewer lines between the sump and the STP may contain hazardous constituents resulting from past usage of paints containing lead and chromium pigments. The suggested action of the RFA is to conduct an RFI at this unit (Kearney, 1988).~~

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

~~7.0 SWMU 153 (WSMR-58) VANDAL BURIAL SITE~~

~~7.1 SWMU 153 Description and Operational History~~

~~7.1.1 Site Description~~

~~SWMU 153 (WSMR-58) is located in an area approximately 270 by 140 feet that is located in the Hazardous Test Area of WSMR, adjacent (25 feet south) to the Open Burn/Open Detonation Area (SWMUs 55, 56, and 56A) (Figure 7-1). The site is approximately 7 miles north of the Main Post. The site consists of three distinct cells that have been covered with approximately 2 to 3 feet of soil.~~

~~7.1.2 Operational History~~

~~During the mid 1950's, missile and rocket parts were buried in three distinct cells and covered with approximately 2 to 3 feet of soil. During the 1988 visual inspection conducted by A.T. Kearney, the unit was found to have been extensively excavated. Exposed missile parts, other unexploded ordnance, and scrap metal were observed in the fill area (Kearney, 1988). The date of the termination of operations at this site is unknown.~~

~~7.2 Conclusion~~

~~Based on the site operational history, a potential exists for the release of hazardous constituents to the soil. The suggested action from the RFA (Kearney, 1988) is to conduct an RFI at the site.~~

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

~~8.0~~4.0 SWMU 163 ~~(WSMR-72)~~ COMMISSARY LANDFILL TRENCH

~~8.1~~4.1 SWMU 163 Description and Operational History

~~8.1.1~~4.1.1 Site Description

SWMU 163 ~~(WSMR-72)~~, the Commissary Landfill Trench, is located on Picatinny Avenue, approximately one-quarter mile west of Headquarters Avenue at the WSMR Main Post, 27 miles east-northeast of Las Cruces, New Mexico (**Figure ~~8~~4-1**).

~~8.1.2~~4.1.2 Operational History

During the construction of a new WSMR commissary in 1994, an old, inactive landfill was discovered. Little is known about the landfill; it is estimated that the landfill operated between 1946 and 1952 (Section 1, page 1, ASI, 1994a; **Appendix C-1** ~~and 1994b~~). The exact contents or quantities of waste placed in this landfill are unknown (Section 1, ASI, 1994a; **Appendix C-1**). To allow construction to proceed, the landfill was investigated to determine the extent and waste type, excavated to remove the waste and stained soil, sampled to confirm waste removal, and backfilled with clean fill to complete facility construction (Section 1, page 1, ASI, 1994a; **Appendix C-1**). The former trench is now partially covered with asphalt (ASI, 1994a; **Appendix C-1**). There were no engineered release controls associated with SWMU 163 and no history of release.

SWMU 163 ~~(WSMR-72)~~ was not part of the RFA performed at WSMR; however, SWMU 163 was identified as an area of concern in the 1997 SWMU Inventory Report (page 2-92, MEVATEC, 1995).

4.2 SWMU 163 Previous Assessments/Investigations

SWMU 163 was not part of any of the RFAs and RFIs performed at WSMR. The activities at SWMU 163 involved initial sampling to characterize the site, excavation of landfill material and visibly stained soil, and subsequent collection of confirmation soil samples (ASI, 1994a; **Appendix C-1**).

4.2.1 Initial Characterization

Soil samples were collected from various locations at the abandoned landfill in August 1994 to determine whether the soil contained any hazardous constituents. Sampling locations were not documented. A total of eight soil samples were collected (Section 1, ASI, 1994a; **Appendix C-1**). Three soil samples were analyzed for Toxicity Characterization Leaching Procedure (TCLP) metals; three soil samples were analyzed for total metals; and two soil samples were analyzed for VOCs. Results from the initial characterization event are provided

139791, ZZ2020 • October 2013 • ACA08-037

in Appendix A of the Commissary Landfill Trench Sampling report (ASI, 1994a; **Appendix C-1**).

Lead was the only constituent that exceeded the NMED residential SSL; the highest concentration of lead detected was 16,200 mg/kg well above the NMED Residential SSL of 400 mg/kg. Lead (TCLP) was measured at a concentration of 37 mg/L and exceeded the TCLP regulatory limit of 5 mg/L.

4.2.2 Closure Activities

Due to the high lead concentrations, WSMR prepared and implemented a plan to excavate, remove, and dispose of contaminated soil (ASI, 1994a; **Appendix C-1**). The landfill material was excavated and placed into roll-off containers. Waste characterization samples were collected from the excavated landfill material in roll-off containers to determine the appropriate disposition, as either hazardous or nonhazardous waste (ASI, 1994b, **Appendix C-2)**. A summary of the waste characterization sample results can be found in Table 1 of the Commissary Landfill Trench Excavation Material Sampling Report (ASI, 1994b; **Appendix C-2**). The complete data package from the waste characterization sampling event can be found in Appendix F of the Commissary Landfill Trench Excavation Material Sampling Report (ASI, 1994b; **Appendix C-2**).

Confirmatory soil samples were collected from the trench to determine the efficacy of the excavation and removal procedures (Section 2, page 1, ASI, 1994a, **Appendix C-1**). Robin Brown, a representative from the NMED Hazardous and Radioactive Materials Bureau observed the sampling event and collected split samples (Section 2, page 6, ASI, 1994a; **Appendix C-1**). Twenty-two confirmation soil samples were collected from the trench in September 1994 as shown in Figure 2 of the Commissary Landfill Trench Sampling Report (ASI, 1994a; **Appendix C-1)**. Sidewall samples were each located 1 foot above the trench floor. Samples from the trench floor were located on the bottom of the trench at a distance of 1 foot from the sidewall (Section 2, ASI, 1994a; **Appendix C-1**). The confirmation soil samples were analyzed for priority pollutant metals plus barium, pesticides and PCBs, chlorinated herbicides, VOCs, and SVOCs. A summary of the analytical results from the confirmation sampling event can be found in Table 1 of the Landfill Trench Sampling Report (ASI, 1994a; **Appendix C-1**).

None of the analytical results for metals exceed the NMED residential SSLs. The maximum concentration of lead was detected at 53 mg/kg, below the NMED Residential SSL of 400 mg/kg. The confirmation soil sampling data package is provided in Appendix F of the Commissary Landfill Trench Sampling Report **(**ASI, 1994a; **Appendix C-1).**

WSMR received a letter from the NMED Groundwater Protection and Remediation Bureau (NMED, 1995) in February 1995 approving the VCA at SWMU 163 (**Appendix C-3**).

~~8.2~~4.3 Conclusion

~~Based on the site operational history, the potential exists for the release of hazardous constituents to the soil and/or groundwater.~~ SWMU 163 was identified in the SWMU Inventory Report. The site did not undergo a Phase I/Phase II RFI. A VCA was performed which involved excavation of landfill material and collection of confirmation soil samples. The reports documenting the VCA were reviewed by the NMED Groundwater Protection Bureau and approved as indicated in **Appendix C-3**. The two reports, the Commissary Landfill Trench Sampling Report and the Commissary Landfill Excavation Material Sampling Report are attached as **Appendix C-1** and **Appendix C-2** incase these files are not available in NMED's database.

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

139791, ZZ2020 • October 2013 • ACA08-037

~~9.0~~5.0 REFERENCES

Advanced Sciences Inc. (ASI), 1993, *Final Closure Report for the Storage Tank Removal and Remediation at Stallion Range Center, White Sands Missile Range, New Mexico*, Contract No. DAAD07-90-C-0018, Work Assignment Order 400-11, Revision 4 and 5, August 30, 1993.

Advanced Sciences, Inc. (ASI), 1994a, *Commissary Landfill Trench Sampling at White Sands Missile Range, New Mexico*, Contract No. DAAD07-90-C0018, Work Assignment Order 600-11, October.

Advanced Sciences, Inc. (ASI), 1994b, *Commissary Landfill Trench Excavation Material Sampling at White Sands Missile Range*, New Mexico, Contract No. DAAD07-90-C0018, Work Assignment Order 600-11, December.

ASI, see Advanced Sciences, Inc.

BAE Systems, 2003, *RCRA Permit Modification Application for Post-Closure Care: TTF Disposal Surface Impoundment (SWMU 104), Permit Number NM2750211235-PCC, White Sands Missile Range, NM*, Report WS-ES-EC-0309.

IT Corporation, 1992, *Final RCRA Facility Investigation Report, Appendix II, III, and IV Sites, White Sands Missile Range, New Mexico, Volume 1*, USACE, Huntsville, Alabama, Contract No. DACA 8790-D-0015, Delivery Order 002, Project No. 42-1671, December 1992.

Kelly, T.E., and G.A. Hearne, 1976, *The Effects of Groundwater Development on the Water Supply in the Post Headquarters Area, White Sands Missile Range, New Mexico*, USGS Open File Report 76-277, U.S. Geological Survey.

Kearney, A.T., 1988, *RCRA Facility Assessment Preliminary Review/Visual Site Inspection Report, White Sands Missile Range*, USEPA Contract No. 68-01-7374, prepared for the U.S. Environmental Protection Agency Region VI, August.

MEVATEC Corporation (MEVATEC), 1995, *SWMU Inventory Report*, White Sands Missile Range, Contract No. DAAD07-95-C-0125.

MEVATEC Corporation (MEVATEC), 2000, *Decision Document for the Temperature Test Facility, 25,000 Gallon Evaporation Tank, SWMU 107, White Sands Missile Range, New Mexico*.

New Mexico Environment Department (NMED), 1995, Letter from M. Leavitt, Chief of the Ground Water Protection and Remediation Bureau, New Mexico Environment Department, to Brigadier General J.L. Laws, Commander, U.S. Army White Sands Missile Range, *RE: Approval of Corrective Action at the Commissary Landfill Site*, February 16.

New Mexico Environment Department (NMED), 2009, *Resource Conservation and Recovery Act Permit EPA ID No. NM 2750211235 to U.S. Department of Army for White Sands Missile Range Located in Doña Ana, Lincoln, Otero, Sierra and Socorro Counties, New Mexico,* Hazardous Waste Bureau, New Mexico Environment Department, Santa Fe, NM, December 3, 2009.

New Mexico Environment Department (NMED), 2012, *Risk Assessment Guidance for Site Investigation and Remediation, Volume I, Tier 1: Soil Screening Guidance Technical Background Document*, Tables 6-2 and A-1, New Mexico Environment Department., Hazardous Waste Bureau and Ground Water Quality Bureau, Santa Fe, NM, February 2012.

New Mexico Environment Department (NMED), 2013, Disapproval Release Assessment Report, SWMUs 107, 116, 117, 118, 121, 122, 123, 125, 126, 137, 153, 163, EPA ID# NM2750211235 to US Department of Army for White Sands Missile Range, New Mexico, Hazardous Waste Bureau, New Mexico Environment Department, Santa Fe, NM, August 28, 2013

NMED, see New Mexico Environment Department.

U.S. Environmental Protection Agency (EPA), 1995, *Statement of Basis, Final Decision and Response to Comments Summary, U.S. Army White Sands Missile Range, New Mexico, Approval of the Class III Permit Modification Request to remove twenty-four (24) Solid Waste Management Units (SWMUs) from the Corrective Action Permit (EPA Identification Number NM2750211235)*, Region 6, New Mexico and Federal Facilities Section (6PD-N), U.S. Environmental Protection Agency.

U.S. Environmental Protection Agency (EPA), 2000, Letter from D. Neleigh, Chief, New Mexico and Federal Facilities Section (6PD-N), U.S. Environmental Protection Agency, to T.A. Ladd, Director, Environment and Safety Directorate, Department of the Army, U.S. Army White Sands Missile Range, *RE: Confirmation for EPA Approval of the Class III Permit Modification Request to remove twenty-four (24) Solid Waste Management Units (SWMUs) from the Corrective Action Permit (EPA Identification Number NM2750211235)*, April 28, 2000.

White Sands Missile Range (WSMR), 1989, Temperature Test Facility Closure Plan, White Sands Missile Range, New Mexico, May, 1989.

WSMR, 1990, *Temperature Test Facility Spill Site Closure*, White Sands Missile Range, New Mexico, October, 1990.

White Sands Technical Services (WTS), 2006, *Phase III RCRA Facility Investigation, Main Post Multiple Sites: SWMUs 8-17, 21, 22, 80, 140, and 156, White Sands Missile Range, New Mexico*.

Woodward-Clyde Federal Services, 1996, *RCRA Facility Investigation Report, Temperature Test Facility*, White Sands Missile Range, New Mexico, April, 1996.

WTS, see White Sands Technical Services.

139791, ZZ2020 • October 2013 • ACA08-037

139791, ZZ2020 • October 2013 • ACA08-037

This page intentionally left blank.

Figures

Figure 1-1 **Location Map of SWMU 107, ~~SWMUs 116, 117, 118 (WSMR-75),~~ SWMUs 121 - 123 ~~(WSMR-67)~~, ~~SWMU 137 (WSMR-56), SWMUs 125 - 126 (WSMR-77), SWMU 153 (WSMR-58),~~ and SWMU 163 ~~(WSMR-72)~~, Release Assessment Report, White Sands Missile Range, NM**

Figure 1-2 **WSMR Main Post Geologic Map, SWMU 107 ~~(WSMR-35)~~, ~~SWMU 153 (WSMR-58), SWMU 125 (WSMR-77), SWMU 137 (WSMR-56),~~ and SWMU 163 ~~(WSMR-72)~~, Release Assessment Report, White Sands Missile Range, NM**

Figure 1-3 **WSMR Stallion Range Geologic Map, SWMUs 121 - 123 ~~(WSMR-67)~~, Release Assessment Report, White Sands Missile Range, NM**

~~**Figure 1-4 WSMR Stallion Range Geologic Map, SWMUs 116 - 118 (WSMR-75), Release Assessment Report, White Sands Missile Range, NM**~~

Figure 2-1 **Site Location Map, SWMU 107 ~~(WSMR-35)~~, Release Assessment Report, White Sands Missile Range, NM**

~~**Figure 3-1 Site Location Map, SWMU 116 (WMSR-75), Release Assessment Report, White Sands Missile Range, NM**~~

Figure ~~4~~3-1 **Site Location, Asphalt Tanks at Stallion Range, SWMUs 121 - 123 ~~(WSMR-67)~~, Release Assessment Report, White Sands Missile Range, NM**

~~**Figure 5-1 Site Location Map, SWMUs 125 and 126 (WSMR-77), Release Assessment Report, White Sands Missile Range, NM**~~

~~**Figure 6-1 Site Location Map, SWMU 137 (WSMR-56), Release Assessment Report, White Sands Missile Range, NM**~~

~~**Figure 7-1 Site Location Map, SWMU 153 (WSMR-58), Release Assessment Report, White Sands Missile Range, NM**~~

Figure ~~4~~8-1 **Site Plan, SWMU 163 ~~(WSMR-72)~~, Release Assessment Report, White Sands Missile Range, NM**

Appendix A-1
SWMU 107: Decision Document

Appendix A-2
SWMU 107: WSMR Letter to NMED Regarding RFI Activities at TTF

Appendix A-3
SWMU 107: WSMR Letter to NMED Regarding TTF Closure Data

Appendix B-1
SWMUs 121 – 123: 1993 Tank Closure Report

Appendix B-2
SWMUs 121 – 123: 1995 EPA Statement of Basis

Appendix B-3
SWMUs 121 – 123: 2000 EPA Letter Validating the Statement of Basis

Appendix C-1
SWMU 163: 1994 Trench Sampling Report

Appendix C-2
SWMU 163: 1994 Trench Excavation Material Sampling Report

Appendix C-3
SWMU 163: Approval Letter from NMED Dated February 16, 1995