WATER QUALITY & HYDROLOGY GROUP (ESH-18)

FAX TRANSMITTAL SHEET

FAX #: (505) 665-9344 **VERIFICATION #: (505) 665-0453**

DATE: February 7, 2000 LOG NO: ESH-18:00-FAX-

✓TO:	B. Hoditschek N. Wells B. Hoditschek	FAX #:	(505) 827-0160	PHONE #	(505) 827-0596	GRP ORG	NMED/SWQB
✓TO:	S. Yanicak	FAX #:	(505) 672-0466	PHONE #	(505) 672-0448	GRP ORG	NMED/AIP
✓TO:	M. Johansen J. Plum	FAX #:	(505) 665-4872	PHONE #	(505) 665-5046	GRP ORG	DOE/LAAO
✓TO:	Everett Spencer	FAX #:	(214) 665-6490	PHONE #	(214) 665-6080 (214) 665-6475	GRP ORG	EPA Region VI
✓TO:	Deb Woitte	FAX #:	(505) 665-4424	PHONE #	(505) 667-3766	GRP ORG	LC GEN
✓TO:	F. Sisneros M. Cash	FAX #:	(505) 667-0288	PHONE #	(505) 665-6978	GRP ORG	ESH-7
✓TO:	J. Mullany J. Parker	FAX #:	(505) 827-2965	PHONE #	(505) 827-0212	GRP ORG	NMED/GWQB
TO:	John Kieling	FAX #:	(505) 827-1544	PHONE #	(505) 827-1557	GRP ORG	NMED/HRMB
TO:		FAX #:		PHONE #		GRP ORG	

HSWA LANL 5/1157/9

FROM: Harvey Decker, ESH-18, MS K497 PHONE #: (505) 665-2014

MESSAGE: 15 day report on the TA-9 collection tank overflow. The validated analytical data is included. Data is fr taken from residual water left in the tank and from impacted soil samples and soil samples collected from outside the im QA/QC of the data is needed please let me know and I will send it separately as there are many pages of QA/QC results.

NUMBER OF PAGES TO FOLLOW: 18

Cy: ESH-18 FAX FILE
CRM-4, MS A150
ESH-18, spill file

GROUP LEADER/TEAM LEADER

H.D for M.S

3357

RELEASE / DISCHARGE NOTIFICATION

LOS ALAMOS NATIONAL LABORATORY

Permit Number: NM0028355

Calendar Year 2000

NPDES or Operational Spill/Release ☑
ER Spill/Release ☐
Other Spill/Release ☐
Indicate with "X" in appropriate box.

Release ID Number: 80

Responsible Facility/User Group: DX-DO FMU 67

Contact Person: Tom Alexander

Pager #: NA

Phone #: 667-6471

Cell Phone #: NA

Release/Discharge Location:

TA: 9

Building: 21

The High Explosives wastewater collection tanks at TA-9 overfilled and discharged from the vent pipe to the ground. These tanks are located on the south east corner of building 21 at TA-9 (see map enclosed).

If the release/discharge is associated with a NPDES Outfall, Potential Release Site (PRS) or Solid Waste Management Unit (SWMU), indicate the site/unit number and its relationship to the release/discharge:

NPDES Outfall: ☑ PRS: ☐ SWMU: ☐ PRS/SWMU Number:

Indicate with "X" in appropriate box(es

Relationship of the Discharge to a SWMU or PRS:

This discharge did not impact a SWMU or PRS. The wastewater from these tanks is normally trucked to the TA-16 HE treatment facility (HEWTF) for treatment prior to discharge from NPDES Outfall 05A055.

Discharge Occurred: 1/21/2000 10:00 a.m. (Date & Time)

Discharge Discovered: 1/21/2000 10:00 a.m. (Date & Time)

Discharge Stopped: 1/21/2000 10:00 a.m. (Date & Time)

Cleanup Started: N/A (Date & Time)

Cleanup Completed: N/A (Date & Time)

Material(s) Released / Discharged:

Approximately 500 to 1000 gallons of wastewater with suspected HE contaminants were discharged to the soil due to overflow of the wastewater holding tanks.

Release/Discharge Mitigation Method:

Approximately 4500 gallons of wastewater has been pumped from the tanks and trucked to the HEWTF for treatment under an approved Waste Profile Form/Waste Acceptance Criteria for that facility . All operations which contribute wastewater to the holding tanks have been suspended as of 14:10 p.m. on 1/21/00. These tanks collect HE wastewater from the TA-9 facility for treatment at the HEWTF and discharge at NPDES EPA permitted outfall 05A055

Weather Conditions:

clear, cool

Duration of Release/ Discharge, in HOURS:

Est. Volume Released/ Discharged, in GAL. 500-1000

Est. Volume Recovered, in GAL. N/A

Corrective Actions Taken (ie, type of BMPs, etc):

The discharge was halted and the impacted area was barricaded pending cleanup efforts. Samples were collected of the wastewater in the tanks and of soil from the impacted area. (7-day report) Preliminary High Explosives (HE) analysis indicate no detectable HE constituents. Preliminary Volatile data indicates non detect for all components in the soil sample, Semi-Volatile results are not yet available(7-day report). The impacted area was covered with plastic and bermed to prevent any mobilization of any suspected contaminants until the analytical results are back and a cleanup decision is made.

Nearest Watercourse (Canyon Name) Pajarito Canyon

Report Printed 2/7/00 2:51:12 PM

If the release/discharge reached a watercourse, describe the estimated surface area affected, presence of release/discharge now in the watercourse, and the media the release/discharge was detected in:

the discharge did not reach a watercourse.

Depth to Groundwater, in FT, if known: 1000

Distance to Nearest Drinking Water Well, in FT, if known: 21120 **Well ID#** OW-4

	Contact Person	Phone	Fax	Date & Time (or Comment)	
EPA:	E. Spencer	214-665-6475	214-665-6490	1/21/2000	1:53 p.m. (v-mail)
NMED/SWQB:	N. Wells	827-0572	827-0160	1/21/2000	1:50 p.m. (v-mail)
NMED/GWQB:	Jennifer Parker	827-0523	827-2965	1/21/2000	3:20 p.m.
NMED/HRMB:	J. Kelling	827-1557	827-1544	1/21/2000	2:28 p.m. (v-mail)
NMED/DOE-OB:	S. Yanicak	672-0448	672-0466	1/21/2000	2:18 p.m.
ESH-18:	H. Decker	665-2014	665-9344	1/21/2000	11:20 a.m.
DOE:	Mat Johansen	665-5046	665-4872	1/21/2000	2:30 p.m. (v-mail)
OTHER:					
OTHER:					

Comments: Samples from the tank and the impacted soil were collected on 1/21/00 in order to identify any contaminants and quantity of any contaminants that may be present. The analytical data will be transmitted when analysis is completed. The tanks were being periodically inspected by site personnel to monitor the level as the high level alarms had not yet been installed. Sampling for waste characterization were collected of the tank contents for transport to the High Explosives Treatment Facility when this discharge was discovered. Approximately 450 sq. ft. total area of soil was impacted by this discharge. The wastewater did not enter a streamcourse or cause any erosional damage. The area has been barricaded, the area covered with plastic and BMP's put in place in order to halt any mobilization of suspected contaminants until a cleanup decision can be developed based on the sample analytical results.

Form Completed By: H. Decker

7 Day Notice ☑ **7 Day Notice Date:** 1/27/2000 **7 Day Notice By:** H. Decker

Mark "X" when done.

Comments: Preliminary draft data indicate NO HE compounds or volatile organic compounds detected in the soil sample collected from the impacted area. Final data will be forwarded upon validation.

15 day Follow-up Due: 2/7/2000 **15-day Follow-Up By:** H. Decker

Comments: Final data from soil samples collected in the discharge area indicate no contaminant levels which would require removal of the soil. Analytical data for HE contaminants was non detect in the soil impacted from the overflow of water from the tanks. Additionally Volatile Organic Carbon (VOC) analysis of the soil was non detect with the exception of acetone at 0.12 ppm and Toluene at 0.014 ppm in the soil. These and other VOC's were detected in the tank water but below regulatory standard thresholds. The Laboratory proposes to leave the soil in place based on no apparent environmental damage as indicated by the analytical data. A slight sheen on the soil was noted in a small area near the tank, SVOC analysis indicate minute amounts of constituents that may be attributal to some slight oil left on the walls of the tanks and piping during construction. The tanks are currently out of operation pending the installation of high level alarms and operations procedural changes. As these modifications are put into place the tanks will be brought back into operation.

NMED 30 Day Response Date:

Comments:

David Gurule, Area Manager
Los Alamos Area Office
Department of Energy
Los Alamos, New Mexico 87544
(505) 667-5105

Dennis J. Erickson, ESH Division Director
University of California
Los Alamos National Laboratory
P.O. Box 1663, MS K491
Los Alamos, New Mexico 87544
(505) 667-4218

Group DX-2 Analytical Laboratory Report

Requester G.JIO,DX-2,C920
M.Cash,ESH-19,P915

Analytical Lab # 23086
Program Code CDFE/3000
Cost Center 8L20

Sample ID WW ta-9-21-185 tank#3-1/21/00 *
Tests Required pH, COD, TLC for HE

Date Received 1/21/00
Operator JGA
Date Reported 1/21/00

Total Weight 1 sample
Manufacture DX-2

Composition	Analysis	Nominal
N/A	N/A	N/A

Impact Sensitivity
Type 12 N/A H50 cm N/A HMX, Ref, cm

Thermal Tests
Vacuum Stability N/A ml/g Temp. N/A °C Time
DTA N/A °C
Pyrolysis N/A °C Color

Misc. Tests
RESULTS:

SAMPLE	pH	COD (mg/l)	TLC for HE
Tank #3	6.7	100	Not Detected
Standing surface water East side (no spill)	**	50	Not Detected
Soil West (spill)			Not Detected
Soil East (no spill)			Not Detected

Note: ** Not enough sample for pH

*Report amended 1/25/00

ASSAIGAI ANALYTICAL LABORATORIES, INC.
7300 Jefferson, NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood Dr., Suite N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2555

Explanation of codes	
B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

LOS ALAMOS NATIONAL LABS
attn: **DUSTIE STEPHENS**
MAIL STOP K491/ESH-19
LOS ALAMOS, NM 87545

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Background Soil Sample collected from area of no impact of the discharged water

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0001224 TA-9 BL20CFDE30000000**

William P. Slaven: President of Assaigai Analytical Laboratories, Inc.

Client Sample ID: ***00DS049*** Sample Matrix: ***SOIL*** Sample Collected: *01/21/00 16:15:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0001224-01A		SW846 3050A/6010A ICP							
M0074	MW.2000.111-61	7429-90-5	Aluminum	7240	mg / Kg	1	25		01/26/00
M0074	MW.2000.111-61	7440-36-0	Antimony	ND	mg / Kg	1	1.5		01/26/00
M0074	MW.2000.101-50	7440-38-2	Arsenic	ND	mg / Kg	1	3		01/24/00
M0074	MW.2000.101-50	7440-39-3	Barium	131	mg / Kg	1	0.5		01/24/00
M0074	MW.2000.111-61	7440-41-7	Beryllium	0.51	mg / Kg	1	0.5		01/26/00
M0074	MW.2000.111-61	7440-42-8	Boron	ND	mg / Kg	1	15	3	01/26/00
M0074	MW.2000.151-27	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		02/01/00
M0074	MW.2000.111-61	7440-70-2	Calcium	1700	mg / Kg	1	15		01/26/00
M0074	MW.2000.101-50	7440-47-3	Chromium	4.2	mg / Kg	1	1		01/24/00
M0074	MW.2000.111-61	7440-48-4	Cobalt	6.6	mg / Kg	1	0.5		01/26/00
M0074	MW.2000.151-27	7440-50-8	Copper	4.6	mg / Kg	1	0.8		02/01/00
M0074	MW.2000.111-61	7439-89-6	Iron	9220	mg / Kg	1	15		01/26/00
M0074	MW.2000.111-61	7439-95-4	Magnesium	1460	mg / Kg	1	10		01/26/00
M0074	MW.2000.111-61	7439-96-5	Manganese	490	mg / Kg	1	0.25		01/26/00
M0074	MW.2000.111-61	7440-02-0	Nickel	5.6	mg / Kg	1	2		01/26/00
M0074	MW.2000.111-61	7440-09-7	Potassium	1610	mg / Kg	1	10		01/26/00
M0074	MW.2000.111-61	7782-49-2	Selenium	ND	mg / Kg	1	2.5		01/26/00
M0074	MW.2000.111-61	7440-21-3	Silicon	226	mg / Kg	1	25	23E	01/26/00
M0074	MW.2000.101-50	7440-22-4	Silver	ND	mg / Kg	1	1		01/24/00
M0074	MW.2000.111-61	7440-23-5	Sodium	45.3	mg / Kg	1	15		01/26/00
M0074	MW.2000.111-61	7440-28-0	Thallium	ND	mg / Kg	1	20		01/26/00
M0074	MW.2000.111-61	7440-62-2	Vanadium	17.3	mg / Kg	1	0.15		01/26/00
M0074	MW.2000.111-61	7440-66-6	Zinc	19.0	mg / Kg	1	5		01/26/00

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Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0001224 TA-9 8L20CFDE30000000**

0001224-01A		**SW846 3050A/7000 series AA-FL**							
M0074	MW.2000.116-11	7439-92-1	Lead	6.6	mg / Kg	1	5		01/27/00
0001224-01A		**SW846 3550A/8270B 5VOCs by GC/MS**							
X0030	XG.2000.83-6	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		01/27/00
X0030	XG.2000.83-6	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.87		01/27/00
X0030	XG.2000.83-6	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	91-57-6	2-Methylnaphthalene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6		3+4 Methylphenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	106-47-8	4-Chloroaniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	100-01-6	4-Nitroaniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	100-02-7	4-Nitrophenol	ND	mg / Kg	1	0.6		01/27/00
X0030	XG.2000.83-6	83-32-9	Acenaphthene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	208-96-8	Acenaphthylene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	62-53-3	Aniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	120-12-7	Anthracene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	56-55-3	Benzo (a) anthracene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	50-32-8	Benzo(a)pyrene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6		Benzo(b & k)fluoranthene	0.064	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	65-85-0	Benzoic acid	ND	mg / Kg	1	3		01/27/00
X0030	XG.2000.83-6	100-51-6	Benzyl alcohol	ND	mg / Kg	1	1.5		01/27/00
X0030	XG.2000.83-6	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1	0.03		01/27/00

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Certificate of Analysis

Client: LOS ALAMOS NATIONAL LABS
Project: 0001224 TA-9 SL20CFDE30000000

X0030	XG.2000.83-6	117-81-7	bis(2-Ethylhexyl)phthalate	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	218-01-9	Chrysene	0.031	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	117-84-0	di-n-Octylphthalate	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	132-64-9	Dibenzofuran	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	84-66-2	Diethylphthalate	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	131-11-3	Dimethylphthalate	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	206-44-0	Fluoranthene	0.060	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	86737	Fluorene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	118-74-1	Hexachlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1	1.5		01/27/00
X0030	XG.2000.83-6	67-72-1	Hexachloroethane	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	78-59-1	Isophorone	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	91-20-3	Naphthalene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	98-95-3	Nitrobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	87-86-5	Pentachlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	85-01-8	Phenanthrene	0.032	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	108-95-2	Phenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-6	129-00-0	Pyrene	0.058	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-6	110-86-1	Pyridine	ND	mg / Kg	1	0.3		01/27/00

0001224-01A **SW846 7471 CVAA**

M5091	MW.2000.110-15		Mercury	0.10	mg / Kg	1	0.05		01/26/00

0001224-01A **SW846 8260A Purgeable VOCs by GC/MS**

X0021	XG.2000.65-18	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	75-35-4	1,1 Dichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-18	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	1	01/25/00

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X0021	XG.2000.65-18	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	67-64-1	Acetone	0.12	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-18	107-02-8	Acrolein	ND	mg / Kg	1	0.1	1	01/25/00
X0021	XG.2000.65-18	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	1	01/25/00
X0021	XG.2000.65-18	71-43-2	Benzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	75-25-2	Bromoform	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	67-66-3	Chloroform	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18		Freon 113	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	75-71-8	Freon 12	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-18	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-18		Naphthalene	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18		p/m Xylenes	ND	mg / Kg	1	0.01	1	01/25/00
X0021	XG.2000.65-18	100-42-5	Styrene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	108-88-3	Toluene	0.014	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-18	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-18	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.025	1	01/25/00

Client Sample ID: **00DS050**
Sample Matrix: **SOIL** Sample from Impacted Area
Sample Collected: 01/21/00 16:15:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0001224-02A		SW846 3050A/6010A ICP							
M0074	MW.2000.111-64	7429-90-5	Aluminum	9180	mg / Kg	1	25		01/26/00
M0074	MW.2000.111-64	7440-36-0	Antimony	ND	mg / Kg	1	1.5		01/26/00

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M0074	MW.2000.101-53	7440-38-2	Arsenic	ND	mg / Kg	1	3		01/24/00
M0074	MW.2000.101-53	7440-39-3	Barium	124	mg / Kg	1	0.5		01/24/00
M0074	MW.2000.111-64	7440-41-7	Beryllium	ND	mg / Kg	1	0.5		01/26/00
M0074	MW.2000.111-64	7440-42-8	Boron	ND	mg / Kg	1	15	3	01/26/00
M0074	MW.2000.151-30	7440-43-9	Cadmium	ND	mg / Kg	1	0.2		02/01/00
M0074	MW.2000.111-64	7440-70-2	Calcium	4070	mg / Kg	1	15		01/26/00
M0074	MW.2000.101-53	7440-47-3	Chromium	4.8	mg / Kg	1	1		01/24/00
M0074	MW.2000.111-64	7440-48-4	Cobalt	4.7	mg / Kg	1	0.5		01/26/00
M0074	MW.2000.151-30	7440-50-8	Copper	11.8	mg / Kg	1	0.5		02/01/00
M0074	MW.2000.111-64	7439-89-6	Iron	12000	mg / Kg	1	15		01/26/00
M0074	MW.2000.151-30	7439-92-1	Lead	17.1	mg / Kg	1	2		02/01/00
M0074	MW.2000.111-64	7439-95-4	Magnesium	1360	mg / Kg	1	10		01/26/00
M0074	MW.2000.111-64	7439-96-5	Manganese	390	mg / Kg	1	0.25		01/26/00
M0074	MW.2000.111-64	7440-02-0	Nickel	6.8	mg / Kg	1	2		01/26/00
M0074	MW.2000.111-64	7440-09-7	Potassium	1290	mg / Kg	1	10		01/26/00
M0074	MW.2000.111-64	7782-49-2	Selenium	ND	mg / Kg	1	2.5		01/26/00
M0074	MW.2000.111-64	7440-21-3	Silicon	211	mg / Kg	1	25	23E	01/26/00
M0074	MW.2000.101-53	7440-22-4	Silver	ND	mg / Kg	1	1		01/24/00
M0074	MW.2000.111-64	7440-23-5	Sodium	80.1	mg / Kg	1	15		01/26/00
M0074	MW.2000.111-64	7440-28-0	Thallium	ND	mg / Kg	1	20		01/26/00
M0074	MW.2000.111-64	7440-62-2	Vanadium	15.1	mg / Kg	1	0.15		01/26/00
M0074	MW.2000.111-64	7440-66-6	Zinc	18.8	mg / Kg	1	5		01/26/00

0001224-02A — **SW846 3550A/8270B SVOCs by GC/MS**

X0030	XG.2000.83-9	120-82-1	1,2,4-Trichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	95-50-1	1,2-Dichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	541-73-1	1,3-Dichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	106-46-7	1,4-Dichlorobenzene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	90-12-0	1-Methylnaphthalene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg / Kg	1	1.5		01/27/00
X0030	XG.2000.83-9	95-95-4	2,4,5-Trichlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	88-06-2	2,4,6-Trichlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	120-83-2	2,4-Dichlorophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	105-67-9	2,4-Dimethylphenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	51-28-5	2,4-Dinitrophenol	ND	mg / Kg	1	0.67		01/27/00
X0030	XG.2000.83-9	121-14-2	2,4-Dinitrotoluene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	606-20-2	2,6-Dinitrotoluene	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	91-58-7	2-Chloronaphthalene	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	95-57-8	2-Chlorophenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	91-57-6	2-Methylnaphthalene	0.033	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	95-48-7	2-Methylphenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	88-74-4	2-Nitroaniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	88-75-5	2-Nitrophenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9		3+4 Methylphenol	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	91-94-1	3,3-Dichlorobenzidine	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	99-09-2	3-Nitroaniline	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	534-52-1	4,6-Dinitro-2-methylphenol	ND	mg / Kg	1	0.3		01/27/00
X0030	XG.2000.83-9	101-55-3	4-Bromophenyl-phenylether	ND	mg / Kg	1	0.03		01/27/00
X0030	XG.2000.83-9	59-50-7	4-Chloro-3-methylphenol	ND	mg / Kg	1	0.3		01/27/00

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Client: **LOS ALAMOS NATIONAL LABS**
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X0030	XG.2000.83-9	106-47-8	4-Chloroaniline	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	7005-72-3	4-Chlorophenyl-phenylether	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	100-01-6	4-Nitroaniline	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	100-02-7	4-Nitrophenol	ND	mg / Kg	1		0.6	01/27/00
X0030	XG.2000.83-9	83-32-9	Acenaphthene	0.10	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	208-96-8	Acenaphthylene	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	62-53-3	Aniline	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	120-12-7	Anthracene	0.16	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9		Azobenzene&1,2-Diphenylhydrazine	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	56-55-3	Benzo (a) anthracene	0.28	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	50-32-8	Benzo(a)pyrene	0.26	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9		Benzo(b & k)fluoranthene	0.45	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	191-24-2	Benzo(g,h,i)perylene	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	65-85-0	Benzoic acid	ND	mg / Kg	1		3	01/27/00
X0030	XG.2000.83-9	100-51-6	Benzyl alcohol	ND	mg / Kg	1		1.5	01/27/00
X0030	XG.2000.83-9	111-44-4	bis (2-Chloroethyl) ether	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	111-91-1	bis(2-Chloroethoxy)methane	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	108-60-1	bis(2-Chloroisopropyl)ether	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	117-81-7	bis(2-Ethylhexyl)phthalate	0.61	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	85-68-7	Butylbenzylphthalate	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	218-01-9	Chrysene	0.29	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	84-74-2	di-n-Butylphthalate	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	117-84-0	di-n-Octylphthalate	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	53-70-3	Dibenz(a,h)anthracene	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	132-64-9	Dibenzofuran	0.060	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	84-66-2	Diethylphthalate	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	131-11-3	Dimethylphthalate	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	206-44-0	Fluoranthene	0.71	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	86737	Fluorene	0.10	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	118-74-1	Hexachlorobenzene	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	87-68-3	Hexachlorobutadiene	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	77-47-4	Hexachlorocyclopentadiene	ND	mg / Kg	1		1.5	01/27/00
X0030	XG.2000.83-9	67-72-1	Hexachloroethane	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	193-39-5	Indeno(1,2,3-cd)pyrene	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	78-59-1	Isophorone	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	621-64-7	n-Nitroso-di-n-propylamine	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	62-75-9	n-Nitroso-dimethyl-amine	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	86-30-6	n-Nitrosodiphenylamine	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	91-20-3	Naphthalene	0.097	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	98-95-3	Nitrobenzene	ND	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	87-86-5	Pentachlorophenol	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	85-01-8	Phenanthrene	0.75	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	108-95-2	Phenol	ND	mg / Kg	1		0.3	01/27/00
X0030	XG.2000.83-9	129-00-0	Pyrene	0.63	mg / Kg	1		0.03	01/27/00
X0030	XG.2000.83-9	110-86-1	Pyridine	ND	mg / Kg	1		0.3	01/27/00

0001224-02A **SW846 7471CVAA**

M0091	MW.2000.110-16		Mercury	0.08	mg / Kg	1		0.05	01/26/00

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Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**
Project: **0001224 TA-9 8L20CFDE30000000**

0001224-02A — **SW846 8260A Purgeable VOCs by GC/MS**

X0021	XG.2000.65-19	75-34-3	1,1 Dichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	75-35-4	1,1 Dichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	71-55-6	1,1,1 Trichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	630-20-6	1,1,1,2 Tetrachloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	79-00-5	1,1,2 Trichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	79-34-5	1,1,2,2 Tetrachloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	106-93-4	1,2 Dibromoethane (EDB)	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	95-50-1	1,2 Dichlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	107-06-2	1,2 Dichloroethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	78-87-5	1,2 Dichloropropane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	96-18-4	1,2,3 Trichloropropane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	95-63-6	1,2,4-Trimethylbenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	541-73-1	1,3 Dichlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	108-67-8	1,3,5-Trimethylbenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	764-41-0	1,4 Dichloro-2-butene	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-19	106-46-7	1,4 Dichlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	78-93-3	2-Butanone (MEK)	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	110-75-8	2-Chloroethylvinylether	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	591-78-6	2-Hexanone (MBK)	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	67-64-1	Acetone	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-19	107-02-8	Acrolein	ND	mg / Kg	1	0.1	1	01/25/00
X0021	XG.2000.65-19	107-13-1	Acrylonitrile	ND	mg / Kg	1	0.1	1	01/25/00
X0021	XG.2000.65-19	71-43-2	Benzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	75-27-4	Bromodichloromethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	75-25-2	Bromoform	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	74-83-9	Bromomethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	75-15-0	Carbon disulfide	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	56-23-5	Carbon tetrachloride	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	108-90-7	Chlorobenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	124-48-1	Chlorodibromomethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	75-00-3	Chloroethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	67-66-3	Chloroform	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	74-87-3	Chloromethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	156-59-2	cis-1,2 dichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	10061-01-5	cis-1,3 dichloropropene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	74-95-3	Dibromomethane	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	97-63-2	Ethyl methacrylate	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19		Freon 113	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	75-71-8	Freon 12	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-19	74-88-4	Iodomethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	1634-04-4	Methyl t-butyl ether (MTBE)	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	75-09-2	Methylene chloride	ND	mg / Kg	1	0.05	1	01/25/00
X0021	XG.2000.65-19		Naphthalene	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19		p/m Xylenes	ND	mg / Kg	1	0.01	1	01/25/00

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X0021	XG.2000.65-19	100-42-5	Styrene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	156-60-5	t-1,2 Dichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	10061-02-6	t-1,3 Dichloropropene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	127-18-4	Tetrachloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	108-88-3	Toluene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	79-01-6	Trichloroethene	ND	mg / Kg	1	0.005	1	01/25/00
X0021	XG.2000.65-19	75-69-4	Trichlorofluoromethane	ND	mg / Kg	1	0.025	1	01/25/00
X0021	XG.2000.65-19	108-05-4	Vinyl acetate	ND	mg / Kg	1	0.026	1	01/25/00
X0021	XG.2000.65-19	75-01-4	Vinyl chloride	ND	mg / Kg	1	0.026	1	01/25/00

Client Sample ID: 00DS051 — Sample Matrix: SOIL from Impacted Area for TCLP — Sample Collected: 01/21/00 16:15:00

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0001224-03B		**SW846 1311/3010A/6010A ICP TCLP**							
M0083	MW.2000.111-14	7440-38-2	Arsenic	ND	mg / L	1	0.1		01/26/00
M0083	MW.2000.111-14	7440-43-9	Cadmium	ND	mg / L	1	0.02		01/26/00
M0083	MW.2000.111-14	7440-47-3	Chromium	ND	mg / L	1	0.02		01/26/00
M0083	MW.2000.111-14	7782-49-2	Selenium	ND	mg / L	1	0.05		01/26/00
M0083	MW.2000.111-14	7440-22-4	Silver	ND	mg / L	1	0.04		01/26/00
0001224-03B		**SW846 1311/3010A/6020A ICP-MS TCLP**							
MT.2000.384	MT.2000.384-8		Lead	ND	mg/L	1	0.001		01/27/00
0001224-03B		**SW846 1311/3010A/7000 series AA-FL TCLP**							
M0083	MW.2000.117-27	7440-39-3	Barium	0.6	mg / L	1	0.5		01/27/00
0001224-03B		**SW846 1311/7470 CVAA TCLP**							
M0084	MW.2000.131-13		Mercury	ND	mg / L	1	0.0002		01/28/00
0001224-03D		**SW846 1311/8260A Purgeable VOCs by GC/MS TCLP**							
X99429	XG.2000.64-2	75-35-4	1,1 Dichloroethylene	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	107-06-2	1,2 Dichloroethane	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	71-43-2	Benzene	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	56-23-5	Carbon tetrachloride	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	108-90-7	Chlorobenzene	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	67-66-3	Chloroform	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	78-93-3	Methyl ethyl ketone	ND	mg / L	1	0.005	1	01/25/00
X99429	XG.2000.64-2	127-18-4	Tetrachloroethylene	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	79-01-6	Trichloroethylene	ND	mg / L	1	0.001	1	01/25/00
X99429	XG.2000.64-2	75-01-4	Vinyl chloride	ND	mg / L	1	0.001	1	01/25/00
0001224-03F		**SW846 1311/3510B/8270B SVOCs by GC/MS TCLP**							
X007	XG.2000.78-2	106-46-7	1,4-Dichlorobenzene	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2	95-95-4	2,4,6-Trichlorophenol	ND	mg / L	1	0.01		01/27/00
X007	XG.2000.78-2	88-06-2	2,4,6-Trichlorophenol	ND	mg / L	1	0.01		01/27/00
X007	XG.2000.78-2	121-14-2	2,4-Dinitrotoluene	ND	mg / L	1	0.01		01/27/00

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X007	XG.2000.78-2	118-74-1	Hexachlorobenzene	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2	87-68-3	Hexachlorobutadiene	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2	67-72-1	Hexachloroethane	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2		m-Cresol & p-Cresol	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2	98-95-3	Nitrobenzene	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2	95-48-7	o-Cresol	ND	mg / L	1	0.001		01/27/00
X007	XG.2000.78-2	87-86-5	Pentachlorophenol	ND	mg / L	1	0.01		01/27/00
X007	XG.2000.78-2	110-86-1	Pyridine	ND	mg / L	1	0.01		01/27/00

*** Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. ***
*** ND = Not detected: less than the sample specific Detection Limit. Results relate only to the items tested. ***

footnote

1. Sample was received in an improper container with headspace.
2. The laboratory control samples are below QC criteria at 28%.
3. Please note that Fractions 0001224-01A and 02A were received in glass containers, therefore the reported boron and silica results may be biased

End of Soils Data

ASSAIGAI ANALYTICAL LABORATORIES, INC.
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127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-255

Explanation of codes

B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

LOS ALAMOS NATIONAL LABS
attn: **DUSTIE STEPHENS**
MAIL STOP K491/ESH-19
LOS ALAMOS, NM 87545

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Client: **LOS ALAMOS NATIONAL LABS**
Project: **0001223 TA-9 8L20CFDE30000000**

William P. Blave: President of Assaigai Analytical Laboratories, Inc.

Client Sample ID: ***00DS046*** Sample Matrix: ***H2O*** From Tank Sample Collected: *01/21/00 14:30:00*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0001223-01A		SW846 8260A Purgeable VOCs by GC/MS							
X0032	XG.2000.69-4	75-34-3	1,1 Dichloroethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	75-35-4	1,1 Dichloroethene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	71-55-6	1,1,1 Trichloroethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	630-20-6	1,1,1,2 Tetrachloroethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	79-00-5	1,1,2 Trichloroethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	79-34-5	1,1,2,2 Tetrachloroethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	106-93-4	1,2 Dibromoethane (EDB)	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	95-50-1	1,2 Dichlorobenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	107-06-2	1,2 Dichloroethane	81	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	78-87-5	1,2 Dichloropropane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	96-18-4	1,2,3 Trichloropropane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	95-63-6	1,2,4-Trimethylbenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	541-73-1	1,3 Dichlorobenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	108-67-8	1,3,5-Trimethylbenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	764-41-0	1,4 Dichloro-2-butene	ND	ug / L	1	10	1	01/24/00
X0032	XG.2000.69-4	106-46-7	1,4 Dichlorobenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	78-93-3	2-Butanone (MEK)	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	110-75-8	2-Chloroethylvinylether	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	591-78-6	2-Hexanone (MBK)	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	108-10-1	4-Methyl-2-pentanone (MIBK)	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-9	67-64-1	Acetone	190	ug / L	10	10	1	01/25/00
X0032	XG.2000.69-4	107-02-8	Acrolein	ND	ug / L	1	20	1	01/24/00
X0032	XG.2000.69-4	107-13-1	Acrylonitrile	ND	ug / L	1	20	1	01/24/00

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X0032	XG.2000.69-4	71-43-2	Benzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	75-27-4	Bromodichloromethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	75-25-2	Bromoform	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	74-83-9	Bromomethane	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	75-15-0	Carbon disulfide	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	56-23-5	Carbon tetrachloride	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	108-90-7	Chlorobenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	124-48-1	Chlorodibromomethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	75-00-3	Chloroethane	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	67-66-3	Chloroform	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	74-87-3	Chloromethane	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	156-59-2	cis-1,2 dichloroethene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	10061-01-5	cis-1,3 dichloropropene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	74-95-3	Dibromomethane	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	97-63-2	Ethyl methacrylate	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	100-41-4	Ethylbenzene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4		Freon 113	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	75-71-8	Freon 12	ND	ug / L	1	10	1	01/24/00
X0032	XG.2000.69-4	74-88-4	Iodomethane	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	1634-04-4	Methyl t-butyl ether (MTBE)	1.8	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	75-09-2	Methylene chloride	ND	ug / L	1	10	1	01/24/00
X0032	XG.2000.69-4		Naphthalene	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	95-47-6	o-Xylene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4		p/m Xylenes	ND	ug / L	1	2	1	01/24/00
X0032	XG.2000.69-4	100-42-5	Styrene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	156-60-5	t-1,2 Dichloroethene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	10061-02-6	t-1,3 Dichloropropene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	127-18-4	Tetrachloroethene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	108-88-3	Toluene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	79-01-6	Trichloroethene	ND	ug / L	1	1	1	01/24/00
X0032	XG.2000.69-4	75-69-4	Trichlorofluoromethane	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	108-05-4	Vinyl acetate	ND	ug / L	1	5	1	01/24/00
X0032	XG.2000.69-4	75-01-4	Vinyl chloride	ND	ug / L	1	5	1	01/24/00

Client Sample ID: **00DS047** Sample Matrix: **H2O** from Tank Sample Collected: **01/21/00 14:30:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0001223-02A		**SW846 3510B/8270B SVOCs by GC/MS**							
X0011	XG.2000.80-2	120-82-1	1,2,4-Trichlorobenzene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	95-50-1	1,2-Dichlorobenzene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	541-73-1	1,3-Dichlorobenzene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	106-46-7	1,4-Dichlorobenzene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	90-12-0	1-Methylnaphthalene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	58-90-2	2,3,4,6-Tetrachlorophenol	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	95-95-4	2,4,5-Trichlorophenol	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	88-06-2	2,4,6-Trichlorophenol	ND	ug / L	1	5		01/27/00

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X0011	XG.2000.80-2	120-83-2	2,4-Dichlorophenol	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	105-67-9	2,4-Dimethylphenol	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	51-28-5	2,4-Dinitrophenol	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	121-14-2	2,4-Dinitrotoluene	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	606-20-2	2,6-Dinitrotoluene	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	91-58-7	2-Chloronaphthalene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	95-57-8	2-Chlorophenol	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	91-57-6	2-Methylnaphthalene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	95-48-7	2-Methylphenol	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	88-74-4	2-Nitroaniline	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	88-75-5	2-Nitrophenol	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2		3+4 Methylphenol	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	91-94-1	3,3-Dichlorobenzidine	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	99-09-2	3-Nitroaniline	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	534-52-1	4,6-Dinitro-2-methylphenol	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	101-55-3	4-Bromophenyl-phenylether	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	59-50-7	4-Chloro-3-methylphenol	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	106-47-8	4-Chloroaniline	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	7005-72-3	4-Chlorophenyl-phenylether	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	100-01-6	4-Nitroaniline	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	100-02-7	4-Nitrophenol	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	83-32-9	Acenaphthene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	208-96-8	Acenaphthylene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	62-53-3	Aniline	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	120-12-7	Anthracene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2		Azobenzene&1,2-Diphenylhydrazine	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	56-55-3	Benzo (a) anthracene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	50-32-8	Benzo(a)pyrene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2		Benzo(b & k)fluoranthene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	191-24-2	Benzo(g,h,i)perylene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	65-85-0	Benzoic acid	ND	ug / L	1	25		01/27/00
X0011	XG.2000.80-2	100-51-6	Benzyl alcohol	ND	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	111-44-4	bis (2-Chloroethyl) ether	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	111-91-1	bis(2-Chloroethoxy)methane	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	108-60-1	bis(2-Chloroisopropyl)ether	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	117-81-7	bis(2-Ethylhexyl)phthalate	12	ug / L	1	5		01/27/00
X0011	XG.2000.80-2	85-68-7	Butylbenzylphthalate	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	218-01-9	Chrysene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	84-74-2	di-n-Butylphthalate	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	117-84-0	di-n-Octylphthalate	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	53-70-3	Dibenz(a,h)anthracene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	132-64-9	Dibenzofuran	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	84-66-2	Diethylphthalate	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	131-11-3	Dimethylphthalate	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	206-44-0	Fluoranthene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	86737	Fluorene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	118-74-1	Hexachlorobenzene	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	87-68-3	Hexachlorobutadiene	ND	ug / L	1	10		01/27/00

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X0011	XG.2000.80-2	77-47-4	Hexachlorocyclopentadiene	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	67-72-1	Hexachloroethane	ND	ug / L	1	6		01/27/00
X0011	XG.2000.80-2	193-39-5	Indeno(1,2,3-cd)pyrene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	78-59-1	Isophorone	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	621-64-7	n-Nitroso-di-n-propylamine	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	62-75-9	n-Nitroso-dimethyl-amine	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	86-30-6	n-Nitrosodiphenylamine	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	91-20-3	Naphthalene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	98-95-3	Nitrobenzene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	87-86-5	Pentachlorophenol	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	85-01-8	Phenanthrene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	108-95-2	Phenol	ND	ug / L	1	10		01/27/00
X0011	XG.2000.80-2	129-00-0	Pyrene	ND	ug / L	1	1		01/27/00
X0011	XG.2000.80-2	110-86-1	Pyridine	ND	ug / L	1	10		01/27/00

Client Sample ID **00DS048** Sample Matrix **H2O** from Tank Sample Collected **01/21/00 14:30:00**

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date
0001223-03A		**SW846 3005A/6010A ICP**							
M0075	MW.2000.101-63	7429-90-5	Aluminum	ND	mg / L	1	0.1		01/24/00
M0075	MW.2000.101-63	7440-36-0	Antimony	ND	mg / L	1	0.04		01/24/00
M0075	MW.2000.101-63	7440-38-2	Arsenic	ND	mg / L	1	0.08		01/24/00
M0075	MW.2000.101-63	7440-41-7	Beryllium	ND	mg / L	1	0.002		01/24/00
M0075	MW.2000.145-19	7440-42-8	Boron	0.07	mg / L	1	0.05	3	02/01/00
M0075	MW.2000.101-63	7440-43-9	Cadmium	ND	mg / L	1	0.006		01/24/00
M0075	MW.2000.101-63	7440-70-2	Calcium	2.8	mg / L	1	0.4		01/24/00
M0075	MW.2000.101-63	7440-47-3	Chromium	0.34	mg / L	1	0.01	2	01/24/00
M0075	MW.2000.101-63	7440-48-4	Cobalt	ND	mg / L	1	0.01		01/24/00
M0075	MW.2000.145-19	7440-50-8	Copper	0.08	mg / L	1	0.01		02/01/00
M0075	MW.2000.101-63	7439-89-6	Iron	1.66	mg / L	1	0.05	2	01/24/00
M0075	MW.2000.145-19	7439-92-1	Lead	ND	mg / L	1	0.08		02/01/00
M0075	MW.2000.101-63	7439-95-4	Magnesium	0.7	mg / L	1	0.1		01/24/00
M0075	MW.2000.145-19	7439-96-5	Manganese	0.073	mg / L	1	0.01		02/01/00
M0075	MW.2000.101-63	7440-02-0	Nickel	0.14	mg / L	1	0.02		01/24/00
M0075	MW.2000.145-19	7440-09-7	Potassium	11.9	mg / L	1	0.2		02/01/00
M0075	MW.2000.101-63	7782-49-2	Selenium	ND	mg / L	1	0.08		01/24/00
M0075	MW.2000.145-19	7440-21-3	Silicon	50.3	mg / L	1	0.1	3	02/01/00
M0075	MW.2000.101-63	7440-22-4	Silver	ND	mg / L	1	0.01		01/24/00
M0075	MW.2000.145-19	7440-23-5	Sodium	20.0	mg / L	1	0.2		02/01/00
M0075	MW.2000.111-31	7440-28-0	Thallium	ND	mg / L	1	0.1		01/26/00
M0075	MW.2000.101-63	7440-62-2	Vanadium	ND	mg / L	1	0.01		01/24/00
M0075	MW.2000.145-19	7440-66-6	Zinc	0.34	mg / L	1	0.02		02/01/00
0001223-03A		**SW846 3005A/7000 series AA-FL**							
M0075	MW.2000.117-41	7440-39-3	Barium	ND	mg / L	1	0.5		01/27/00

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0001223-03A **SW846 7470 CVAA**

M0085	MW.2000.131-25		Mercury	0.0009	mg / L	1	0.0002		01/28/00

**** Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. ****
**** ND = Not detected: less than the sample specific Detection Limit. Results relate only to the items tested. ****

footnote

1. The pH of this sample at the time of analysis was greater than 2 pH units.
2. This sample was utilized for the matrix spike and duplicate. Please note that the recoveries were outside of QC criteria, suggesting matrix interference problems. This should be taken into account when reviewing the data.
3. Please note that Fraction 0001223-03A was received in a glass container, therefore the reported boron and silica results may be biased.