EG&G

MOUND APPLIED TECHNOLOGIES

**EG&G MOUND PLANT
DECEMBER 1990 AND
JANUARY 1991
D&D SOIL BOX SAMPLING**

Prepared by Roy F. Weston, Inc.

April 1991

Revision 0

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is operated for the

U. S. Department of Energy

under contract No. DE-AC04-88-DP4395

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operated by
EG&G MOUND APPLIED TECHNOLOGIES
P.O. Box 3000, Miamisburg, Ohio 45343-3000

for the
U. S. DEPARTMENT OF ENERGY
Contract No. DE-AC04-88DP43495

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15 May 1991

Mr. James F. Griffin
EG&G Mound Applied Technologies, Inc.
Post Office Box 3000
Miamisburg, Ohio 45343

RE: Report on EG&G Mound Plant December 1990 and January 1991
D&D Soil Box Sampling, Revision 0 (April 1991)
EG&G MAT P.O. Number 14875
WESTON W.O. No. 5376-05-01

Dear Mr. Griffin:

Enclosed for your review are three (3) copies of the subject report, documenting the sampling and analysis of the D&D soils waste packages from the WTS hillside and the SM Building area. These waste packages were generated between April 1 and October 31, 1990, and were sampled on December 18, 1990, and January 29-30, 1991, according to the approved "Sampling and Analysis Plan for Mound Plant D&D Soils Packages". Two sampling efforts were required because the first suite of samples collected in December was only analyzed for TCLP metals, and the analytical laboratory failed to analyze the samples for TCLP organics. The submittal of this report has been delayed from our original schedule due to this requirement for resampling, and subsequent delays in receipt of the analytical data packages and resolution of specific issues with the laboratory.

The analytical results indicate that these waste packages do not contain RCRA-regulated wastes, and are suitable for disposal at the Nevada Test Site as low-level radioactive waste. These waste packages appear to meet all NTS waste acceptance criteria, with the possible exception of particle size distribution. Analysis of the particle size distribution of one of the soil samples indicated that 51% of the particles were less than 250 microns in diameter and 40% were less than 105 microns in diameter, whereas NTS requirements allow no more than 15% of particles less than 200 microns. However, because the analytical protocol includes oven drying and mechanical shaking before passage through a series of sieves, these results are not representative of the actual condition of the soils. Based on our discussion of this issue with NTS personnel at Mound on April 16-18, this requirement may not be considered applicable for soils, and Mound should pursue an exemption for this waste stream.

Mr. James F. Griffin

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15 May 1991

Upon your approval, I plan to incorporate these results into the revised "Mound Plant Application to Ship Waste to the Nevada Test Site". I also suggest that we transmit this document to NVO in advance of the application for their review and approval.

Please contact me at your convenience if you have any questions or comments regarding this report or need any additional information.

Sincerely,

ROY F. WESTON, INC.

A handwritten signature in dark ink, appearing to read "Donald E. Dunning, Jr.", with a large, stylized flourish at the end.

Donald E. Dunning, Jr.
Project Director

DED:wm

Enclosure: As Stated

EG&G MOUND PLANT
DECEMBER 1990 AND JANUARY 1991
D&D SOIL BOX SAMPLING

April 1991
Revision 0

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1. INTRODUCTION

Six hundred eighty-two (682) containers of soil were generated at Mound Plant between April 1 and October 31, 1990 as a result of the excavation of soils containing plutonium-238 at two ongoing Decontamination and Decommissioning (D&D) Program sites; these areas are known as Area 14, the waste transfer system (WTS) hillside, and Area 17, the Special Metallurgical (SM) Building Area. The soils from these areas are part of the Mound Plant waste stream number AMDM-000000010, Contaminated Soil, and are proposed for shipment to the Nevada Test Site (NTS) for disposal as low-level radioactive waste. These containers of soil are currently in storage at Mound Plant. The purpose of this sampling and analysis was to demonstrate that the D&D soils comply with the waste acceptance requirements of the NTS, as presented in *Nevada Test Site Defense Waste Acceptance Criteria, Certification, and Transfer Requirements* (DOE 1988).

The sealed waste packages, constructed of wood or metal, are currently being stored in Building 31 and at other locations throughout the Mound Plant. For additional historical information concerning the D&D soils, including waste stream evaluations and past sampling data see the Sampling and Analysis Plan for Mound Plant D&D Soils Packages (EG&G 1991).

2. DESCRIPTION OF SOIL SAMPLING

2.1. SAMPLING METHOD

On December 18, 1990 and January 29 and 30, 1991 samples were taken from the containers of contaminated soil at Mound Plant in accordance with the approved sampling and analysis plan (EG&G 1991). For sampling purposes, the 682 packages were divided into four groups, depending on the location of the excavation. During each sampling effort, five percent of the contaminated soil boxes in each group were sampled, which resulted in samples from 36 of the 682 D&D soil boxes. In order to avoid the introduction of bias into the sampling effort, the packages to be sampled in each group were selected on a random basis. The waste input forms for the 36 boxes sampled are given in Appendix A of this report. Table II.1 lists the EG&G Mound identification numbers for these 36 boxes and the corresponding sample number assigned during the sampling efforts (EG&G 1991).

Due to the potential for preferential distribution of soil particles and contaminants according to mass and shape, a core sample was taken from each box sampled, using a thin-walled, hammer driven tube sampler equipped with 2 ft long acetate tubes. These acetate tubes hold approximately 300 mL of soil.

Table II.1. EG&G Mound Box Identification Numbers and Corresponding Sample Numbers

Mound Package Number	Sample Number
<u>WTS-WD hillside (WD Hill or WTS)</u>	
878 BX90	MND16-0012-0001
1123 BX90	MND16-0012-0002
1113 BX90	MND16-0012-0003
1116 BX90	MND16-0012-0004
778 BX90	MND16-0012-0005
663 BX90	MND16-0012-0006
1016 BX90	MND16-0012-0007
787 BX90	MND16-0012-0008
1144 BX90	MND16-0012-0009
860 BX90	MND16-0012-0010
797 BX90	MND16-0012-0011
628 BX90	MND16-0012-0012
1015 BX90	MND16-0012-0013
1110 BX90	MND16-0012-0014
807 BX90	MND16-0012-0015
<u>WTS-PP Hillside (SM LF)</u>	
626 BX90	MND16-0013-0001
<u>SM Building-near tanks (SM 1 or Bldg 38 1)</u>	
1060 BX90	MND16-0014-0001
1066 BX90	MND16-0014-0002
947 BX90	MND16-0014-0003
<u>SM Building Annex Foundation and Soils (SM FDT)</u>	
1089 BX90	MND16-0015-0001
1553 BX90	MND16-0015-0002
1311 BX90	MND16-0015-0003
1211 BX90	MND16-0015-0004
1195 BX90	MND16-0015-0005
1379 BX90	MND16-0015-0006
1368 BX90	MND16-0015-0007
1422 BX90	MND16-0015-0008
1495 BX90	MND16-0015-0009
1357 BX90	MND16-0015-0010
1210 BX90	MND16-0015-0011
1265 BX90	MND16-0015-0012
1568 BX90	MND16-0015-0013
1505 BX90	MND16-0015-0014
1106 BX90	MND16-0015-0015
1436 BX90	MND16-0015-0016
1290 BX90	MND16-0015-0017

2.2. ANALYTICAL PARAMETERS

At the request of the DOE Nevada Operations Office (DOE-NV), the soils have been analyzed for Toxicity Characteristic Leaching Procedure (TCLP) constituents (Table II.2). DOE-NV also requested that one of the soil samples be analyzed for polychlorinated biphenyls (PCBs), particle size distribution, and free liquids. Table II.3 gives the analytical methods for these parameters and Table II.4 gives the applicable holding times. Two sampling efforts (December 1990 and January 1991) were required because the first suite of samples collected in December (Batch 90-12-490) was only analyzed for TCLP metals; the analytical laboratory failed to analyze the samples for the TCLP organics. In addition, one of the December samples was analyzed for particle size distribution, PCBs, and free liquids. The samples collected in January during the repeat sampling effort were analyzed for the TCLP constituents (organic and inorganic) and PCBs. (The particle size distribution and free liquid determination were not repeated.) In addition to the complete TCLP data generated from the January sampling effort, this December 1990 data will be presented in this report.

2.3. SAMPLE CONTROL AND DOCUMENTATION

The December soil samples were shipped on December 19, 1990, the day after collection, and the January soil samples were shipped on January 30, 1991, the last day of sampling, via Federal Express overnight delivery to Controls for Environmental Pollution (CEP) in Santa Fe, New Mexico. The chain-of-custody forms prepared to document the transfer of the soil samples from Mound Plant to CEP for analysis for both sampling efforts are included in Appendix B of this report.

The soil samples and shipping cooler were prepared for shipment according to the Standard Operating Procedures given in the Sampling and Analysis Plan (EG&G 1991), which included the following:

- the ends of the acetate tube were capped as soon as the sample was taken;
- the tube was wrapped in aluminum foil to prevent exposure to light;
- a signed and dated custody seal was attached to each sample to detect any sample tampering;
- the wrapped acetate tube was then placed in a cooler containing enough ice to maintain cooler temperature at 4°C;
- the completed chain-of-custody form (Appendix B) was then placed in a plastic bag and taped to the inside of the cooler lid;
- the cooler was closed and taped securely using duct tape;

Table II.2. RCRA Regulatory Levels

<u>Compounds</u>	<u>Regulatory Level (mg/L)</u>
(TCLP constituents ^a)	
benzene	0.5
carbon tetrachloride	0.5
chlordane	0.03
chlorobenzene	100.0
chloroform	8.0
o-cresol	200.0
m-cresol	200.0
p-cresol	200.0
1,4-dichlorobenzene	7.5
1,2-dichloroethane	0.5
1,1-dichloroethene	0.7
2,4-dinitrotoluene	0.13
heptachlor	0.008
hexachlorobenzene	0.13
hexachloro-1,3-butadiene	0.5
hexachloroethane	3.0
methyl ethyl ketone ^b	200.0
nitrobenzene	2.0
pentachlorophenol	100.0
pyridine	5.0
tetrachloroethene	0.7
trichloroethene	0.5
2,4,5-trichlorophenol	400.0
2,4,6-trichlorophenol	2.0
vinyl chloride	0.2
arsenic	5.0
barium	100.0
cadmium	1.0
chromium	5.0
lead	5.0
mercury	0.2
selenium	1.0
silver	5.0
endrin	0.02
lindane	0.4
methoxychlor	10.0
toxaphene	0.5
2,4-D ^c	10.0
2,4,5-TP (silvex) ^d	1.0

^aReference: EPA 1986, November 1990 revision.

^bMethyl ethyl ketone is also known as 2-butanone.

^c2,4-D is also known as 2,4-dichlorophenoxy acetic acid.

^d2,4,5-TP (silvex) is also known as 2,4,5-trichlorophenoxy propionic acid.

Table II.3. Analytical Methods

<u>Parameter</u>	<u>EPA Method^a</u>
TCLP-ZHE	1311A
Volatiles	8240A
Semivolatiles	8270A
Metals	6010A for Ba, Cd, Cr, Pb, Ag 7060A for As 7470 for Hg 7740 for Se
Pesticides	8080A
Herbicides	509B (Standard Methods)
PCBs	8080
Free liquids (paint filter test)	9095
Particle size	ASTM D-422-63

TCLP - Toxicity characteristic leaching procedure

ZHE - Zero headspace extraction

^aUnless otherwise noted, methods are from SW846, Third Edition (EPA 1986) including the November 1990 revisions.

Table E.4. Requirements for Holding Times (Days)

Analyte	TCLP Extraction	Preparative Extraction	Analysis
<u>TCLP Constituents</u>			
Volatiles	14	NA	14
Semivolatiles	14	7	40
Pesticides	14	7	40
Herbicides	14	7	40
Mercury	28	NA	28
Other Metals	180	NA	180

Additional Parameters

	Collection to Extraction	Extraction to Analysis
PCBs	14	40
Particle Size	NA	NA
Free liquids	NA	NA

- a signed and dated custody seal was placed on each side of the cooler, at the junction of the cooler and lid;
- a completed Federal Express form (Appendix B) and an address label for CEP were taped to the cooler.

The laboratory reported that the December soil samples were received in good condition (custody seals intact, chilled and with no breakage) on December 20, 1990, and the January samples were received in good condition on January 31, 1991.

3. ANALYTICAL RESULTS

3.1. HOLDING TIMES

An evaluation of the holding times for the D&D soil samples for Batch 90-12-490 (December 1990 samples) and 91-01-580 (January 1991 samples) indicate that the required holding times (see Table II.4) were met for all of the D&D soil samples.

3.2. SAMPLE RESULTS

Complete analytical results for Batch 90-12-490 (December 1990) and Batch 91-11-580 (January 1991) are included in Appendices C and D, respectively, of this report. The following sections discuss the analytes that were detected in both sets of samples.

3.2.1. Analytes Detected in the December 1990 Samples

The analytical results for the D&D soil samples collected in December 1990 (Batch 90-12-490) are given in Appendix C of this report. Barium, lead, and chromium were detected in these samples at concentrations well below the TCLP limits (Table III.1). In addition to the TCLP metals, sample MND16-0015-0002 was analyzed for PCBs, free liquids and particle size distribution. No PCBs were detected in this sample, using a detection limit of 170 $\mu\text{g/kg}$ (0.170 ppm), and no free liquids were observed in the sample (Appendix C). The results of the particle size distribution analysis on sample MND16-0015-002 are given in Table III.2.

3.2.2. Analytes Detected in the January 1991 Samples

The analytical results for the D&D soil samples collected in January 1991 are given in Appendix D of this report. Six TCLP constituents (barium, cadmium, lead, silver, chloroform and cresol) were detected in the January 1991 (Batch 91-01-580) D&D soil samples (Table III.3), but at concentrations well below the TCLP

Table III.1. Metals Detected in December 1990 Soil Samples

<u>Sample Number</u>	<u>CEP Number</u>	<u>Analyte</u>	<u>Concentration (mg/L)</u>
MND16-0012-0001	31	barium	0.31
		lead	0.07
MND16-0012-0002	34	barium	0.34
MND16-0012-0003	36	barium	0.24
MND16-0012-0004	24	barium	0.57
		chromium	0.15
		lead	0.10
MND16-0012-0005	16	barium	0.39
MND16-0012-0006	09	barium	0.71
MND16-0012-0007	03	barium	0.65
MND16-0012-0008	10	barium	0.76
		lead	0.13
MND16-0012-0009	22	barium	0.38
		lead	0.13
MND16-0012-0010	27	barium	0.17
		lead	0.12
MND16-0012-0011	05	barium	0.84
MND16-0012-0012	17	barium	0.86
		lead	0.13
MND16-0012-0013	06	barium	0.92
		chromium	0.10
		lead	0.05
MND16-0012-0014	02	barium	0.84
		chromium	0.06
MND16-0012-0015	28	barium	0.88
		lead	0.06
MND16-0013-0001	25	barium	0.74
		chromium	0.09
		lead	0.016
MND16-0014-0001	35	barium	0.50
MND16-0014-0002	26	barium	0.67
		chromium	0.05
		lead	0.06
MND16-0014-0003	32	barium	0.78
		chromium	0.05
MND16-0015-0001	11	barium	0.77
		lead	0.14
MND16-0015-0002	14	barium	0.88
		lead	0.20
MND16-0015-0003	04	barium	0.71
		lead	0.14
MND16-0015-0004	23	barium	0.83
		lead	0.07
MND16-0015-0005	30	barium	0.34
		lead	0.10

Table III.1. (continued)

<u>Sample Number</u>	<u>CEP Number</u>	<u>Analyte</u>	<u>Concentration (mg/L)</u>
MND16-0015-0006	13	barium	0.77
		chromium	0.14
		lead	0.20
MND16-0015-0007	01	barium	0.77
		chromium	0.06
MND16-0015-0008	08	barium	0.86
MND16-0015-0009	15	barium	0.54
		lead	0.13
MND16-0015-0010	07	barium	0.90
		chromium	0.12
		lead	0.05
MND16-0015-0011	21	barium	0.75
		chromium	0.07
		mercury	0.0038
MND16-0015-0012	12	barium	0.58
		lead	0.25
MND16-0015-0013	33	barium	0.37
		lead	0.06
MND16-0015-0014	16	barium	1.18
		chromium	0.08
		lead	0.23
MND16-0015-0015	19	barium	0.88
		chromium	0.05
		lead	0.10
MND16-0015-0016	29	barium	0.86
		chromium	0.06
MND16-0015-0017	20	barium	0.85
		chromium	0.07
		lead	0.05

Matrix spike/matrix spike duplicates

MND16-0015-0017 (MS/MSD) (CEP # 90-12-490-20)

MND16-0015-0018 (MS/MSD) (CEP # 90-12-490-29)

MND16-0012-0010 (MS/MSD) (CEP # 90-12-490-27)

MND16-0015-0011 (MS/MSD) (CEP # 90-21-490-21)

Table III.2. Particle Size Distribution (December Sample #MND16-0015-0002)

<u>Particle (sieve) size</u>	<u>% retained</u>	<u>Cumulative % retained</u>	<u>Result in millimeters</u>
>3/4 in	0	0	NA
3/8 in	9.98	9.98	9.52 ^a
No. 4	8.51	18.49	4.75 ^a
No. 10	9.88	28.37	2.00 ^a
No. 20	7.46	35.83	0.84 ^a
No. 40	5.50	41.33	0.42 ^a
No. 60	7.01	48.34	0.25 ^a
No. 140	11.03	59.37	0.105 ^a
No. 200	2.10	61.47	0.074 ^a
Fines (<No. 200)	38.63	---	<0.074

*Reference for conversion of U.S. Standard sieve mesh sizes to millimeters: Pettijohn, Potter, and Siever 1973.

Table III.3. Analytes Detected in January 1991 D&D Soil Samples

<u>Sample Number</u>	<u>CEP Number</u>	<u>Analyte</u>	<u>Concentration</u>
MND16-0012-0001	01A	barium	0.51 mg/L
		lead	0.014 mg/L
		cresol	0.15 mg/L
MND16-0012-0002	30A	barium	0.73 mg/L
MND16-0012-0003	31A	barium	0.19 mg/L
MND16-0012-0004	02A	barium	0.63 mg/L
MND16-0012-0005	03A	barium	0.51 mg/L
MND16-0012-0006	04A	barium	0.46 mg/L
MND16-0012-0007	05A	barium	0.82 mg/L
		cadmium	0.06 mg/L
		silver	0.05 mg/L
MND16-0012-0008	32A	barium	0.54 mg/L
		cadmium	0.09 mg/L
MND16-0012-0009	06A	barium	0.71 mg/L
MND16-0012-0010	07A	barium	0.38 mg/L
MND16-0012-0011	08A	barium	0.83 mg/L
MND16-0012-0012	09A	barium	0.42 mg/L
MND16-0012-0013	10A	barium	0.54 mg/L
		chloroform	2.9 µg/L
MND16-0012-0014	11A	barium	0.82 mg/L
		cadmium	0.06 mg/L
		chloroform	3.5 µg/L
MND16-0012-0015	12A	barium	0.86 mg/L
		chloroform	3.7 µg/L
MND16-0013-0001	13A	barium	0.90 mg/L
		chloroform	3.8 µg/L
MND16-0014-0001	14A	barium	1.26 mg/L
		cadmium	0.07 mg/L
		chloroform	5.2 µg/L
MND16-0014-0002	15A	barium	0.83 mg/L
		chloroform	4.7 µg/L
MND16-0014-0003	16A	barium	0.71 mg/L
		chloroform	4.7 µg/L
MND16-0015-0001	33A	barium	0.81 mg/L
		cadmium	0.12 mg/L
		silver	0.09 mg/L
MND16-0015-0002	17A	barium	1.33 mg/L
		chloroform	2.8 µg/L
MND16-0015-0003	18A	barium	0.56 mg/L
		chloroform	2.33 µg/L
MND16-0015-0004	19A	barium	1.28 mg/L
		chloroform	4.52 µg/L
MND16-0015-0005	20A	chloroform	3.1 µg/L
MND16-0015-0006	21A	chloroform	2.0 µg/L
MND16-0015-0007	22A	barium	0.68 mg/L
		cadmium	0.07 mg/L

Table III.3. (continued)

<u>Sample Number</u>	<u>CEP Number</u>	<u>Analyte</u>	<u>Concentration</u>
MND16-0015-0008	34A	barium	0.81 mg/L
		cadmium	0.12 mg/L
		silver	0.09 mg/L
		chloroform	2.9 µg/L
MND16-0015-0009	23A	barium	0.63 mg/L
		cadmium	0.07 mg/L
		silver	0.07 mg/L
MND16-0015-0010	24A	barium	0.62 mg/L
		cadmium	0.08 mg/L
		chloroform	4.8 µg/L
MND16-0015-0011	35A	barium	1.12 mg/L
		cadmium	0.08 mg/L
		silver	0.10 mg/L
MND16-0015-0012	25A	barium	0.48 mg/L
		cadmium	0.06 mg/L
		silver	0.07 mg/L
MND16-0015-0013	26A	barium	1.27 mg/L
		cadmium	0.07 mg/L
		silver	0.07 mg/L
MND16-0015-0014	27A	barium	0.35 mg/L
		cadmium	0.10 mg/L
		silver	0.06 mg/L
MND16-0015-0015	28A	barium	1.09 mg/L
		cadmium	0.05 mg/L
		silver	0.08 mg/L
MND16-0015-0016	29A	barium	0.86 mg/L
		silver	0.06 mg/L
MND16-0015-0017	36A	barium	2.02 mg/L
		cadmium	0.12 mg/L
		silver	0.11 mg/L

Samples used in matrix spiking

MND16-0012-0001 (CEP #90-01-580-01)
 MND16-0013-0001 (CEP #90-01-580-13)
 MND16-0014-0001 (CEP #90-01-580-14)
 MND16-0015-0001 (CEP #90-01-580-33)
 MNS16-0015-0017 (CEP #90-01-580-36)

limits. In addition to the TCLP constituents, sample MND16-0012-0007 was analyzed for PCBs, but showed no detections (<0.85 mg/kg) (Appendix D).

3.3. QUALITY ASSURANCE RESULTS

The quality assurance requirements for Method 1311A (TCLP) include one matrix spike and one laboratory blank for every TCLP analytical batch and waste type (EPA 1986, November 1990 revision). The results for these samples are discussed in the following subsections. In addition to the Method 1311A requirements, EG&G Mound required that the analytical laboratory (CEP) comply with the quality assurance protocols specified in the method-specific analytical procedures listed in Table II.3. However, some problems occurred with the surrogate spiking of the January 1991 samples, which is required for volatile and semivolatile organics analyses. These problems are discussed in subsection 3.3.3. (No surrogate spiking was performed on the December 1990 samples because the TCLP organics fraction was not run.) The quality assurance data for the December 1990 samples and the January 1991 samples are contained in Appendices E and F, respectively, of this report.

3.3.1. Matrix Spikes

The corrected Final Rule for Method 1311A (EPA 1986, November 1990 revision) requires that matrix spike recovery values be used to correct sample results for analytical bias using the following formula:

$$\text{corrected result} = 100 (\text{measured value} / \% \text{ recovery}).$$

The matrix spike percent recoveries less than 100% are given in Table III.4. Table III.5 gives the corrected sample results for the associated TCLP compounds. For analytes not detected, the detection limits were used to calculate corrected results.

For analytes that were present above the detection limits in one or more samples in the analytical lot, the maximum concentration detected for any sample in that analytical lot was used. Corrections have not been made for matrix spike recoveries greater than 100% because this would result in a lower corrected result. Using the maximum concentrations detected in the December 1990 and January 1991 samples, all corrected sample results remain below the TCLP regulatory levels (Table III.5).

3.3.2. Laboratory Blanks

Two types of laboratory blanks are used to assess contamination that may be introduced by the analytical laboratory during sample preparation or analysis. Process blanks consist of laboratory grade water (ASTM Type 1) that is taken through the entire TCLP process (preparation, zero headspace extraction, and analysis). Because zero headspace extractions are performed, process blanks are most applicable to the

Table III.4. Matrix Spike Recoveries Less Than 100%

<u>Fraction</u>	<u>Analyte</u>	<u>% Recovery</u>
Batch 90-12-490 (December 1990)		
TCLP metals	silver	82.2
	arsenic	94.0
	barium	86.0
	cadmium	86.4
	chromium	85.8
	lead	85.8
	selenium	96.0
PCBs	PCBs	83.15
Batch 91-01-580 (January 1991)		
TCLP metals	arsenic	94.0
	barium	94.0
	cadmium	75.9
	chromium	94.0
	lead	90.0
	mercury	90.0
	selenium	94.0
	silver	83.0
Volatiles	1,1-dichloroethene	64.0
	trichloroethene	86.0
	1,2-dichloroethane	76.0*
Semivolatiles	1,4-dichlorobenzene	21.0
	2,4-dinitrotoluene	42.0
	pentachlorophenol	1.0
	nitrobenzene	26.0*
Pesticides/herbicides	lindane	60.0
	heptachlor	42.0
	endrin	74.4
	2,4-D	50.24
	silvex	51.0

*Surrogate spike recovery used in lieu of matrix spike recovery because matrix spiking was not performed.

Table III.5. Corrected Sample Results^a

Analyte	Maximum Result	%Recovery	Corrected Result	TCLP Level
Batch 90-12-490 (December 1990)				
arsenic	<0.01 mg/L	94.0	0.011 mg/L	5.0 mg/L
barium	1.16 mg/L	86.0	1.35 mg/L	100.0 mg/L
cadmium	<0.05 mg/L	86.4	0.06 mg/L	1.0 mg/L
chromium	0.15 mg/L	85.8	0.17 mg/L	5.0 mg/L
lead	0.25 mg/L	85.8	0.29 mg/L	5.0 mg/L
selenium	<0.01 mg/L	96	0.01 mg/L	1.0 mg/L
silver	<0.05 mg/L	82.2	0.06 mg/L	5.0 mg/L
PCBs ^b	<170 µg/kg	83.15	204 µg/kg	NA
Batch 91-01-580 (January 1991)				
arsenic	<0.01 mg/L	94	0.011 mg/L	5.0 mg/L
barium	2.02 mg/L	94	2.15 mg/L	100.0 mg/L
cadmium	0.12 mg/L	75.9	0.16 mg/L	1.0 mg/L
chromium	<0.01 mg/L	84	0.011 mg/L	5.0 mg/L
lead	0.014 mg/L	90	0.016 mg/L	5.0 mg/L
mercury	<0.0004 mg/L	90	0.0004 mg/L	0.2 mg/L
selenium	<0.01 mg/L	94	0.011 mg/L	1.0 mg/L
silver	0.11 mg/L	83	0.13 mg/L	5.0 mg/L
1,1-dichloroethene	<2.8 µg/L	64	4.4 µg/L	0.7 mg/L
trichloroethene	<1.9 µg/L	86	2.2 µg/L	0.5 mg/L
1,2-dichloroethane	<2.8 µg/L	76 ^c	3.7 µg/L	0.5 mg/L
1,4-dichlorobenzene	<0.020 mg/L	21	0.095 mg/L	7.5 mg/L
2,4-dinitrotoluene	<0.030 mg/L	42	0.071 mg/L	0.13 mg/L
pentachlorophenol	<0.020 mg/L	1	2.0 mg/L	100.0 mg/L
nitrobenzene	<0.010 mg/L	26 ^c	0.038 mg/L	2.0 mg/L
lindane	<0.06 mg/L	60.0	0.1 mg/L	0.4 mg/L
heptachlor	<0.001 mg/L	42.0	0.002 mg/L	0.008 mg/L
endrin	<0.003 mg/L	74.4	0.004 mg/L	0.02 mg/L
2,4-D	<1.4 mg/L	50.24	2.8 mg/L	10.0 mg/L
silvex	<0.14 mg/L	51.0	0.27 mg/L	1.0 mg/L

^aCorrected results calculated using the maximum concentrations detected in the 36 D&D samples.

^bNon-TCLP constituent

^cSurrogate spike recovery used in lieu of matrix spike recovery because matrix spiking was not performed.

organic fraction. However, they can also be analyzed for inorganics. Method blanks consist of laboratory grade water (ASTM Type 1) that is prepared and analyzed with the samples. Because zero headspace extraction is not performed, method blanks are usually run with the inorganics fraction (TCLP metals), but they can also be analyzed for organics.

December 1990 Samples

Method blanks were run with each set (methods 6010A, 7060A, 7470, and 7740) of the December 1990 D&D soil samples that were analyzed for TCLP metals. No TCLP metals were detected in the blanks (Appendix E).

January 1991 Samples

For the January D&D soils samples, which were analyzed for the full list of TCLP constituents, process blanks were run for volatile and semivolatile organic compounds and method blanks were run for TCLP pesticides and metals. One volatile organic compound was detected at 10 µg/L (or 0.01 mg/L) in one of the two process blanks analyzed ("GC/MS ZHE Extraction Data Sheet" in Appendix F). Because this level does not exceed the EG&G established action level for blanks, which is 5% of the TCLP regulatory level of 6 mg/L (Table II.2), or 0.30 mg/L, no corrective actions were required. No semivolatile organic compounds, metals, pesticides, or herbicides were detected in the blanks (Appendix F).

3.3.3. Surrogate Spikes

Laboratory performance on individual samples is evaluated by spiking analytical samples with selected deuterated volatile and semivolatile organic compounds, known as surrogate compounds. EPA method 8240 (volatiles) and 8270 (semivolatiles) requires the spiking of each analytical sample with the following deuterated volatile surrogate compounds; toluene, bromofluorobenzene and 1,2-dichloroethane, and the following deuterated semivolatile surrogate compounds; nitrobenzene, 2-fluorobiphenyl, terpenyl, phenol, 2-fluorophenol, and 2,4,6-tribromophenol. Of these compounds, only nitrobenzene, and 1,2-dichloroethane are TCLP constituents. However, surrogate spiking is required for all of the compounds listed as a means of documenting overall system performance for individual samples.

No surrogate spiking was performed on the December 1990 D&D soil samples because no analyses were performed for volatiles or semivolatiles. When the January 1991 samples were initially analyzed for these compounds, the analytical laboratory (CEP) inadvertently added acid spiking solution instead of the surrogate spiking solution to six of the 36 D&D soil samples and the matrix spike/matrix spike duplicate for one of the six samples. These six samples are listed below.

- MND16-0015-0016 (CEP # 29)
- MND16-0012-0002 (CEP # 30)
- MND16-0012-0003 (CEP # 31)
- MND16-0012-0008 (CEP # 32)
- MND16-0015-0001 (CEP # 33)
- MND16-0015-0001 matrix spike and matrix spike duplicate (CEP # 33)

After being notified of this error, EG&G Mound requested immediate re-extraction and surrogate spiking of these samples. This was performed on March 8, 1991. (Initial analyses for semivolatiles were performed on February 12 or 13, 1991).

Although the surrogate spiking of these samples and the subsequent analysis of the spiked samples were performed outside of the established holding times, the initial sample analyses were performed within the required time period. It is believed that this error does not affect the validity of the associated analytical data. Additional discussion concerning the analyses of the surrogate spikes is provided below.

The EPA Contract Laboratory Program and the EPA procedures have established surrogate recovery limits for soil and water matrices, but there are currently no established guidelines for TCLP extracts. The applicable EPA methods, 8240 for volatiles and 8270 for semivolatiles, require that, at a minimum, analytical laboratories update surrogate recovery limits on a matrix-by-matrix basis, annually (EPA 1986). Therefore, in 1990 CEP established surrogate guidelines for TCLP extracts using the mean and standard deviation calculated from surrogate data obtained from the analyses of 65 TCLP extracts at CEP. The "in-house" limits were then identified using the mean ± 3 standard deviations (Table III.6). All of the surrogate percent recoveries (volatile and semivolatile compounds) for the January D&D soils samples were within the surrogate recovery limits established by CEP (Soil volatile and semivolatile surrogate recovery forms in Appendix F).

4. CONCLUSIONS

According to the analytical results and the corrected results based on matrix spiking, all contaminants detected in the D&D soil samples collected in December 1990 and January 1991 are present at levels below the TCLP regulatory levels; therefore the D&D soils do not constitute a RCRA hazardous waste based on the toxicity characteristic. In addition, results from the analysis of PCBs and free liquids indicate that these soils meet the NTS requirements for these parameters, which are <50 ppm PCBs, and not more than 0.5% free liquids by volume (DOE 1988).

Table W.6. Surrogate Recovery Limits for TCLP Extracts

<u>Fraction</u>	<u>Compound</u>	<u>CEP % Recovery Limit*</u>
Volatiles	1,2-dichloroethane-d4	82-113
	toluene-d8	71-119
	bromofluorobenzene	73-116
Semivolatiles	nitrobenzene-d5	10-109
	2-fluorobiphenyl	4-130
	terphenyl-d14	18-127
	phenol-d5	1-99
	2-fluorophenol	8-98
	2,4,6-tribromophenol	5-116

*Surrogate recovery limits were established using the mean and ± 3 standard deviations calculated using the surrogate recoveries for 65 TCLP extracts.

Analysis of the particle size distribution (Table III.2) of one of the D&D soil samples indicated that 51.66% (cumulative percent retained was 48.34) of the Mound Plant soils consisted of particles less than 0.25 millimeters in diameter (or 250 micrometers). In addition, 40.63% (cumulative percent retained was 59.37) of the sample consisted of particles less than 0.105 millimeters in diameter, or 105 micrometers. Based on this analysis, it appears that the native Mound Plant soils, which are silty-clay loam, do not meet the requirements of the NTS, as given in NVO-325 (DOE 1988). These requirements include no more than 15 weight percent of particles less than 200 micrometers in diameter. However, because the analysis of the particle size distribution includes oven drying of the sample and mechanical shaking before passage through a series of sieves, resulting in particles that are not representative of the actual condition of the soils, EG&G Mound is requesting an exemption from this requirement for the D&D soils, waste stream AMDM-000000010.

5. REFERENCES

- DOE. 1988. "Nevada Test Site Defense Waste Acceptance Criteria, Certification, and Transfer Requirements." Document No. NVO-325. Prepared by the U.S. Department of Energy Nevada Operations Office and Reynolds Electrical & Engineering Co., Inc., Las Vegas, Nevada. October 1988.
- EG&G. 1991. "EG&G Mound Applied Technologies, Inc. Sampling and Analysis Plan for Mound Plant D&D Soils Packages (Revision 1)." EG&G Mound Applied Technologies, Miamisburg, Ohio. February 1991.
- EPA. 1986. "Test Methods for Evaluating Solid Waste." *Laboratory Manual Physical/Chemical Methods, SW-846, Volumes 1A, 1B, and 1C, Third Edition with November 1990 updates.* U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington D.C. November 1986.
- Pettijohn F.J., Potter Paul E., and Siever Raymond. "Sand and Sandstone." Springer-Verlag Publishing, New York. 1973.

APPENDIX A
WASTE INPUT FORMS

UNIT ID		CREATE LOCATION		FILL DATE		SEAL DATE		PHYSICAL INSPECTION		INT.	
011123		BLDG. W/D ROOM H/L/L		061390		061390		No Significant Dents		10H	
J. D. Higgins		2,2,3		LOT NO.		SEAL NO.		No Significant Rust		10H	
ORIGINATOR SIGNATURE		HP NO.		17H1855		N/A		No Holes		10H	
COMBUSTIBLE - %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.		No Cracks		10H	
0%		DRUMS IN N/A DRUMS OUT N/A		374.85		1322		Drum Tightened		NA	
NON-COMBUSTIBLE		100%		8264				Unit ID Applied		10H	
DRUM W/LINER		PKG. TYPE		HEALTH PHYSICS DATA		INT.		WASTE DESCRIPTION AND COMMENTS			
NA		STEEL		Wipe (D/M) 100 (CM) SQ		42.0					
DRUM ONLY		PKG. SIZE		MREM/HR		4.0		103			
NA		15A/MED		0.91M MREM/HR		4.0		103			
		Code # 109		Shipping Labels Applied		103		103			
ISOTOPE		CURIES		γ Inst.		2004/3410		CONTENT CODE			
Pu-238		N/A		N Inst.		4022/4020 N/A					
				Surveyor Signature		HP NO.		3741000.00			

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B. M. Higgins

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HP NO.

UNIT ID 111355		CREATE LOCATION BLDG. WID ROOM HIX L		FILL DATE 0.6 1.2 9.0		SEAL DATE 0.6 1.2 9.0		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE JAY D. Higgins		HP NO. 2.7.3.4		LOT NO. 1 7 H 1 8 5 5 NA		SEAL NO. NA		No Significant Dents		JDN	
COMBUSTIBLE - % 0%		COMPACTOR RATIO DRUMS IN N/A DRUMS OUT N/A		GROSS WT. (KG) 3749.9		ACCT. NO. 1.13.2.2		No Significant Rust		JDN	
NON-COMBUSTIBLE 100%		PKG. TYPE STEEL		HEALTH PHYSICS DATA		INT.		No Holes		JDN	
DRUM W/LINER NA		PKG. SIZE LSA/MED		Wipe (D/M) 100 (CM) SQ 2.2.0 SJB				No Cracks		JDN	
DRUM ONLY NA		ISOTOPE P14.2.3.8		MREM/HR 2.0.1 SJB				Drum Tightened		NA	
		CURIES 0.062		0.91M MREM/HR 1.0.1 SJB				Unit ID Applied		JDN	
				Shipping Labels Applied SJB SJB				WASTE DESCRIPTION AND COMMENTS DIRTY ROCK			
				γ Inst. 3004/3410							
				N Inst. 4222/4228 N/A							
				SURVEYOR SIGNATURE JAY D. Higgins		HP NO. 5.3.4.9		CONTENT CODE 37420.0.0.0			

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LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 011116		CREATE LOCATION BLDG. W.D. ROOM HIL L		FILL DATE 06 13 90		SEAL DATE 06 13 90		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE Jocid D. Higgins		HP NO. 2734		LOT NO. 17H1655 NA		SEAL NO. NA		No Significant Dents		JDN	
COMBUSTIBLE - % 0%		COMPACTOR RATIO DRUMS IN N/A DRUMS OUT N/A		GROSS WT. (KG) 36,864		ACCT. NO. 11322		No Significant Rust		JDN	
NON-COMBUSTIBLE 100%								No Holes		JDN	
DRUM W/LINER NA		PKG. TYPE STEEL						No Cracks		JDN	
DRUM ONLY NA		PKG. SIZE LSA/MED						Drum Tightened		NA	
								Unit ID Applied		JDN	
ISOTOPE Pu-238		CURIES N/A		HEALTH PHYSICS DATA		INT.		WASTE DESCRIPTION AND COMMENTS DIRTY ROCK			
				Wipe (D/M) 100 (CM) SO 4.210		43					
				MREM/HR 4.01		43					
				0.91M MREM/HR 4.01		43					
				Shipping Labels Applied		43					
				γ Inst. 3004/3416							
				N Inst. 4022/4028 NA							
				SURVEYOR SIGNATURE Jocid D. Higgins		HP NO. 5416		CONTENT CODE 37422000			

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<div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">CPM (1)</p> <p>Highest Reading on End</p> <p style="text-align: center;">_____ CPM (3)</p> <p style="text-align: center;">Highest Reading on Side</p> </div>		<div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">CPM (2)</p> <p>Highest Reading on Opposite End</p> <p style="text-align: center;">_____ CPM (4)</p> <p style="text-align: center;">Highest Reading on Opposite Side</p> </div>		<div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>_____</div> <div>(1) Avg. Top</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>(2) Avg.</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>(3) Avg.</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>(4) Avg.</div> </div> </div>	
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UNIT ID <u>D-10/6-BH912</u>		CREATE LOCATION BLD. <u>4B</u> ROOM <u>H14</u>		FILL DATE <u>08/15/90</u>		SEAL DATE <u>08/15/90</u>		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <u>[Signature]</u>		HP NO. <u>2250</u>		LOT NO. <u>1, 7, H, 1, 6, 5, 5</u>		SEAL NO. <u>N/A</u>		No Significant Dents		<u>WS</u>	
COMBUSTIBLE - % <u>0%</u>		COMPACTOR RATIO DRUMS IN <u>N/A</u> DRUMS OUT <u>N/A</u>		GROSS WT. (KG) <u>38,719</u> <u>8536</u>		ACCT. NO. <u>13122</u>		No Significant Rust		<u>WS</u>	
NON-COMBUSTIBLE <u>100%</u>		PKG. TYPE <u>1 EEL</u>		HEALTH PHYSICS DATA		INT.		No Holes		<u>WS</u>	
DRUM W/LINER <u>N/A</u>		PKG. SIZE <u>0/100</u>		Wipe (D/M) 100 (CM) SQ <u>1, 7, 0</u>		<u>WS</u>		No Cracks		<u>WS</u>	
DRUM ONLY <u>N/A</u>				MREM/HR <u>1, 0, 1</u>		<u>WS</u>		Drum Tightened		<u>N/A</u>	
				0.01M MREM/HR <u>1, 0, 1</u>		<u>WS</u>		Unit ID Applied		<u>WS</u>	
				Shipping Labels Applied <u>2/11</u>		<u>WS</u>		WASTE DESCRIPTION AND COMMENTS <u>Dirt</u> <u>PIPES</u> <u>ROCK</u>			
ISOTOPE <u>Th-232</u>		CURIES <u>1.4E-8</u>		γ Inst. <u>3004/3411</u>							
				N Inst. <u>4022/4023</u>							
				SURVEYOR SIGNATURE <u>[Signature]</u>		HP NO. <u>5341</u>					
								CONTENT CODE <u>37.4.000.0.0</u>			

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ORIGINATOR SIGNATURE <u>W. Stephens</u>		HP NO. <u>2790</u>		LOT NO. 1 7 H 1 6 5 5		SEAL NO. N/A		No Significant Dents	WS	
COMBUSTIBLE % <u>5%</u>		COMPACTOR RATIO		GROSS WT. (KG) 3899.5		ACCT. NO. 1322		No Significant Rust	WS	
NON-COMBUSTIBLE <u>95%</u>		DRUMS IN <u>N/A</u> DRUMS OUT <u>N/A</u>		HEALTH PHYSICS DATA				No Holes	WS	
DRUM W/LINER <u>N/A</u>		PKG. TYPE <u>5/22L</u>		Wipe (D/M) 100 (CM) SQ <u>4.210</u>		INT. <u>103</u>		No Cracks	WS	
DRUM ONLY <u>N/A</u>		PKG. SIZE <u>4/MED</u>		MREM/HR <u>4.110</u>		INT. <u>103</u>		Drum Tightened	N/A	
				0.91M MREM/HR <u>4.110</u>		INT. <u>103</u>		Unit ID Applied	WS	
				Shipping Labels Applied <u>103</u>		INT. <u>103</u>		WASTE DESCRIPTION AND COMMENTS		
ISOTOPE		CURIES		γ Inst. <u>3004/3410</u>				Dirt		
<u>Pu-238</u>		<u>N 0.11/g</u>		N Inst. <u>4022/4028</u>				TRASH		
				<u>4022/4028</u>				ROCK		
				SURVEYOR SIGNATURE <u>Scott J. Fiddler</u>		HP NO. <u>5466</u>		CONTENT CODE		
								<u>37.4220.0.0</u>		

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MRC-ML-7042A (3-87)

UNIT ID <u>65</u>		CREATE LOCATION BLDG. <u>AJD</u> ROOM <u>H-11</u>		FILL DATE <u>14 25 910</u>		SEAL DATE <u>14 25 910</u>		PHYSICAL INSPECTION		INT.	
<u>151410</u>								No Significant Dents		<u>NR</u>	
<u>217 16 17</u>								No Significant Rust		<u>NR</u>	
ORIGINATOR SIGNATURE <u>[Signature]</u>		HP NO.		LOT NO. <u>1 7 H 1 6 5 5</u>		SEAL NO. <u>1111</u>		No Holes		<u>NR</u>	
								No Cracks		<u>NR</u>	
COMBUSTIBLE - % <u>5</u>		COMPACTOR RATIO		GROSS WT. (KG) <u>3.4 16 8</u>		ACCT. NO. <u>1131210</u>		Drum Tightened		<u>NR</u>	
NON-COMBUSTIBLE <u>75</u>		DRUMS IN <u>WIA</u> DRUMS OUT <u>NIA</u>						Unit ID Applied		<u>NR</u>	
DRUM W/LINER <u>NIA</u>		PKG. TYPE <u>55 gal</u>		HEALTH PHYSICS DATA		INT.		WASTE DESCRIPTION AND COMMENTS <u>Dirty, 100 cm sq</u> <u>Wipe (D/M) 100 (CM) SQ</u> <u>MREM/HR</u> <u>0.91M MREM/HR</u> <u>Shipping Labels Applied</u>			
DRUM ONLY <u>NIA</u>		PKG. SIZE <u>2.5 gal</u>									
ISOTOPE		CURIES		γ Inst. <u>3004 / 3410</u>				CONTENT CODE <u>3.7.4.D.0.0.0</u>			
<u>15138</u>		<u>1.1 16 18</u>		N Inst. <u>4023 / 4028</u>							
				<u>577</u>							
				<u>3054 / 3435</u>							
				SURVEYOR SIGNATURE		HP NO.					

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE

HP NO.

SCAN DATE

14 25 910

SPECIAL DRUM SCAN

DISTRIBUTION:

Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

B. Michigian

HP NO.

☒ OK to Ship

OC

HP NO.

☐ Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID A74721551		CREATE LOCATION BLDG. 08 ROOM 144		FILL DATE 08/01/90		SEAL DATE 08/01/90		PHYSICAL INSPECTION		INT.
ORIGINATOR SIGNATURE <i>[Signature]</i>		HP NO. 2290		LOT NO. 17H1855		SEAL NO. N/A		No Significant Dents	OK	
COMBUSTIBLE - % ☒		COMPACTOR RATIO		GROSS WT. (KG) 17.15		ACCT. NO. 1000		No Significant Rust	OK	
NON-COMBUSTIBLE ☒		DRUMS IN 1/4 DRUMS OUT 1/1						No Holes	OK	
DRUM W/LINER ☒		PKG. TYPE 237		HEALTH PHYSICS DATA				No Cracks	OK	
DRUM ONLY ☒		PKG. SIZE 237		Wipe (D/M) 100 (CM) SQ <2.0		INT. SM		Drum Tightened	N/A	
				MREM/HR <0.1		SM		Unit ID Applied	OK	
				0.91M MREM/HR <0.1		SM				
				Shipping Labels Applied		SM				
				γ Inst. 3004/3410						
				N Inst. 4072/4028 N/A						
				5.3.49						
				SURVEYOR SIGNATURE		HP NO.				

ISOTOPE		CURIES	

WASTE DESCRIPTION AND COMMENTS	

CONTENT CODE
4741-2000

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE <i>[Signature]</i>	
HP NO. 5.3.49	

SCAN DATE

08.01.90

SPECIAL DRUM SCAN

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

[Signature]

1462
HP NO.

☒ OK to Ship

☐ Requires Additional Scan

QC *[Signature]*
HP NO.

UNIT ID N-28131910		CREATE LOCATION BLDG. <u>W-1</u> ROOM <u>1114</u>		FILL DATE 07/17/90		SEAL DATE 07/17/90		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <u>U. Stephens</u>		HP NO. <u>21292</u>		LOT NO. <u>17H1655</u>		SEAL NO. <u>14/19</u>		No Significant Dents		WS	
COMBUSTIBLE - % <u>51</u>		COMPACTOR RATIO		GROSS WT. (KG) <u>359.48</u>		ACCT. NO. <u>11322</u>		No Significant Rust		WS	
NON-COMBUSTIBLE <u>51</u>		DRUMS IN <u>N/A</u> DRUMS OUT <u>N/A</u>		HEALTH PHYSICS DATA		INT.		No Holes		WS	
DRUM W/LINER <u>N/A</u>		PKG. TYPE <u>STEEL</u>		Wipe (D/M) 100 (CM) SQ <u>1210</u>		<u>813</u>		No Cracks		WS	
DRUM ONLY <u>N/A</u>		PKG. SIZE <u>250/MSD</u>		MREM/HR <u>1.31</u>		<u>813</u>		Drum Tightened		N/A	
ISOTOPE		CURIES		0.91M MREM/HR <u>1.04</u>		<u>813</u>		Unit ID Applied		WS	
<u>Pu-238</u>		<u>2.11E-18</u>		Shipping Labels Applied		<u>813</u>		WASTE DESCRIPTION AND COMMENTS <u>DIRTY</u> <u>TREAS</u> <u>KOIS</u>			
				γ Inst. <u>3054/3410</u>							
				β Inst. <u>4022/4028</u>							
				SURVEYOR SIGNATURE <u>5/22</u>		HP NO. <u>5349</u>		CONTENT CODE <u>374P0000</u>			

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE 5/22HP NO. 5349

SCAN DATE

07/17/90

SPECIAL DRUM SCAN

Filler
3054/3135

(1) Avg. Top
 (2) Avg.
 (3) Avg.
 (4) Avg.

DISTRIBUTION:

Copy 1 - Nuclear Materials Management
 Copy 2 - Waste Management
 Copy 3 - Health Physics
 Copy 4 - Originator

BUILDING MANAGER

B. M. Chapman

HP NO.

☒ OK to Ship

QC

T. Warner

HP NO.

☐ Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID <u>00072111</u>		CREATE LOCATION BLDG. <u>W0</u> ROOM <u>414C</u>		FILL DATE <u>07 216 90</u>		SEAL DATE <u>07 216 90</u>		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <u>W. Stephens</u>		HP NO. <u>2790</u>		LOT NO. <u>1 7 H 1 6 5 5</u>		SEAL NO. <u>N/A</u>		No Significant Dents		<u>WS</u>	
COMBUSTIBLE - % <u>0</u>		COMPACTOR RATIO DRUMS IN <u>N/A</u> DRUMS OUT <u>N/A</u>		GROSS WT. (KG) <u>3719.4</u>		ACCT. NO. <u>1302</u>		No Significant Rust		<u>WS</u>	
NON-COMBUSTIBLE <u>100</u>		DRUM W/LINER <u>N/A</u>		HEALTH PHYSICS DATA		INT.		No Holes		<u>WS</u>	
DRUM ONLY <u>N/A</u>		PKG. TYPE <u>22L</u>		Wipe (D/M) 100 (CM) SQ <u>1.0</u>		<u>WS</u>		No Cracks		<u>WS</u>	
		PKG. SIZE <u>21/med</u>		MREM/HR <u>1.0</u>		<u>WS</u>		Drum Tightened		<u>N/A</u>	
				0.91M MREM/HR <u>1.0</u>		<u>WS</u>		Unit ID Applied		<u>WS</u>	
				Shipping Labels Applied <u>WS</u>		<u>WS</u>		WASTE DESCRIPTION AND COMMENTS <u>DIRTY</u> <u>ROCK</u>			
ISOTOPE		CURIES		γ Inst. <u>304/340</u>							
<u>Pu-238</u>		<u>1.0</u>		N Inst. <u>1.0</u>							
				SURVEYOR SIGNATURE		HP NO.		CONTENT CODE <u>37400000</u>			

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE HP NO.

SCAN DATE

07 216 190

SPECIAL DRUM SCAN

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

B. Michigan

14162
HP NO.

☒ OK to Ship

☐ Requires Additional Scan

T. Hennes
QC

5701310
HP NO.

UNIT ID		CREATE LOCATION				FILL DATE				SEAL DATE				PHYSICAL INSPECTION		INT.		
911002190		BLDG.		440	ROOM	414L	018		1090		08		16		910		No Significant Dents	WS
W. Stephens		2390		LOT NO.		17H1855				SEAL NO.		NA		No Significant Rust		WS		
ORIGINATOR SIGNATURE		HP NO.		GROSS WT. (KG)		ACCT. NO.				No Holes		WS		No Cracks		WS		
COMBUSTIBLE %		COMPACTOR RATIO		DRUMS IN		DRUMS OUT		34736		1322		Drum Tightened		NA		Unit ID Applied	WS	
NON-COMBUSTIBLE		PKG. TYPE		PKG. SIZE		HEALTH PHYSICS DATA				INT.		WASTE DESCRIPTION AND COMMENTS						
DRUM W/LINER		NA		NA		Wipe (D/M) 100 (CM) SQ				470		DIRT						
DRUM ONLY		NA		NA		MREM/HR				4.1		ROCK						
ISOTOPE		CURIES		Shipping Labels Applied				512										
P4238		100571		γ Inst.				204, 2910										
				R Inst.				4125/4028										
				SURVEYOR SIGNATURE				HP NO.		CONTENT CODE								
										37422020								

SURVEYOR SIGNATURE	HP NO. 51344
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08/12/74

SPECIAL DRUM SCAN

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

B. M. Morgan

1462
HP NO.

☒ OK to Ship

T. Morris
QC

57030
HP NO.

☐ Requires Additional Scan

UNIT ID 062163194		CREATE LOCATION BLDG. <u>SM</u> ROOM <u>LF</u>		FILL DATE 9/27/50		SEAL DATE 9/27/50		PHYSICAL INSPECTION		INT.	
<i>Vernon Lane</i> ORIGINATOR SIGNATURE		2161312 HP NO.		LOT NO. 1 7 H 1 8 5 5		SEAL NO. 11111		No Significant Dents		UL	
COMBUSTIBLE - % <u>0</u>		COMPACTOR RATIO		GROSS WT. (KG) 389.1		ACCT. NO. 131212		No Significant Rust		UL	
NON-COMBUSTIBLE <u>100</u>		DRUMS IN <u>N/A</u> DRUMS OUT <u>N/A</u>		Shipping Labels Applied				No Holes		UL	
DRUM W/LINER <u>N/A</u>		PKG. TYPE <u>metal</u>		γ Inst. <u>3004/3410</u>				No Cracks		UL	
DRUM ONLY <u>N/A</u>		PKG. SIZE <u>Full</u>		N Inst. <u>4022/4028 N/A</u>				Drum Tightened		N/A	
		COOPER 09		SURVEYOR SIGNATURE <i>Scott Thompson</i>		HP NO. <u>5116</u>		Unit ID Applied		UL	
								WASTE DESCRIPTION AND COMMENTS <u>Sail Rock</u>			
ISOTOPE		CURIES									
<u>241Am</u>		<u>1.111 g</u>									
								CONTENT CODE <u>37.4250.0</u>			

SPECIAL BOX SCAN:		SCAN DATE		SPECIAL DRUM SCAN	
<i>Scott Thompson</i> SURVEYOR SIGNATURE		09/28/90			
HP NO. <u>5116</u>					
<p>Highest Reading on End <u>4850</u> CPM (1)</p>		<p>Highest Reading on Opposite End <u>4850</u> CPM (2)</p>		<p>Fiddler 3429 3565</p>
<p>Highest Reading on Side <u>4850</u> CPM (3)</p>		<p>Highest Reading on Opposite Side <u>4850</u> CPM (4)</p>			
<p>DISTRIBUTION: Copy 1 - Nuclear Materials Management Copy 2 - Waste Management Copy 3 - Health Physics Copy 4 - Originator</p>					
BUILDING MANAGER <i>B. Michigan</i>		HP NO. <u>141612</u>		☒ OK to Ship ☐ Requires Additional Scan	
				<p>HP NO. <u>5116</u></p>	

UNIT ID		CREATE LOCATION		FILL DATE		SEAL DATE		PHYSICAL INSPECTION		INT.	
01101613CE121		BLDG. 5M ROOM 1		0161141910		0161141910		No Significant Dents		JW	
Johna Wilson		2223		LOT NO.		SEAL NO.		No Significant Rust		JW	
ORIGINATOR SIGNATURE		HP NO.		1 7 H 1 6 5 5		MA		No Holes		JW	
COMBUSTIBLE - %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.		No Cracks		JW	
NON-COMBUSTIBLE		DRUMS IN DRUMS OUT		1 3 2 2		1 3 2 2		Drum Tightened		NA	
DRUM W/LINER		PKG. TYPE		HEALTH PHYSICS DATA		INT.		Unit ID Applied		JW	
DRUM ONLY		PKG. SIZE		Wipe (D/M) 100 (CM) SQ		K 2 0 1113		WASTE DESCRIPTION AND COMMENTS		Solid	
ISOTOPE		CURIES		MREM/HR		K 0 1 1113					
AW238		005244		0.91M MREM/HR		K 0 1 1113					
				Shipping Labels Applied		✓ 1113					
				γ Inst.		3077/3166					
				N Inst.		N/A					
				SURVEYOR SIGNATURE		HP NO.					

141 Ball 1,611
SURVEYOR SIGNATURE HP NO.

061590

SPECIAL DRUM SCAN

< 850 CPM (2)
Highest Reading on Opposite End

< 850 CPM (4)
Highest Reading on Opposite Side

3422
3433

_____ (1) Avg. Top

_____ (2) Avg.

_____ (3) Avg.

_____ (4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

230C
HP NO.

☐ OK to Ship

Requires Additional Scan

OF 2030 HP NO.

UNIT ID 01016163418101		CREATE LOCATION BLDG. <u>S.M</u> ROOM <u>01</u>		FILL DATE 05 06 90		SEAL DATE 06 06 90		PHYSICAL INSPECTION		INT.	
<i>Caplin Medman</i> ORIGINATOR SIGNATURE		<u>4.6.2.6</u> HP NO.		LOT NO. 1 7 H 1 6 5 5		SEAL NO.		No Significant Dents		CM	
COMBUSTIBLE - %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.		No Significant Rust		CM	
NON-COMBUSTIBLE <u>100%</u>		DRUMS IN <u>N.A</u> DRUMS OUT <u>N.A</u>		<u>36.03.4</u> <i>7444</i>		<u>31.2.2</u>		No Holes		NA	
DRUM W/LINER <u>NA</u>		PKG. TYPE <u>METAL</u>		HEALTH PHYSICS DATA				No Cracks		NA	
DRUM ONLY <u>NA</u>		PKG. SIZE <u>FULL</u>		Wipe (D/M) 100 (CM) SQ				Drum Tightened		NA	
		<i>CODE 105</i>		MREM/HR				Unit ID Applied		CM	
ISOTOPE		CURIES		0.91M MREM/HR				WASTE DESCRIPTION AND COMMENTS <u>DILUTED RADIATION</u> <u>FLUORIC</u>			
<u>Pu 238</u>		<u>1200</u>		Shipping Labels Applied		<u>X</u>					
				γ Inst. <u>Radman</u>							
				N Inst. <u>A</u>							
		<u>101059</u>		SURVEYOR SIGNATURE		HP NO.		CONTENT CODE <u>37499900</u>			

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE

HP NO.

SCAN DATE

01.07.90

SPECIAL DRUM SCAN

DISTRIBUTION:

Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

*W. F. J. J.*5.0.7.2

HP NO.

☒ OK to Ship*T. J. J.*

QC

5101310

HP NO.

☐ Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 9472120		CREATE LOCATION BLDG. 38 ROOM 01		FILL DATE 953190		SEAL DATE 060190		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <i>Kelly M. Rainey</i>		HP NO. 2813		LOT NO. 17H1655		SEAL NO. N/A		No Significant Dents		KMR	
COMBUSTIBLE - % NON-COMBUSTIBLE 100%		COMPACTOR RATIO DRUMS IN N/A DRUMS OUT N/A		GROSS WT. (KG) 3411.5		ACCT. NO. 1322		No Significant Rust		KMR	
DRUM W/LINER N/A		PKG. TYPE METAL		HEALTH PHYSICS DATA		INT.		No Holes		N/A	
DRUM ONLY N/A		PKG. SIZE FULL		Wipe (D/M) 100 (CM) SQ < 2000				No Cracks		N/A	
ISOTOPE Pu-238		CURIES 100.00		MREM/HR < 0.1				Drum Tightened		N/A	
				0.91M MREM/HR < 0.1				Unit ID Applied		KMR	
				Shipping Labels Applied				WASTE DESCRIPTION AND COMMENTS SHORT PICKUP			
				7 Inst. <i>Field</i> AC 3007							
				8 Inst. <i>N/A</i>							
				SURVEYOR SIGNATURE <i>Kelly M. Rainey</i>		HP NO. 2813		CONTENT CODE 37422000			

SPECIAL BOX SCAN: <i>Richard Smith</i>		SCAN DATE: 060790		SPECIAL DRUM SCAN	
SURVEYOR SIGNATURE		HP NO.			
CPM (1) < 800		CPM (2) < 850		(1) Avg. Top	
Highest Reading on End		Highest Reading on Opposite End		(2) Avg.	
CPM (3) < 850		CPM (4) < 850		(3) Avg.	
Highest Reading on Side		Highest Reading on Opposite Side		(4) Avg.	
DISTRIBUTION: Copy 1 - Radioactive Materials Management Copy 2 - Waste Management Copy 3 - Health Physics Copy 4 - Originator		BUILDING MANAGER <i>John Smith</i>		☒ OK to Ship ☐ Requires Additional Scan	
BUILDING NO. 3871 MATERIAL: Soil		HP NO. 2813		DATE: 060790 HP NO. 510310	

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 01553 BX 90		CREATE LOCATION BLDG. SW ROOM 1-27		FILL DATE 10/20/90		SEAL DATE 10/20/90		PHYSICAL INSPECTION		INT.
ORIGINATOR SIGNATURE <i>Mancey</i>		HP NO. 2770		LOT NO. 17H1655		SEAL NO.		No Significant Dents		100
COMBUSTIBLE - %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.		No Significant Rust		100
NON-COMBUSTIBLE		DRUMS IN 1/1 DRUMS OUT 1/1				13-22		No Holes		100
DRUM W/LINER		PKG. TYPE		HEALTH PHYSICS DATA		INT.		No Cracks		100
DRUM ONLY		PKG. SIZE		Wipe (D/M) 100 (CM) SQ				Drum Tightened		100
				MREM/HR				Unit ID Applied		100
ISOTOPE		CURIES		0.91M MREM/HR				WASTE DESCRIPTION AND COMMENTS N/A T. KAC		
Pu-238				Shipping Labels Applied						
				γ Inst.						
				N Inst.						
				SURVEYOR SIGNATURE		HP NO.		CONTENT CODE		

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE HP NO.

SCAN DATE

SPECIAL DRUM SCAN

DISTRIBUTION:
Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

HP NO.

☒ OK to Ship

☐ Requires Additional Scan

CC

HP NO.

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 014041		CREATE LOCATION BLDG. 101 ROOM 101		FILL DATE 06/11/96		SEAL DATE 06/11/96		PHYSICAL INSPECTION		INT.
ORIGINATOR SIGNATURE <i>[Signature]</i>		HP NO.		LOT NO. 1 7 H 1 6 5 5		SEAL NO. N/A		No Significant Dents	KMR	
COMBUSTIBLE - % NON-COMBUSTIBLE		COMPACTOR RATIO DRUMS IN DRUMS OUT		GROSS WT. (KG)		ACCT. NO.		No Significant Rust	KMR	
DRUM W/LINER DRUM ONLY		PKG. TYPE PKG. SIZE		HEALTH PHYSICS DATA		INT.		No Holes	KMR	
								Wipe (D/M) 100 (CM) SQ		
ISOTOPE Pu-238		CURIES 0.058		MREM/HR				Drum Tightened	NA	
				0.91M MREM/HR				Unit ID Applied	KMR	
				Shipping Labels Applied				WASTE DESCRIPTION AND COMMENTS SOIL IN PAIL		
				γ Inst.						
				N Inst.				CONTENT CODE		
				SURVEYOR SIGNATURE		HP NO.				

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE **HP NO.**

SCAN DATE

SPECIAL DRUM SCAN

DISTRIBUTION:
 Copy 1 - Nuclear Materials Management
 Copy 2 - Waste Management
 Copy 3 - Health Physics
 Copy 4 - Originator

BUILDING MANAGER

HP NO.

☐ OK to Ship

QC

HP NO.

☐ Signature Additional Owner

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SPECIAL BOX SCAN: <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;">SURVEYOR SIGNATURE _____</div> <div style="width: 40%;">HP NO. _____</div> </div> </div>	SCAN DATE <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; vertical-align: middle;"></div>	SPECIAL DRUM SCAN
--	--	--------------------------

CPM (1)

Highest Reading on End

CPM (3)

Highest Reading on Side

CPM (2)

Highest Reading on Opposite End

CPM (4)

Highest Reading on Opposite Side

DISTRIBUTION:

- Copy 1 - Nuclear Materials Management
- Copy 2 - Waste Management
- Copy 3 - Health Physics
- Copy 4 - Originator

BUILDING MANAGER _____

HP NO.

OK to Ship

Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 011211113K99		CREATE LOCATION BLDG. 51M ROOM 1.D.7		FILL DATE 1.0.3.9.0		SEAL DATE 1.0.3.9.0		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE Kelly M. Ramsey		HP NO. 2.8.1.3		LOT NO. 1.7.H.1.8.5.5 N/A		SEAL NO. N/A		No Significant Dents		KMR	
COMBUSTIBLE - % NON-COMBUSTIBLE 100%		COMPACTOR RATIO DRUMS IN N/A DRUMS OUT N/A		GROSS WT. (KG) 36.41.5		ACCT. NO. 1.3.2.2		No Significant Rust		KMR	
DRUM W/LINER NA		PKG. TYPE METAL		HEALTH PHYSICS DATA		INT.		No Holes		KMR	
DRUM ONLY NA		PKG. SIZE FULL		Wipe (D/M) 100 (CM) SQ		2.20.0		No Cracks		KMR	
ISOTOPE		CURIES		MREM/HR		2.0+1		Drum Tightened		N/A	
Pu-238		1.0016		0.91M MREM/HR		1.0.0		Unit ID Applied		KMR	
				Shipping Labels Applied		RD		WASTE DESCRIPTION AND COMMENTS			
				7 Inst. LUD. 11C (5.0.7)		RD		Similar to R101K1			
				8 Inst. N/A		RD					
				Surveyor Signature Kelly M. Ramsey		HP NO.					
								CONTENT CODE			
								37.4D12.00.0			

SPECIAL BOX SCAN: Surveyor Signature Kelly M. Ramsey HP NO. 2.44.2 SCAN DATE 1.0.1.1.9.0 SPECIAL DRUM SCAN

CPM (1)
Highest Reading on End
850

CPM (2)
Highest Reading on Opposite End
850

CPM (3)
Highest Reading on Side
850

CPM (4)
Highest Reading on Opposite Side
850

FIDEL: 3425
3000

(1) Avg. Top
(2) Avg.
(3) Avg.
(4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER [Signature] 5.0.7.2 HP NO. OK to Ship [Signature] 5.0.3.0 HP NO. Specimen Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 011195		CREATE LOCATION BLDG. S.M ROOM F.D.T		FILL DATE 090490		SEAL DATE 090490		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <i>Kelly M. Bayne</i>		HP NO. 2813		LOT NO. 17H1655		SEAL NO. N/A		No Significant Dents		KMR	
COMBUSTIBLE - % -		COMPACTOR RATIO		GROSS WT. (KG) 156.3		ACCT. NO. 1322		No Significant Rust		KMR	
NON-COMBUSTIBLE 100%		DRUMS IN N/A DRUMS OUT N/A						No Holes		KMR	
DRUM W/LINER NA		PKG. TYPE METAL						No Cracks		KMR	
DRUM ONLY NA		PKG. SIZE FULL						Drum Tightened		NA	
								Unit ID Applied		KMR	
ISOTOPE		CURIES		HEALTH PHYSICS DATA				WASTE DESCRIPTION AND COMMENTS			
Pu-238		4.641		Wipe (D/M) 100 (CM) SQ 4.0 RD				5011111111111111			
				MREM/HR 4.0 RD							
				0.91M MREM/HR 4.0 RD							
				Shipping Labels Applied 60 RD							
				γ Inst. 400.14C (5007)				CONTENT CODE 374D2000			
				N Inst. N/A							
				SURVEYOR SIGNATURE <i>Kelly M. Bayne</i> HP NO.							

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE *Kelly M. Bayne*

HP NO.

SCAN DATE

090490

SPECIAL DRUM SCAN

HOLDER!
3533
3534

(1) Avg. Top
(2) Avg.
(3) Avg.
(4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

4/1/90

5072

HP NO.

☒ OK to Ship

T. Maxwell

QC

50131

HP NO.

☐ Requires Additional Scan

[illegible]

SURVEYOR SIGNATURE _____ HP NO. _____

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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_____ (1) Avg. Top

_____ (2) Avg.

_____ (3) Avg.

_____ (4) Avg.

Diagram illustrating the measurement locations for a rectangular block:

- Highest Reading on End**: Indicated by an arrow pointing to the top-left corner of the front face.
- CPM (3)**: A label with a line pointing to the right side of the block.
- Highest Reading on Side**: Indicated by an arrow pointing to the bottom-left corner of the front face.

Diagram of a rectangular box. The top surface is labeled "CPM 127" and "Highest Reading on Opposite End". The right side face is labeled "CPM 141" and "Highest Reading on Opposite Side". An arrow points from the "CPM 141" label to the side face.

BUILDING MANAGER

☒ OK to Ship

On

HP NO.

Requires Additional Space

UNIT ID D1368		CREATE LOCATION		FILL DATE		SEAL DATE		PHYSICAL INSPECTION		INT.	
		BLDG. S17A	ROOM - - -	48 212 910		018 212 510		No Significant Dents	U.L.		
								No Significant Rust	U.L.		
								No Holes	U.L.		
								No Cracks	U.L.		
								Drum Tightened	MA		
								Unit ID Applied	U.I.		

ORIGINATOR SIGNATURE <i>[Signature]</i>		HP NO. 3161512		LOT NO. 1 7 H 1 6 5 5		SEAL NO. MFA	
COMBUSTIBLE - % 0		COMPACTOR RATIO		GROSS WT. (KG) 23.263		ACCT. NO. 1131212	
NON-COMBUSTIBLE 100		DRUMS IN NH	DRUMS OUT NH				
DRUM W/LINER N/A		PKG. TYPE 2712 GEL		HEALTH PHYSICS DATA		INT.	
DRUM ONLY N/A		PKG. SIZE 5L		Wipe (D/M) 100 (CM) SQ C 20.0		R0	
				MREM/HR C 0.1		R0	
				0.91M MREM/HR C 0.0		R0	
				Shipping Labels Applied RD		RD	
				γ Inst. Ind. (ILC 5007) N Inst. MA			
				<i>[Signature]</i> SURVEYOR SIGNATURE		HP NO.	

ISOTOPE		CURIES
P4238		2.2 MCi
		0.059

WASTE DESCRIPTION AND COMMENTS Small Rock	
CONTENT CODE 5742011	

SPECIAL BOX SCAN: <i>[Signature]</i> SURVEYOR SIGNATURE HP NO. 31442	SCAN DATE 016121810
--	------------------------

Highest Reading on End CPM (1)
Highest Reading on Side CPM (3)

Highest Reading on Opposite End CPM (2)
Highest Reading on Opposite Side CPM (4)

VIAL 3153 / 51722

_____ (1) Avg. Top
 _____ (2) Avg.
 _____ (3) Avg.
 _____ (4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
 Copy 2 - Waste Management
 Copy 3 - Health Physics
 Copy 4 - Originator

BUILDING MANAGER
[Signature]
 HP NO. 5072

☒ OK to Ship
☐ Requires Additional Scan

OC
[Signature]
 HP NO. 50310

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 01495BX1501		CREATE LOCATION BLDG. S.M ROOM F.D.T		FILL DATE 10/31/90		SEAL DATE 10/31/90		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <i>James Rountree</i>		HP NO. 2541		LOT NO. 17H1655 N/A		SEAL NO. N.A.		No Significant Dents		<i>J.R.</i>	
COMBUSTIBLE - % 5%		COMPACTOR RATIO		GROSS WT. (KG) 35.19		ACCT. NO. 1322		No Significant Rust		<i>J.R.</i>	
NON-COMBUSTIBLE 95%		DRUMS IN N.A. DRUMS OUT N.A.		HEALTH PHYSICS DATA				No Holes		<i>J.R.</i>	
DRUM W/LINER N.A.		PKG. TYPE METAL		Wipe (D/M) 10D (CM) SQ		4.20		No Cracks		<i>J.R.</i>	
DRUM ONLY N.A.		PKG. SIZE FULL		MREM/HR		4.01		Drum Tightened		<i>N.A.</i>	
		COOP # 009		0.01M MREM/HR		1.00		Unit ID Applied		<i>J.R.</i>	
ISOTOPE		CURIES		Shipping Labels Applied		1		WASTE DESCRIPTION AND COMMENTS SOIL & ROCK DISPERSED			
Pu-238		1.00E-05		γ Inst. 1.00E-05		1.00E-05					
				N Inst. N/A		N/A					
				SURVEYOR SIGNATURE <i>James Rountree</i>		HP NO. 2541					
								CONTENT CODE 37422000			

SPECIAL BOX SCAN:

James Rountree
SURVEYOR SIGNATURE

15485
HP NO.

SCAN DATE

11/01/90

SPECIAL DRUM SCAN

DISTRIBUTION:

Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

James Rountree

5.0.7.2
HP NO.

☒ OK to Ship

T. Morrow
OC

510.3.0
HP NO.

☐ Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 01131517		CREATE LOCATION BLOG. 711 ROOM 1		FILL DATE 08 24 90		SEAL DATE 08 24 90		PHYSICAL INSPECTION		INT.
<i>Cowley</i> ORIGINATOR SIGNATURE		41446 HP NO.		17H1655 LOT NO.				No Significant Dents		CM
								No Significant Rust		CM
								No Holes		CM
								No Cracks		CM
								Drum Tightened		NA
								Unit ID Applied		CM

COMBUSTIBLE - %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.	
NON-COMBUSTIBLE		DRUMS IN 1407 DRUMS OUT 1407		314.5		311212	
DRUM W/LINER ☒		PKG. TYPE 112112		HEALTH PHYSICS DATA Wipe (D/M) 100 (CM) SQ 430 RD MREM/HR 4.91 RD 0.91M MREM/HR 100 RD Shipping Labels Applied RD RD 7 Inst. Ind. 14C(3007) 8 Inst. N/A <i>Russ. M. L. L.</i> SURVEYOR SIGNATURE HP NO. 2442			
DRUM ONLY ☒		PKG. SIZE 1000					

ISOTOPE		CURIES	
P 14121318		1010141	

WASTE DESCRIPTION AND COMMENTS	
Solidified Radioactive	

CONTENT CODE	
374P2000	

SPECIAL BOX SCAN:

for Wally
SURVEYOR SIGNATURE HP NO.

SCAN DATE 08.2.7.9.0

SPECIAL DRUM SCAN

406R 3422
3433

(1) Avg. Top
(2) Avg.
(3) Avg.
(4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

W. Foster
BUILDING MANAGER

5.0.7.2
HP NO.

☒ OK to Ship
☐ Requires Additional Scan

T. M. M.
QC HP NO. 5.0.13.0

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

[illegible]

SPECIAL BOX SCAN:

Pearl Bailey 1244
SURVEYOR SIGNATURE HP NO.

SCAN DATE

L. n.

SPECIAL DRUM SCAN

Highest Reading on End

CPM (1)

Highest Reading on Side

CPM (3)

CPM (2)
Highest Reading on Opposite End

CPM (4)
Highest Reading on Opposite Side

_____ (1) Avg. Top

_____ (2) Avg.

_____ (3) Avg.

_____ (4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

42. positive 5.1.74.
HP NO.

☒ OK to Ship

1.2 Monoclonal	50.30
QC	HP NO.

Requires Additional Scan

6

SPECIAL BOX SCAN: Kennedy 2,442 SCAN DATE 1,0,1,1,9,0 SPECIAL DRUM SCAN

1850 CPM (1) 1850 CPM (2) FIDDER: 3426

Highest Reading on End Highest Reading on Opposite End

1850 CPM (3) 1800 CPM (4)

Highest Reading on Side Highest Reading on Opposite Side

(1) Avg. Top
(2) Avg.
(3) Avg.
(4) Avg.

DISTRIBUTION: Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER M Foster 5,072 ☒ OK to Ship T. M. Foster 50, SP

HP NO. HP NO.

Requires Additional Scan

NRC ML-7042A (3-87)

[illegible]

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 0111016		CREATE LOCATION BLDG. 100 ROOM 505		FILL DATE 11/1/78		SEAL DATE 11/1/78		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <i>[Signature]</i>		HP NO. 2813		LOT NO. 17H1655		SEAL NO. NA		No Significant Dents		KMR	
COMBUSTIBLE - % 0		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO. 1322		No Significant Rust		KMR	
NON-COMBUSTIBLE 100		DRUMS IN NA DRUMS OUT NA						No Holes		KMR	
DRUM W/LINER NA		PKG. TYPE Metal		HEALTH PHYSICS DATA		INT.		WASTE DESCRIPTION AND COMMENTS Solid in Drum			
DRUM ONLY NA		PKG. SIZE Full		Wipe (D/M) 100 (CM) SQ							
				MREM/HR							
				0.91M MREM/HR							
				Shipping Labels Applied							
ISOTOPE Pu 238		CURIES 0.064		γ Inst.				CONTENT CODE 71624014			
				N Inst.							
				SURVEYOR SIGNATURE		HP NO.					

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE
[Signature]

HP NO.

SCAN DATE

SPECIAL DRUM SCAN

DISTRIBUTION:
Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

[Signature]

5.0.7.2
HP NO.

☒ OK to Ship *[Signature]* **5.0.7.2**
OC **HP NO.**
☐ Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

[illegible]

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE

44 NO.

SCAN DATE

091447

SPECIAL DRUM SCAN

_ (1) Avg. Top

(2) Avg.

— (3) Avg.

[4] Avg.

DISTRIBUTION:

Copy 1 - Nuclear Materials Management
Copy 2 - Waste Management
Copy 3 - Health Physics
Copy 4 - Originator

BUILDING MANAGER

11/22/20

HP NO.

OK to Ship

QC

HP NO.

Requires Additional Scan

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

UNIT ID 0115105		CREATE LOCATION BLDG. 101 ROOM 1111		FILL DATE 11/1/72		SEAL DATE 11/1/72		PHYSICAL INSPECTION		INT.
ORIGINATOR SIGNATURE [Signature]		HP NO. [Blank]		LOT NO. 17H1655		SEAL NO. 11416		No Significant Dents		011
COMBUSTIBLE - % NON-COMBUSTIBLE		COMPACTOR RATIO DRUMS IN 1111 DRUMS OUT 1111		GROSS WT. (KG) 2730		ACCT. NO. [Blank]		No Significant Rust		011
DRUM W/LINER DRUM ONLY		PKG. TYPE PKG. SIZE		HEALTH PHYSICS DATA		INT.		No Holes		011
				Wipe (D/M) 100 (CM) SQ		100		No Cracks		011
				MREM/HR		100		Drum Tightened		011
				0.91M MREM/HR		100		Unit ID Applied		011
				Shipping Labels Applied		100				
ISOTOPE P-101		CURIES 0061		γ Inst. 100		INT. 100		WASTE DESCRIPTION AND COMMENTS [Blank]		
				β Inst. N/A						
				SURVEYOR SIGNATURE [Signature]		HP NO. [Blank]				
SPECIAL BOX SCAN:		SURVEYOR SIGNATURE [Signature]		HP NO. [Blank]		SCAN DATE 11/1/72		CONTENT CODE 374.220000		

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE

HP NO.

SCAN DATE

SPECIAL DRUM SCAN

DISTRIBUTION:
 Copy 1 - Nuclear Materials Management
 Copy 2 - Waste Management
 Copy 3 - Health Physics
 Copy 4 - Originator

BUILDING MANAGER

[Signature]

5.07.2

HP NO.

☒ OK to Ship

50.3.0

HP NO.

☐ Requires Additional Scan

UNIT ID 011435		CREATE LOCATION BLDG. S01 ROOM F107		FILL DATE 10/1/91		SEAL DATE 10/1/91		PHYSICAL INSPECTION		INT.	
ORIGINATOR SIGNATURE <i>Charles J. J. J.</i>		HP NO. 70920		LOT NO. 17H1655		SEAL NO. 1117		No Significant Dents		✓	
COMBUSTIBLE %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.		No Significant Rust		✓	
NON-COMBUSTIBLE		DRUMS IN 10 DRUMS OUT 10						No Holes		✓	
DRUM W/LINER		PKG. TYPE		HEALTH PHYSICS DATA		INT.		WASTE DESCRIPTION AND COMMENTS			
DRUM ONLY		PKG. SIZE									
ISOTOPE		CURIES		Wipe (D/M) 100 (CM) SQ				CONTENT CODE			
Pu 238				MREM/HR							
				0.91M MREM/HR							
				Shipping Labels Applied							
				γ Inst.							
				N Inst.							
				SURVEYOR SIGNATURE		HP NO.					

SPECIAL BOX SCAN:		SCAN DATE		SPECIAL DRUM SCAN	
SURVEYOR SIGNATURE <i>Charles J. J. J.</i>		10/1/91			
HP NO. 70920					

CPM (1) _____

CPM (2) _____

CPM (3) _____

CPM (1) _____

CPM (2) _____

CPM (3) _____

(1) Avg. Top _____

(2) Avg. _____

(3) Avg. _____

(4) Avg. _____

DISTRIBUTION:		BUILDING MANAGER		HP NO.		OK to Ship		HP NO.	
Copy 1 - Nuclear Materials Management						☐			
Copy 2 - Waste Management						☐			
Copy 3 - Health Physics						☐			
Copy 4 - Originator						☐			

MRC-ML-7042A (3 87)

UNIT ID C11422A1702		CREATE LOCATION BLDG. ROOM		FILL DATE		SEAL DATE		PHYSICAL INSPECTION		INT.
								No Significant Dents		
								No Significant Rust		
								No Holes		
								No Cracks		
								Drum Tightened		
								Unit ID Applied		

ORIGINATOR SIGNATURE		HP NO.		LOT NO. 1 7 H 1 6 5 5		SEAL NO.	

COMBUSTIBLE - %		COMPACTOR RATIO		GROSS WT. (KG)		ACCT. NO.	
NON-COMBUSTIBLE		DRUMS IN DRUMS OUT					

DRUM W/LINER		PKG. TYPE		HEALTH PHYSICS DATA				INT.	
DRUM ONLY		PKG. SIZE							
				Wipe (D/M) 100 (CM) SQ					
				MREM/HR					
				0.91M MREM/HR					
				Shipping Labels Applied					
				γ Inst. _____					
				N Inst. _____					
				SURVEYOR SIGNATURE				HP NO.	

ISOTOPE		CURIES	

WASTE DESCRIPTION AND COMMENTS	

CONTENT CODE	

SPECIAL BOX SCAN:

SURVEYOR SIGNATURE HP NO.

SCAN DATE

SPECIAL DRUM SCAN

DISTRIBUTION:
 Copy 1 - Nuclear Materials Management
 Copy 2 - Waste Management
 Copy 3 - Health Physics
 Copy 4 - Originator

BUILDING MANAGER

HP NO.

☐ OK to Ship

☐ Requires Additional Scan

OC

HP NO.

LOW LEVEL RADIOACTIVE WASTE INPUT FORM

[illegible]

<p>SPECIAL BOX SCAN:</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">SURVEYOR SIGNATURE HP NO.</p> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>CPM (1) _____</p> <p>Highest Reading on End</p> <p style="text-align: center;">CPM (3) _____</p> <p>Highest Reading on Side</p> </div> <div style="width: 45%;"> <p>CPM (2) _____</p> <p>Highest Reading on Opposite End</p> <p style="text-align: center;">CPM (4) _____</p> <p>Highest Reading on Opposite Side</p> </div> </div>	<p>SPECIAL DRUM SCAN</p> <div style="text-align: center;"> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>_____ (1) Avg. Top</p> <p>_____ (2) Avg.</p> <p>_____ (3) Avg.</p> <p>_____ (4) Avg.</p> </div> <div style="width: 45%;"> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> </div> </div>
<p>DISTRIBUTION:</p> <ul style="list-style-type: none"> Copy 1 - Nuclear Materials Management Copy 2 - Waste Management Copy 3 - Health Physics Copy 4 - Originator 	
<p>BUILDING MANAGER _____ HP NO. _____</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p>☒ OK to Ship</p> <p>☐ Requires Additional Scan</p> </div> <div style="text-align: right;"> <p>OC _____</p> <p>HP NO. _____</p> </div> </div>	

APPENDIX B

CUSTODY TRANSFER RECORDS

(December 1990 and January 1991 Sampling)

**FEDERAL
EXPRESS****AIRBILL**SEE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A. ALASKA AND HAWAII.
SEE THE INTERNATIONAL AIRWAYBILL FOR SHIPMENTS TO FOREIGN COUNTRIES.
QUESTIONS? CALL 800-388-3305 TOLL FREE.PACKAGE
TRACKING NUMBER**3890070155****3890070155****SENDER'S COPY**

Sender's Federal Express Account Number 1250-9010-9		Date 12-19-90	
From (Your Name) Please Print SUSAN WILSON		Your Phone Number (Very Important) 505-255-1445	
Company ROY F WESTON		Department/Floor No. SUITE 1000	
Street Address 5301 CENTRAL AVE NE		Exact Street Address (We Deliver to P.O. Boxes or R.O. 24 Hours) 1925 ROSINA ST	
City ALBUQUERQUE NM		City SANTA FE NM	
State NM		State NM	
ZIP Required 87108		ZIP Required 87502	
YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE) 5376-05-01-0005			
IF HOLD FOR PICK-UP, Print FEDEX Address Here Street Address City State ZIP Required			
PAYMENT ☐ Bill Sender ☐ Bill Recipient's FedEx Account ☒ Bill 3rd Party FedEx Account No. ☐ Bill Credit Card ☐ Cash 0191-1273-0 Expiration Date 1			

SERVICES		DELIVERY AND SPECIAL HANDLING		PACKAGES		WEIGHT		FREE DELIVERY		DAYS	
1 ☒ PRIORITY 1 Overnight Delivery	6 ☐ OVERNIGHT LETTER*	1 ☐ HOLD FOR PICK-UP (24 hr. limit)	2 ☒ DELIVER WEEKDAY	1 ☒ REGULAR	2 ☒ ON-STOP	1 ☒ REGULAR	2 ☒ ON-STOP	1 ☒ REGULAR	2 ☒ ON-STOP	1 ☒ REGULAR	2 ☒ ON-STOP
2 ☐ COULDER-PAK STANDARD ENVELOPES	7 ☐	3 ☐ DELIVER SATURDAY (Extra charge)	4 ☐ DELIVER SUNDAY (Extra charge)	3 ☐ REGULAR	4 ☐ ON-STOP	3 ☐ REGULAR	4 ☐ ON-STOP	3 ☐ REGULAR	4 ☐ ON-STOP	3 ☐ REGULAR	4 ☐ ON-STOP
3 ☐ OVERNIGHT BOX	8 ☐	5 ☐ DELIVER MONDAY (Extra charge)	6 ☐ DELIVER TUESDAY (Extra charge)	5 ☐ REGULAR	6 ☐ ON-STOP	5 ☐ REGULAR	6 ☐ ON-STOP	5 ☐ REGULAR	6 ☐ ON-STOP	5 ☐ REGULAR	6 ☐ ON-STOP
4 ☐ OVERNIGHT TUBE	9 ☐	7 ☐ DELIVER WEDNESDAY (Extra charge)	8 ☐ DELIVER THURSDAY (Extra charge)	7 ☐ REGULAR	8 ☐ ON-STOP	7 ☐ REGULAR	8 ☐ ON-STOP	7 ☐ REGULAR	8 ☐ ON-STOP	7 ☐ REGULAR	8 ☐ ON-STOP
5 ☐ STANDARD AIR Delivery Not later than second business day	10 ☐	9 ☐ DELIVER FRIDAY (Extra charge)	10 ☐ DELIVER SATURDAY (Extra charge)	9 ☐ REGULAR	10 ☐ ON-STOP	9 ☐ REGULAR	10 ☐ ON-STOP	9 ☐ REGULAR	10 ☐ ON-STOP	9 ☐ REGULAR	10 ☐ ON-STOP
*Declared Value Limit \$100		11 ☐ DELIVER SUNDAY (Extra charge)		11 ☐ DELIVER MONDAY (Extra charge)		11 ☐ DELIVER TUESDAY (Extra charge)		11 ☐ DELIVER WEDNESDAY (Extra charge)		11 ☐ DELIVER THURSDAY (Extra charge)	
		12 ☐ DELIVER FRIDAY (Extra charge)		12 ☐ DELIVER SATURDAY (Extra charge)		12 ☐ DELIVER SUNDAY (Extra charge)		12 ☐ DELIVER MONDAY (Extra charge)		12 ☐ DELIVER TUESDAY (Extra charge)	

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY		FEDERAL EXPRESS USE	
Use of this form constitutes your agreement to the service conditions in our current Service Guide which is available upon request. See back of Sender's copy of this form for further information.		Base Charges	
We will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay or non-delivery, unless you specify a higher amount in the space to the left, pay \$4.00 per \$100 specified and document your actual loss in the event of a claim. Maximum amount insurable under the current Federal Express Service Guide. Your right to recover from Federal Express for loss of the package value of the package, as well as for loss of sales, income, interest, profit, attorney fees, costs and any other kind of damage whether direct, incidental, consequential or special is limited to the greater of \$100 or the declared value specified to the left. In no event shall your recovery exceed your actual cost.		Declared Value Charge	
In the event of priority delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.		Other 1	
Sender authorizes Federal Express to deliver the shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.		Other 2	
Release Signature: _____		Total Charges	
Date/Time for FEDEX Use 12 19 1600		PART 42041738000 REVISION DATE 10/90 PRINTED IN U.S.A. 2401	

Custody Transfer Record/Lab Work Request

Client WESTON / EGVA MOUND
 Work Order P.O. # 54200
 Date Rec'd _____ Date Due _____
 RFW Contact SUSAN WILSON
 Client Contact/Phone 505-255-1445

WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected	Refrigerator#	#/Type Container	Volume	Preservative	ANALYSES REQUESTED											
	MND16-0015-0014	S	18 DEC 90		1/1600	300ML	4°C	①	②	③									
	MND16-0012-0012				1/1600	300ML	4°C												
	MND16-0012-0006																		
	MND16-0015-0015																		
	MND16-0015-0017																		
	MND16-0015-0011																		
	MND16-0012-0009																		
	MND16-0015-0004																		
	MND16-0012-0004																		
	MND16-0013-0001																		
	MND16-0014-0002																		
	MND16-0012-0010																		
	MND16-0012-0015																		
	MND16-0015-0016																		
	MND16-0015-0005	✓	✓																

Matrix: W - Water DS - Drum Solids X - Other
 S - Soil O - Oil DL - Drum Liquids
 SE - Sediment A - Air F - Fish
 SO - Solid WI - Wipe L - EP/TCLP Leachate

Special Instructions: ① TOTAL TELP
 ② TOTAL TELP + MS/MSD
 ③ PCBs, PARTICULATE SIZE, PAINT FILTER TEST

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
SAMPLES/	S. Wilson								
ANALYSIS	18 DEC 90								
	16 00								
	FEDX								

WESTON Analytics
Use Only

Samples Were:
 1 Shipped or Hand-Delivered
 NOTES:

2 Ambient or Chilled
 NOTES:

3 Received Broken/
 Leaking (Improperly Sealed)
 Y N
 NOTES:

4 Properly Preserved
 Y N
 NOTES:

5 Received Within
 Holding Times
 Y N
 NOTES:

COC Tape Was:
 1 Present on Outer Package Y N
 2 Unbroken on Outer Package Y N
 3 Present on Sample Y N
 4 Unbroken on Sample Y N
 NOTES:

COC Record Was:
 1 Present Upon Receipt of Samples Y N
 Discrepancies Between Sample Labels and COC Record? Y N
 NOTES:

702

Client Contact/Phone 505-255-1445

ANALYSES REQUESTED

Discrepancies Between Sample Labels and COC Record?	
Y	N
NOTES:	

7-115

AIRBILL

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR SERVICE FOR SHIPMENTS TO FOREIGN COUNTRIES.
QUOTATIONS CALL 800-233-8888 TOLL FREE.

PACKAGE
TRACKING NUMBER

3890070133

SAMPLES
TO CEP

1-30-91 SENDER'S COPY

Sender's Federal Express Account Number
1250-9010-91

Date
1-30-91

From (Your Name) Please Print
SUSAN WILSON

Your Phone Number (Very Important)
505, 253-1445

To (Recipient's Name) Please Print
JEFF TYE

Recipient's Phone Number (Very Important)
505, 982-9841

Company
ROY F. WESTON INC

Department/Floor No
1006

Company
CEP LAB

Department/Floor No

Street Address
5301 CENTRAL AVE, NE

Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Boxes)
1925 ROSINA ST

City
ALBUQUERQUE NM

ZIP Required
87108

City
SANTA FE NM

ZIP Required
87502

YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE)
5376-05-01-0005

IF HOLD FOR PICK-UP, PRINT FEDEX ADDRESS HERE

PAYMENT ☐ Bill Sender ☐ Bill Recipient's FedEx Acct. No. ☒ Bill 3rd Party FedEx Acct. No. ☐ Bill Credit Card
☐ Cash 0191-1273-0

City State ZIP Required

SERVICES		DELIVERY AND SPECIAL HANDLING		PROCESS		DECLARED VALUE AND LIMIT OF LIABILITY		FEDERAL EXPRESS USE	
1 ☒ PRIORITY 1 Guaranteed delivery	6 ☐ OVERNIGHT LETTER	1 ☐ HOLD FOR PICK-UP Hold for pickup	2 ☒ DELIVER WEEKDAY	1 ☐ Regular Stop	2 ☐ On-Cut Stop	<p>SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY</p> <p>Use of this service constitutes your agreement to the service conditions of our Service Guide, which is available upon request. See back of sender's copy of this airbill for further information.</p> <p>We will not be responsible for any claim in excess of \$100 per package, whether the value of loss, damage, delay or non-delivery, unless you specify a higher amount in the space in the left, pay \$10 per additional \$100 specified and document your actual loss in the event of a claim. Maximum amount insurable under the current Federal Express Service Guide applies. Your right to recover from Federal Express for loss of the declared value of the package is waived as far as loss of value, income, expense, profit, opportunity, loss, and any other form of damage, whether direct, incidental or consequential, is concerned. In the event of a claim, the declared value specified in the left, in no event shall your recovery exceed your actual loss.</p> <p>In the event of timely delivery, Federal Express will at your request and with your authorization, refund the transportation charges paid. See Service Guide for further information.</p> <p>Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.</p> <p>Reference Signature: _____</p>		Blank Charges	
2 ☐ COMMERCIAL OVERNIGHT ENVELOPE	7 ☐	3 ☐ DELIVER SATURDAY Extra charge	4 ☐ DELIVER SUNDAY Extra charge	3 ☐ Drop Box	4 ☐ S.S.C.			Declared Value Charge	
3 ☐ OVERNIGHT BOX	8 ☐	5 ☐ DELIVER MONDAY Extra charge	6 ☐ DELIVER TUESDAY Extra charge	4 ☐ Drop Box	5 ☐ S.S.C.			Cart 1	
4 ☐ OVERNIGHT TUBE	9 ☐	7 ☐ DELIVER WEDNESDAY Extra charge	8 ☐ DELIVER THURSDAY Extra charge	5 ☐ Drop Box	6 ☐ S.S.C.			Cart 2	
5 ☐ STANDARD Air Delivery not later than second business day	10 ☐	9 ☐ DELIVER FRIDAY Extra charge	10 ☐ DELIVER SATURDAY Extra charge	6 ☐ Drop Box	7 ☐ S.S.C.	Total Charges			
* Declared Value Limit \$100		11 ☐ DELIVER SUNDAY Extra charge		12 ☐ DELIVER MONDAY Extra charge		PART 8304175800 REVISION DATE 1/88 PRINTED IN U.S.A. 5/82			

WESTON Analytics Use Only

Client EA+G Mould Date Rec'd. 5/24/00

Work Order P.O. #54200 Date Due 5/24/00

REFW Contact SUDAN MALSON

Client Contact/Phone 505-255

Refrigerator #	#Type Container	TUBE SWHL	TUBE SWHL	TUBE SWHL	JAR JSHL	JAR JSHL
Containers/Volume						
Preservative						
ANALYSES REQUESTED						
Matrix	Date Collected					
MND16 - 0014 - 0003	2014-1-29-91	X				
MND16 - 0015 - 0002		X				
MND16 - 0015 - 0003		X				
MND16 - 0015 - 0004					X	
MND16 - 0015 - 0005		X				
MND16 - 0015 - 0006		X				
MND16 - 0015 - 0007					X	
MND16 - 0015 - 0009		X				
MND16 - 0015 - 0010		X				
MND16 - 0015 - 0012					X	
MND16 - 0015 - 0013					X	
MND16 - 0015 - 0014		X				
MND16 - 0015 - 0015		X				
MND16 - 0015 - 0016		X				

Special Instructions: 1. TCLP-ZHE DNAs, VONS, PEST RIDES/NECB-
ICIDES + METALS
2. MSL/MSD
3. PCBs

W - Water	DS - Drum Solids
O - Oil	DL - Drum Liquids
A - Air	F - Fish
EE - Sediment	X - Other
S - Soil	
SE - Sediment	
SD - Solid	

[illegible]

WESTON Analytics	Use Only	Samples Were: , 1 Shipped or Hand-Delivered NOTES: 2 Ambient or Chilled NOTES: 3 Received Broker/Leaking (Improperly Sealed) Y N NOTES: 4 Properly Preserved Y N NOTES: 5 Received Within Holding Times Y N NOTES:	COC Tape Was: 1 Present on Outer Package Y N 2 Unbroken on Outer Package Y N 3 Present on Sample Y N 4 Unbroken on Sample Y N NOTES:	COC Record Was: 1 Present Upon Recalpt of Sample's Y N Discrepancies Between Sample Labels and COC Record? Y N NOTES:
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FFW 21-21-001/A-5/88

7-115

Federal Express # 3890070133

APPENDIX C

DECEMBER 1990 ANALYTICAL RESULTS

CORRECTIONS TO REPORTED DETECTION LIMITS:

Batch 90-12-490 and 91-01-580.

1. Batch - 90-12-490-14C, Sample MND16-0015-0002 - Detection limit for PCBs should be 170 ug/kg (10 fold dilution).
2. Batch - 91-01-580-01A, Sample MND16-0012-0001 - Detection limit for lead should be 0.001 mg/L. Graphic furnace method was used for analysis allowing lower detection limit.
3. Batch - 91-01-580, all samples where lead and chromium are non-detects - Detection limit for lead and chromium should be 0.01, samples run on sequential ICP allowing lower detection limit.
4. Batch - 91-01-580-05A, Sample MND16-0017-0007 - Detection limit for PCBs should be 0.85 mg/kg. The detection limit results from multiplying the nominal detection limit of 17 ug/kg by the required dilution factor of 50 to yield 0.85 mg/kg.

Controls For Environmental
Pollution, Inc.

P.O. Box 5351
Santa Fe, NM 87502

Attn:
Phone: (505) 982-9841/(800) 545-2188

EG and G Mound
P.O. Box 3000
Miami, OH 45343

Attn: Larry Klingler

Purchase Order: 54200
Invoice Number:

Order #: 90-12-490
Date: 01/16/91 14:17
Work ID: Water Quality
Date Received: 12/26/90
Date Completed:

"PRELIMINARY DATA"

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	MND16-0015-0007
03	MND16-0012-0007
05	MND16-0012-0011
07	MND16-0015-0010
09	MND16-0012-0006
11	MND16-0015-0001
13	MND16-0015-0006
15	MND16-0015-0007
17	MND16-0012-0012
19	MND16-0015-0015
21	MND16-0015-0011
23	MND16-0015-0004
25	MND16-0013-0001
27	MND16-0012-0010
29	MND16-0015-0016

<u>Sample Number</u>	<u>Sample Description</u>
02	MND16-0012-0014
04	MND16-0015-0003
06	MND16-0012-0013
08	MND16-0015-0008
10	MND16-0012-0008
12	MND16-0015-0012
14	MND16-0015-0002
16	MND16-0015-0014
18	MND16-0012-0005
20	MND16-0015-0017
22	MND16-0012-0009
24	MND16-0012-0004
26	MND16-0014-0002
28	MND16-0012-0015
30	MND16-0015-0005

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
31	MND16-0012-0001	32	MND16-0014-0003
33	MND16-0015-0013	34	MND16-0012-0002
35	MND16-0014-0001	36	MND16-0012-0003

Remainder of sample(s) for routine analysis will be disposed
of three weeks from final report date. Sample(s) for bacteria
analysis only, will be disposed of immediately after analysis.
This is not applicable if other arrangements have been made.

Approved By

TEST RESULTS BY SAMPLE

Sample: 01A MND16-0015-0007

Collected: 12/18/90 12:10

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.77	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	0.06	0.05	mg/liter	01/02/91	NR
Lead	<0.05	0.05	mg/liter	01/02/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/02/91	NR

Sample: 02A MND16-0012-0014

Collected: 12/18/90 12:25

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.84	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	0.06	0.05	mg/liter	01/02/91	NR
Lead	<0.05	0.05	mg/liter	01/02/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/02/91	NR

Sample: 03A MND16-0012-0007

Collected: 12/18/90 12:15

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.65	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	<0.05	0.05	mg/liter	01/02/91	NR
Lead	<0.05	0.05	mg/liter	01/02/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/02/91	NR

Sample: 04A MND16-0015-0003

Collected: 12/18/90 10:25

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.71	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	0.14	0.05	mg/liter	01/02/91	NR
Lead	<0.05	0.05	mg/liter	01/02/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/02/91	NR

Sample: 05A MND16-0012-0011

Collected: 12/18/90 12:26

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					

Order # 70-12-490
01/16/91 14:09

Controls for Environmental

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.84	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	<0.05	0.05	mg/liter	01/02/91	NR
Lead	<0.05	0.05	mg/liter	01/02/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/02/91	NR

Sample: O6A MND16-0012-0013

Collected: 12/18/90 13:40

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.92	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	0.10	0.05	mg/liter	01/02/91	NR
Lead	0.05	0.05	mg/liter	01/02/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/02/91	NR

Sample: O7A MND16-0015-0010

Collected: 12/18/90 10:10

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.90	0.03	mg/liter	01/02/91	NR
Cadmium	<0.05	0.05	mg/liter	01/02/91	NR
Chromium	0.12	0.05	mg/liter	01/02/91	NR

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	ng/liter	01/04/91	JK
Barium	0.71	0.03	ng/liter	01/02/91	NR
Cadmium	<0.05	0.05	ng/liter	01/02/91	NR
Chromium	<0.05	0.05	ng/liter	01/02/91	NR
Lead	<0.05	0.05	ng/liter	01/02/91	NR
Mercury	<0.0004	0.0004	ng/liter	01/04/91	JK
Selenium	<0.01	0.01	ng/liter	01/02/91	JK
Silver	<0.05	0.05	ng/liter	01/02/91	NR

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Sample: 10A MND14-0012-0008

Collected: 12/18/90 15:15

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.76	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.13	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/05/91	NR

Sample: 11A MND16-0015-0001

Collected: 12/18/90 13:20

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.77	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.14	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 12A MND15-0013-0012

Collected: 12/18/90 15:05

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.58	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.23	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 13A MND16-0015-0006

Collected: 12/18/90 15:15

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.77	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.14	0.05	mg/liter	01/08/91	NR
Lead	0.20	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 14A MND16-0015-0002

Collected: 12/18/90 16:10

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.88	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR

Order # 90-12-490
01/16/91 14:09

Controls for Environmental

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Lead	0.20	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JM
Selenium	<0.01	0.01	mg/liter	01/02/91	JM
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 14B MND16-0015-0002

Collected: 12/18/90 16:10

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Paint Filter Test	Negative		Free Liquids	01/10/91	PH
Polychlorinated Biphenols	<170	10	ug/kg	01/08/91	JT

Sample: 14C MND16-0015-0002

Collected: 12/18/90 16:10

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Particle Size 2.0mm-<75u					
2.0 mm					
800 micron					
417 micron					
250 micron					
210 micron					
149 micron					
106 micron					
75 micron					
Less than 75 micron (fine)					

LMS. NO. 7012490-14A
 TEST SIEVE ANALYSIS
 Percent Retained

TEST
 Cumulative Percent Retained

TESTED BY: CMC
 DATE: January 22, 1991
 Cumulative Percent Passing

SIEVE	Percent Retained	TEST	Cumulative Percent Retained	Cumulative Percent Passing
2 in.	0.00	0.00		100.00
1.5 in.	0.00	0.00		100.00
1 in.	0.00	0.00		100.00
3/4 in.	0.00	0.00		100.00
3/8 in.	9.98	9.98		90.02
No. 4	8.51	18.49		81.51
No. 10	9.88	28.37		71.63
No. 20	7.46	35.83		64.17
No. 40	5.56	41.33		58.67
No. 60	7.01	48.34		51.66
No. 100	11.03	59.37		40.63
No. 200	2.10	61.47		38.53
Fines	38.53			

QA Approved
 [Signature]

Controls for Environmental Pollution, Inc.

1925 Rosine • P. O. Box 9351 • Santa Fe, New Mexico 87502 • Telephone 505 982-9841

ROY F. WESTON
5301 CENTRAL AVENUE, NE
SUITE 1000
ALBUQUERQUE, NM 87108
ATTENTION: SUSAN WILSON

Invoice No: _____

P.O. # _____

Sample Information:

Laboratory No.: 90-12-490 No. of Samples: 36

Date Collected: 12/18/90 Date Received: 12/26/90

JAN 22 1991

Date

QA Approved

Sample: 15A MND16-0015-0009

Collected: 12/18/90 13:05

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JM
Barium	0.54	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.13	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JM
Selenium	<0.01	0.01	mg/liter	01/02/91	JM
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 16A MND16-0015-0014

Collected: 12/18/90 12:50

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JM
Barium	1.16	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.08	0.05	mg/liter	01/08/91	NR
Lead	0.23	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JM
Selenium	<0.01	0.01	mg/liter	01/02/91	JM
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 17A MND16-0012-0012

Collected: 12/18/90 13:12

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.86	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.13	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 18A MND16-0012-0005

Collected: 12/18/90 13:50

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.39	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 19A MND16-0015-0015

Collected: 12/18/90 13:30

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.88	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.08	0.05	mg/liter	01/08/91	NR

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Lead	0.10	0.05	ng/liter	01/08/91	NR
Mercury	<0.0004	0.0004	ng/liter	01/09/91	JK
Selenium	<0.01	0.01	ng/liter	01/02/91	JK
Silver	<0.05	0.05	ng/liter	01/08/91	NR

Sample: 20A MND16-0015-0017

Collected: 12/18/90 15:45

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	ng/liter	01/04/91	JK
Barium	0.85	0.03	ng/liter	01/08/91	NR
Cadmium	<0.05	0.05	ng/liter	01/08/91	NR
Chromium	0.07	0.05	ng/liter	01/08/91	NR
Lead	0.05	0.05	ng/liter	01/08/91	NR
Mercury	<0.0004	0.0004	ng/liter	01/09/91	JK
Selenium	<0.01	0.01	ng/liter	01/02/91	JK
Silver	<0.05	0.05	ng/liter	01/08/91	NR

Sample: 20B MND16-0015-0017 MS/MRD

Collected: 12/18/90 15:45

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	See QA	0.01	ng/liter		
Barium	See QA	0.03	ng/liter		
Cadmium	See QA	0.05	ng/liter		
Chromium	See QA	0.05	ng/liter		
Lead	See QA	0.05	ng/liter		
Mercury	See QA	0.0004	ng/liter		
Selenium	See QA	0.01	ng/liter		
Silver	See QA	0.05	ng/liter		

Sample: 21A MND16-0015-0011

Collected: 12/18/90 15:25

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.75	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.07	0.05	mg/liter	01/08/91	NR
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	0.0038	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 21B MND16-0015-0011 MS/MSD

Collected: 12/18/90 15:25

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	See GA	0.01	mg/liter		
Barium	See GA	0.03	mg/liter		
Cadmium	See GA	0.05	mg/liter		
Chromium	See GA	0.05	mg/liter		
Lead	See GA	0.05	mg/liter		
Mercury	See GA	0.0004	mg/liter		
Selenium	See GA	0.01	mg/liter		
Silver	See GA	0.05	mg/liter		

Sample: 22A MND16-0012-0009

Collected: 12/18/90 17:05

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.38	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.07	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 23A MND16-0015-0004

Collected: 12/18/90 16:00

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.53	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.07	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 24A MND16-0012-0004

Collected: 12/18/90 17:00

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.57	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.15	0.05	mg/liter	01/08/91	NR

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
Lead	0.10	0.05	mg/liter	01/08/91	NR
Mercury	0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	0.05	0.05	mg/liter	01/08/91	NR

Sample: 25A MND16-0613-0001

Collected: 12/18/90 13:30

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.74	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.09	0.05	mg/liter	01/08/91	NR
Lead	0.016	0.05	mg/liter	01/08/91	NR
Mercury	0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 26A MND16-0014-0002

Collected: 12/18/90 17:20

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.67	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.09	0.05	mg/liter	01/08/91	NR
Lead	0.06	0.05	mg/liter	01/08/91	NR
Mercury	0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

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Sample: 27A MND16-0012-0010

Collected: 12/18/90 14:36

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	ng/liter	01/04/91	JK
Barium	0.17	0.03	ng/liter	01/08/91	NR
Cadmium	<0.05	0.05	ng/liter	01/08/91	NR
Chromium	<0.05	0.05	ng/liter	01/08/91	NR
Lead	0.12	0.05	ng/liter	01/08/91	NR
Mercury	<0.0004	0.0004	ng/liter	01/09/91	JK
Selenium	<0.01	0.01	ng/liter	01/02/91	JK
Silver	<0.05	0.05	ng/liter	01/08/91	NR

Sample: 27B MND16-0012-0010 MS/MSD

Collected: 12/18/90 14:36

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	See GA	0.01	ng/liter		
Barium	See GA	0.03	ng/liter		
Cadmium	See GA	0.05	ng/liter		
Chromium	See GA	0.05	ng/liter		
Lead	See GA	0.05	ng/liter		
Mercury	See GA	0.0004	ng/liter		
Selenium	See GA	0.01	ng/liter		
Silver	See GA	0.05	ng/liter		

Sample: 28A MND16-0012-0015

Collected: 12/18/90 12:36

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.88	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.06	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 29A MND16-0015-0016

Collected: 12/18/90 13:00

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.86	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.06	0.05	mg/liter	01/08/91	NR
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 29B MND16-0015-0016 MS/MSD

Collected: 12/18/90 13:00

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	See QA	0.01	mg/liter		
Barium	See QA	0.03	mg/liter		
Cadmium	See QA	0.05	mg/liter		
Chromium	See QA	0.05	mg/liter		

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Lead	See QA	0.05	mg/liter		
Mercury	See QA	0.0004	mg/liter		
Selenium	See QA	0.01	mg/liter		
Silver	See QA	0.05	mg/liter		

Sample: 30A MND16-0018-0005

Collected: 12/18/90 17:25

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.34	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.10	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 31A MND16-0012-0001

Collected: 12/18/90 15:40

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.31	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.07	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

SENT BY:CEP, INC.

1-16-91 3:50PM

505 3628283

5052563876:18

Sample: 32A MND16-0014-0003

Collected: 12/18/90 17:10

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals:					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.78	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	0.05	0.05	mg/liter	01/08/91	NR
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 33A MND16-0015-0013

Collected: 12/18/90 13:55

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals:					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.37	0.03	mg/liter	01/08/91	NR
Cadmium	<0.05	0.05	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	0.06	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

Sample: 34A MND16-0012-0002

Collected: 12/18/90 16:50

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals:					

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.34	0.03	mg/liter	01/08/91	NR
Cadmium	<0.03	0.03	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.03	0.03	mg/liter	01/08/91	NR

Sample: 35A MND16-0014-0001

Collected: 12/18/90 14:30

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.30	0.03	mg/liter	01/08/91	NR
Cadmium	<0.03	0.03	mg/liter	01/08/91	NR
Chromium	<0.05	0.05	mg/liter	01/08/91	NR
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	0.0007	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.03	0.03	mg/liter	01/08/91	NR

Sample: 36A MND16-0012-0003

Collected: 12/18/90 14:43

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	01/04/91	JK
Barium	0.24	0.03	mg/liter	01/08/91	NR
Cadmium	<0.03	0.03	mg/liter	01/08/91	NR
Chromium	<0.05	0.03	mg/liter	01/08/91	NR

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>Bu</u>
Lead	<0.05	0.05	mg/liter	01/08/91	NR
Mercury	<0.0004	0.0004	mg/liter	01/09/91	JK
Selenium	<0.01	0.01	mg/liter	01/02/91	JK
Silver	<0.05	0.05	mg/liter	01/08/91	NR

SENT BY: CEP, Inc.

1-16-01 : 3:51PM :

505 8628289-

5052563876: #22

APPENDIX D

JANUARY 1991 ANALYTICAL RESULTS

CORRECTIONS TO REPORTED DETECTION LIMITS;

Batch 90-12-490 and 91-01-580.

1. Batch - 90-12-490-14C, Sample MND16-0015-0002 - Detection limit for PCBs should be 170 ug/kg (10 fold dilution).
2. Batch - 91-01-580-01A, Sample MND16-0012-0001 - Detection limit for lead should be 0.001 mg/L. Graphite furnace method was used for analysis allowing lower detection limit.
3. Batch - 91-01-580, all samples where lead and chromium are non-detects - Detection limit for lead and chromium should be 0.01, samples run on sequential ICP allowing lower detection limit.
4. Batch - 91-01-580-05A, Sample MND16-0017-0007 - Detection limit for PCBs should be 0.85 mg/kg. The detection limit results from multiplying the nominal detection limit of 17 ug/kg by the required dilution factor of 50 to yield 0.85 mg/kg.

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Sample Number	Sample Description
21	IND16-0012-0003	32	IND16-0012-0008
22	IND16-0015-0001 MS/MSD	34	IND16-0012-0008
23	IND16-0015-0001	36	IND16-0013-0017 MS/MSD
37	IND16-0020-0001	38	IND16-0020-0003
39	IND16-0020-0003		

Residue of sample(s) for routine analysis will be disposed
 of three weeks from final report date. Sample(s) for bacteria
 analysis only, will be disposed of immediately after analysis.
 This is not applicable if other arrangements have been made.

 Approved by

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1,1-Dichloroethane	<0.020	0.020	mg/liter	02/05/91	DVM
Benzol	0.15	0.15	mg/liter	02/05/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/05/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/05/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/05/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/05/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/05/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/05/91	DVM
Methylcyclohexane	<10.0	10.0	ug/liter	02/05/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/05/91	DVM
1,1,2,2-Tetrachloroethylene	<4.10	4.10	ug/liter	02/05/91	DVM
Trichloroethylene	<1.50	1.50	ug/liter	02/05/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/05/91	DVM

Sample: G1A 10416-0012-0004

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
ICL Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.67	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Copper	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
Chloroform	<0.050	0.050	mg/liter	02/05/91	DVM
Hexachlorocyclopentadiene	<0.050	0.050	mg/liter	02/05/91	DVM
Hexachlorocyclopentadiene	<0.050	0.050	mg/liter	02/05/91	DVM
Hexachlorocyclopentadiene	<0.050	0.050	mg/liter	02/05/91	DVM

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Order # 41-01-380

Drugs and Environmental

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<u>Type Description</u>	<u>Result</u>	<u>U.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1,1,1-Trichloroethane	0.023	0.025	mg/liter	02/05/91	DVM
1,1,1-Trichloroethene	0.013	0.013	mg/liter	02/05/91	DVM
1,1-Dinitroethene	0.020	0.020	mg/liter	02/05/91	DVM
Hexachlorobenzene	0.010	0.010	mg/liter	02/05/91	DVM
Hexachlorobutadiene	0.0050	0.0050	mg/liter	02/05/91	DVM
Hexachlorocyclopentadiene	0.010	0.010	mg/liter	02/05/91	DVM
Heptachlorocyclopentadiene	0.010	0.010	mg/liter	02/05/91	DVM
Chlordane	0.03	0.03	mg/liter	02/05/91	DVM
Endrin	0.003	0.003	mg/liter	02/05/91	DVM
Dieldrin	0.001	0.001	mg/liter	02/05/91	DVM
Lindane	0.06	0.06	mg/liter	02/05/91	DVM
Methoxychlor	1.4	1.4	mg/liter	02/05/91	DVM
Permethrin	0.07	0.07	mg/liter	02/05/91	DVM
2,4-D	1.4	1.4	mg/liter	02/05/91	DVM
Simazine	0.14	0.14	mg/liter	02/05/91	DVM
1,1-Dichloroethene	0.020	0.020	mg/liter	02/05/91	DVM
Creosol	0.15	0.15	mg/liter	02/05/91	DVM
Zero Head Space Extraction					
Benzene	4.40	4.40	ug/liter	02/05/91	DVM
Carbon tetrachloride	2.80	2.80	ug/liter	02/05/91	DVM
Chloroform	5.00	5.00	ug/liter	02/05/91	DVM
1,1-Dichloroethane	2.80	2.80	ug/liter	02/05/91	DVM
1,1-Dichloroethene	2.80	2.80	ug/liter	02/05/91	DVM
Methoxychlor	10.0	10.0	ug/liter	02/05/91	DVM
Permethrin	10.0	10.0	ug/liter	02/05/91	DVM
Heptachlorocyclopentadiene	4.10	4.10	ug/liter	02/05/91	DVM
Heptachlorocyclopentadiene	1.50	1.50	ug/liter	02/05/91	DVM
Vinyl Chloride	2.00	2.00	ug/liter	02/05/91	DVM

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Controls for Environmental

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Sample: OGA MW012-001E-0003

Collected: 01/27/91

<u>Test Description</u>	<u>Result</u>	<u>E.L.</u>	<u>Units</u>	<u>Analysed</u>	<u>Eq</u>
<u>VOLATILES</u>					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.51	0.03	mg/liter	02/12/91	NR
Cadmium	<0.03	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.03	0.03	mg/liter	02/12/91	NR
<u>VOLAT ORGANICS</u>					
Chloroform	<0.050	0.050	mg/liter	02/05/91	DVM
M-chloroform	<0.050	0.050	mg/liter	02/05/91	DVM
P-chloroform	<0.050	0.050	mg/liter	02/05/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/05/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/05/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/05/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/05/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/05/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/05/91	DVM
Hexachlorocyclopentadiene	<0.010	0.010	mg/liter	02/05/91	DVM
Dibenzene	<0.010	0.010	mg/liter	02/05/91	DVM
Chloroform	<0.03	0.03	mg/liter	02/05/91	DVM
Trichloro	<0.003	0.003	mg/liter	02/05/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/05/91	DVM
Lindane	<0.06	0.06	mg/liter	02/05/91	DVM
Methoxychlor	<1.1	1.1	mg/liter	02/05/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/05/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/05/91	DVM
Silvex	<0.14	0.14	mg/liter	02/05/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/05/91	DVM
Creosol	<0.15	0.15	mg/liter	02/05/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
Large Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/05/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/05/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/05/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/05/91	DVM
1,2-Dichloroethane	<2.30	2.30	ug/liter	02/05/91	DVM
1,1-Dichloroethylene	<2.30	2.30	ug/liter	02/05/91	DVM
Methylcyclo Hexane	<10.0	10.0	ug/liter	02/05/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/05/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/05/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/05/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/05/91	DVM

Sample: 014 MW912-C012-C006

Collected: 01/27/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
<u>TCMP Metals</u>					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.43	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.03	0.05	mg/liter	02/12/91	NR
<u>TCMP Organics</u>					
O-cresol	<0.050	0.050	mg/liter	02/05/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/05/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/05/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/05/91	DVM
2,4,6-Trichlorophenol	<0.025	0.025	mg/liter	02/05/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/05/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/05/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/05/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>P.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1,1,1-Trichloroethane	0.0050	0.0050	mg/liter	02/05/91	DVM
1,1,2-Trichloroethane	0.010	0.010	mg/liter	02/05/91	DVM
1,2-Dichloroethane	0.010	0.010	mg/liter	02/05/91	DVM
Chloroform	0.03	0.03	mg/liter	02/05/91	DVM
Endrin	0.003	0.003	mg/liter	02/05/91	DVM
Heptachlor	0.001	0.001	mg/liter	02/05/91	DVM
Lindane	0.06	0.06	mg/liter	02/05/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/05/91	DVM
o,p'-DDT	0.07	0.07	mg/liter	02/05/91	DVM
p,p'-DDT	<1.4	1.4	mg/liter	02/05/91	DVM
DDVP	0.14	0.14	mg/liter	02/05/91	DVM
1,1-Dichloroethene	0.020	0.020	mg/liter	02/05/91	DVM
Chloral	<0.13	0.13	mg/liter	02/05/91	DVM
Type II: Solid Phase Extraction					
Carbon tetrachloride	<4.00	4.00	ug/liter	02/05/91	DVM
Carbon tetrachloride	<2.00	2.00	ug/liter	02/05/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/05/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/05/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/05/91	DVM
1,1-Dichloroethylene	<2.50	2.50	ug/liter	02/05/91	DVM
Diethyl Methyl Ketone	<10.0	10.0	ug/liter	02/05/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/05/91	DVM
1,1,2-Trichloroethylene	<4.10	4.10	ug/liter	02/05/91	DVM
1,2-Dichloroethylene	<1.50	1.50	ug/liter	02/05/91	DVM
1,1,1-Trichloroethane	<2.00	2.00	ug/liter	02/05/91	DVM

Sample: CBA 10016-0112-0007

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>P.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Polychlorinated Biphenols	<0.05	10	mg/kg	02/15/91	JT
PAH Metals					
Asbestos	<0.01	0.01	mg/liter	02/09/91	JK

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Spot Description	Result	U.L.	Units	Analysed	By
Barium	0.82	0.03	mg/liter	02/12/91	NR
Cadmium	0.06	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Copper	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/02/91	JK
Silver	0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
D-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
m-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dinitrochlorobenzene	<0.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorocyclopentadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Hexachlorocyclohexane	<0.010	0.010	mg/liter	02/06/91	DVM
Mirephenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chloroform	<0.03	0.03	mg/liter	02/06/91	DVM
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Permethrin	<1.4	1.4	mg/liter	02/06/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Allyl	<0.14	0.14	mg/liter	02/06/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Oxal	<0.13	0.13	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<1.40	1.40	ug/liter	02/05/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/05/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/05/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/05/91	DVM

<u>Chemical Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Du</u>
1,1-Dichloroethane	20.80	2.80	ug/liter	02/05/91	DVM
1,1-Dichloroethylene	20.80	2.80	ug/liter	02/05/91	DVM
Methyl Ethyl Ketone	30.0	10.0	ug/liter	02/05/91	DVM
Nyridine	10.0	10.0	ug/liter	02/05/91	DVM
Tetrachloroethylene	24.10	4.10	ug/liter	02/05/91	DVM
Trichloroethylene	21.80	1.80	ug/liter	02/05/91	DVM
Vinyl Chloride	22.00	2.00	ug/liter	02/05/91	DVM

Sample: OLA NHDIA-0012-0079

Collected: 01/29/91

<u>Chemical Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Du</u>
<u>ICP Metals</u>					
Arsonic	20.01	0.01	mg/liter	02/08/91	JK
Boron	0.71	0.03	mg/liter	02/12/91	NR
Calcium	20.03	0.03	mg/liter	02/12/91	NR
Chromium	20.01	0.03	mg/liter	02/12/91	JK
Cadmium	20.01	0.03	mg/liter	02/12/91	JK
Mercury	20.0004	0.0004	mg/liter	02/11/91	JK
Selenium	20.01	0.01	mg/liter	02/06/91	JK
Silver	20.03	0.03	mg/liter	02/12/91	NR
<u>ICP Organics</u>					
Benzoic	20.050	0.050	mg/liter	02/06/91	DVM
Benzoic	20.050	0.050	mg/liter	02/06/91	DVM
Benzoic	20.050	0.050	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	20.020	0.020	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	20.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	20.013	0.013	mg/liter	02/06/91	DVM
2,4-Dinitrotoluene	20.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	20.010	0.010	mg/liter	02/06/91	DVM
Hexachlorocyclopentadiene	20.0050	0.0050	mg/liter	02/06/91	DVM
Hexachloroethane	20.010	0.010	mg/liter	02/06/91	DVM
Picrolene	20.010	0.010	mg/liter	02/06/91	DVM

Test Description	Result	D.L.	Units	Analyzed	By
Chlordane	<0.03	0.03	mg/liter	02/06/91	DVM
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Nonachlor	<1.4	1.4	mg/liter	02/06/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Silver	<0.14	0.14	mg/liter	02/06/91	DVM
1,2-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Creosol	<0.15	0.15	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/05/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/05/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/05/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/05/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/05/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/05/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/05/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/05/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/05/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/05/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/05/91	DVM

Sample: 07A MND16-0012-0010

Collected: 01/29/91

Test Description	Result	D.L.	Units	Analyzed	By
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.39	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK

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Test Description	Result	D.L.	Units	Analyzed	By
TOLP Metals					
Arsenic	0.01	0.01	mg/liter	02/08/91	JK
Cadmium	0.03	0.03	mg/liter	02/12/91	NR
Chromium	0.05	0.05	mg/liter	02/12/91	NR
Copper	0.01	0.05	mg/liter	02/12/91	JK
Lead	0.01	0.05	mg/liter	02/12/91	JK
Mercury	0.0004	0.0004	mg/liter	02/11/91	JK
Nickel	0.01	0.01	mg/liter	02/08/91	JK
Silver	0.05	0.05	mg/liter	02/12/91	NR
TOLP Organics					
Acetophenol	0.050	0.050	mg/liter	02/06/91	DVM
Hexachlorocyclopentadiene	0.050	0.050	mg/liter	02/06/91	DVM
Hexachlorobenzene	0.050	0.050	mg/liter	02/06/91	DVM
1,2,3,4,5-Pentachlorobenzene	0.020	0.020	mg/liter	02/06/91	DVM
2,3,4,5-Tetrachlorobenzene	0.020	0.020	mg/liter	02/06/91	DVM
2,3,4-Trichlorobenzene	0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dichlorobenzene	0.020	0.020	mg/liter	02/06/91	DVM
Hexachlorocyclopentadiene	0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorobutadiene	0.0050	0.0050	mg/liter	02/06/91	DVM
Heptachlorocyclopentadiene	0.010	0.010	mg/liter	02/06/91	DVM
Heptachlorobenzene	0.010	0.010	mg/liter	02/06/91	DVM
Chlorobenzene	0.02	0.02	mg/liter	02/06/91	DVM
Benzene	0.003	0.003	mg/liter	02/06/91	DVM
1,2-Dichloroethane	0.001	0.001	mg/liter	02/06/91	DVM
1,1,1-Trichloroethane	0.04	0.04	mg/liter	02/06/91	DVM

100-100000
100-100000

100-100000

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Concentration	mg/L	mg/L	Units	Analyzed	By
Acetone	11.9	11.9	mg/liter	02/06/91	DVM
Acetone	10.7	0.07	mg/liter	02/06/91	DVM
Acetone	11.4	11.4	mg/liter	02/06/91	DVM
Acetone	0.1	0.10	mg/liter	02/06/91	DVM
Acetone	10.020	0.020	mg/liter	02/06/91	DVM
Acetone	02.15	0.15	mg/liter	02/06/91	DVM
Acetone	02.40	4.40	ug/liter	02/06/91	DVM
Acetone	02.10	2.10	ug/liter	02/06/91	DVM
Acetone	10.00	6.00	ug/liter	02/06/91	DVM
Acetone	11.60	1.60	ug/liter	02/06/91	DVM
Acetone	02.80	2.80	ug/liter	02/06/91	DVM
Acetone	02.80	2.80	ug/liter	02/06/91	DVM
Acetone	10.0	10.0	ug/liter	02/06/91	DVM
Acetone	02.0	10.0	ug/liter	02/06/91	DVM
Acetone	02.10	4.10	ug/liter	02/06/91	DVM
Acetone	11.00	1.00	ug/liter	02/06/91	DVM
Acetone	02.00	2.00	ug/liter	02/06/91	DVM

100-100000

Collected: 01/27/91

Concentration	mg/L	mg/L	Units	Analyzed	By
Acetone	02.01	0.01	mg/liter	02/08/91	JK
Acetone	1.42	0.00	mg/liter	02/12/91	JK
Acetone	02.03	0.03	mg/liter	02/12/91	JK
Acetone	00.01	0.00	mg/liter	02/12/91	JK
Acetone	00.01	0.00	mg/liter	02/12/91	JK
Acetone	00.0003	0.0003	mg/liter	02/12/91	JK
Acetone	00.01	0.01	mg/liter	02/06/91	JK
Acetone	00.00	0.00	mg/liter	02/12/91	NR

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Collection: 01/29/91

<u>17-C Description</u>	<u>Residue</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>DV</u>
<u>Total Metals</u>					
Cadmium	<0.01	0.01	mg/liter	02/08/91	JH
Mercury	0.54	0.03	mg/liter	02/12/91	HR
Copper	<0.05	0.05	mg/liter	02/12/91	KR
Chromium	<0.01	0.05	mg/liter	02/12/91	JH
Lead	<0.01	0.05	mg/liter	02/13/91	JH
Nickel	<0.0004	0.0004	mg/liter	02/11/91	JH
Selenium	<0.01	0.01	mg/liter	02/09/91	JH
Silver	<0.05	0.05	mg/liter	02/12/91	HR
<u>Total Organics</u>					
Acetone	<0.030	0.030	mg/liter	02/06/91	DVM
Methanol	<0.030	0.030	mg/liter	02/06/91	DVM
Ethanol	<0.030	0.030	mg/liter	02/06/91	DVM
Fenchlorophenol	<0.030	0.020	mg/liter	02/06/91	DVM
2,3,5-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/06/91	DVM
Benzothiazobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorocyclopentadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Heptachlorocyclopentadiene	<0.010	0.010	mg/liter	02/06/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chlorobenzene	<0.02	0.02	mg/liter	02/06/91	DVM
Toluene	<0.003	0.003	mg/liter	02/06/91	DVM
1,2-Dichloro	<0.001	0.001	mg/liter	02/06/91	DVM
1,1-Dichloro	<0.005	0.005	mg/liter	02/06/91	DVM
Diethylamine	<1.4	1.4	mg/liter	02/06/91	DVM
Triethylamine	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-DE	<1.4	1.4	mg/liter	02/06/91	DVM
2,4,6-T	<0.14	0.14	mg/liter	02/06/91	DVM
1,2-Dichlorodiphenyl ether	<0.010	0.020	mg/liter	02/06/91	DVM
2,4,6-T	<0.10	0.10	mg/liter	02/06/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>Bu</u>
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/06/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/06/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/06/91	DVM
Chloroform	2.9	1.60	ug/liter	02/06/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/06/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/06/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/06/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/06/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/06/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/06/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/06/91	DVM

Sample: 11A MND16-0012-0014

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.82	0.03	mg/liter	02/12/91	NR
Cadmium	0.06	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.03	0.03	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/06/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/06/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/06/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/06/91	DVM
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/06/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Silvex	<0.14	0.14	mg/liter	02/06/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Cresol	<0.13	0.13	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/06/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/06/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/06/91	DVM
Chloroform	3.3	1.60	ug/liter	02/06/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/06/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/06/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/06/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/06/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/06/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/06/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/06/91	DVM

Sample: 12A MND16-0012-0013

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.86	0.03	mg/liter	02/12/91	NR

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/06/91	DVM
2, 4, 5-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2, 4, 6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2, 4-Dinitrotoluene	<0.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/06/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/06/91	DVM
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/06/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2, 4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Silvex	<0.14	0.14	mg/liter	02/06/91	DVM
1, 4-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Cresol	<0.15	0.15	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/06/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/06/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/06/91	DVM
Chloroform	3.7	1.60	ug/liter	02/06/91	DVM
1, 2-Dichloroethane	<2.80	2.80	ug/liter	02/06/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/06/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/06/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/06/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/06/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/06/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/06/91	DVM

Sample: 13A MND16-0013-0001 MS/MSD Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.90	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/06/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/06/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/06/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/06/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Silvex	<0.14	0.14	mg/liter	02/06/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Cresol	<0.15	0.15	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/06/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/06/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/06/91	DVM
Chloroform	3.8	1.60	ug/liter	02/06/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/06/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/06/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/06/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/06/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/06/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/06/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/06/91	DVM

Sample: 14A MND16-0014-0001 MS/MSD Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.25	0.03	mg/liter	02/12/91	NR
Cadmium	0.07	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silver	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/06/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/06/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/06/91	DVM
Chloroform	5.2	1.60	ug/liter	02/06/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/06/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/06/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/06/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/06/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/06/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Trichloroethylene	<1.90	1.90	ug/liter	02/06/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/06/91	DVM

Sample: 15A MND16-0014-0002

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.83	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/06/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/06/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/06/91	DVM
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/06/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Silver	<0.14	0.14	mg/liter	02/06/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Cresol	<0.15	0.15	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/06/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/06/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/06/91	DVM
Chloroform	4.7	1.60	ug/liter	02/06/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/06/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/06/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/06/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/06/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/06/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/06/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/06/91	DVM

Sample: 16A MND16-0014-0003

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.71	0.03	mg/liter	02/12/91	NR
Cadmium	<0.03	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.03	0.03	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/06/91	DVM

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Test Description	Result	D.L.	Units	Analuzed	By
M-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/06/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/06/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/06/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/06/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/06/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/06/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/06/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/06/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/06/91	DVM
Endrin	<0.003	0.003	mg/liter	02/06/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/06/91	DVM
Lindane	<0.06	0.06	mg/liter	02/06/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/06/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/06/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/06/91	DVM
Silvex	<0.14	0.14	mg/liter	02/06/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/06/91	DVM
Cresol	<0.15	0.15	mg/liter	02/06/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/07/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/07/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/07/91	DVM
Chloroform	4.7	1.60	ug/liter	02/07/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/07/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/07/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/07/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/07/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/07/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/07/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/07/91	DVM

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.33	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silvex	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	2.8	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 18A MND16-0015-0003

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.56	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silvex	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	2.33	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 19A MND16-0015-0004

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.28	0.03	mg/liter	02/12/91	NR

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Test Description	Result	D. L.	Units	Analyzed	By
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silvex	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	4.52	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 20A MND16-0015-0005

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.01	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silvex	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	3.1	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 21A MND16-0015-0006

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.92	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silver	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	2.0	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM

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Test Description	Result	D.L.	Units	Analyzed	By
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 22A MND16-0015-0007

Collected: 01/29/91

Test Description	Result	D.L.	Units	Analyzed	By
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.68	0.03	mg/liter	02/12/91	NR
Cadmium	0.07	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.06	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silvex	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	2.9	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 23A MND16-0015-0009

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.63	0.03	mg/liter	02/12/91	NR
Cadmium	0.07	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.07	0.03	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.030	mg/liter	02/11/91	DVM

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Test Description	Result	D. L.	Units	Analyzed	Bu
M-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/11/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/11/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/11/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/11/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/11/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/11/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/11/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/11/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/11/91	DVM
Endrin	<0.003	0.003	mg/liter	02/11/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/11/91	DVM
Lindane	<0.06	0.06	mg/liter	02/11/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/11/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/11/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/11/91	DVM
Silvex	<0.14	0.14	mg/liter	02/11/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/11/91	DVM
Cresol	<0.15	0.15	mg/liter	02/11/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 24A MND16-0015-0010

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.62	0.03	mg/liter	02/12/91	NR
Cadmium	0.08	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.05	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/12/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/12/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/12/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/12/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/12/91	DVM
Endrin	<0.003	0.003	mg/liter	02/12/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/12/91	DVM
Lindane	<0.06	0.06	mg/liter	02/12/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/12/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/12/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/12/91	DVM
Silver	<0.14	0.14	mg/liter	02/12/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/12/91	DVM
Cresol	<0.15	0.15	mg/liter	02/12/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analuzed</u>	<u>Bu</u>
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/11/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/11/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/11/91	DVM
Chloroform	4.8	1.60	ug/liter	02/11/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/11/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/11/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/11/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/11/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/11/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/11/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/11/91	DVM

Sample: 25A MND16-0015-0012

Collected: 01/27/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analuzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.48	0.03	mg/liter	02/12/91	NR
Cadmium	0.06	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.07	0.03	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/12/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/12/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/12/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/12/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/12/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/12/91	DVM
Endrin	<0.003	0.003	mg/liter	02/12/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/12/91	DVM
Lindane	<0.06	0.06	mg/liter	02/12/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/12/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/12/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/12/91	DVM
Silvex	<0.14	0.14	mg/liter	02/12/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/12/91	DVM
Cresol	<0.15	0.15	mg/liter	02/12/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/12/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/12/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/12/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/12/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/12/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/12/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 26A MND16-0015-0013

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.27	0.03	mg/liter	02/12/91	NR

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analysed</u>	<u>By</u>
Cadmium	0.07	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.06	0.05	mg/liter	02/12/91	NR
TCLP Organics					
D-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/12/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/12/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/12/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/12/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/12/91	DVM
Endrin	<0.003	0.003	mg/liter	02/12/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/12/91	DVM
Lindane	<0.06	0.06	mg/liter	02/12/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/12/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/12/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/12/91	DVM
Silvex	<0.14	0.14	mg/liter	02/12/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/12/91	DVM
Cresol	<0.15	0.15	mg/liter	02/12/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/12/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/12/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/12/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/12/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/12/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/12/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 27A MND16-0013-0014

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.35	0.03	mg/liter	02/12/91	NR
Cadmium	0.10	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/08/91	JK
Silver	0.06	0.03	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/12/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/12/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/12/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/12/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/12/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Endrin	<0.003	0.003	mg/liter	02/12/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/12/91	DVM
Lindane	<0.06	0.06	mg/liter	02/12/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/12/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/12/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/12/91	DVM
Silvex	<0.14	0.14	mg/liter	02/12/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/12/91	DVM
Cresol	<0.15	0.15	mg/liter	02/12/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/12/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/12/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/12/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/12/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/12/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/12/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 28A MND16-0015-0015

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.09	0.03	mg/liter	02/12/91	NR
Cadmium	0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Selenium	<0. 01	0. 01	mg/liter	02/08/91	JK
Silver	0. 08	0. 05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0. 050	0. 050	mg/liter	02/12/91	DVM
M-cresol	<0. 050	0. 050	mg/liter	02/12/91	DVM
P-cresol	<0. 050	0. 050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0. 020	0. 020	mg/liter	02/12/91	DVM
2, 4, 5-Trichlorophenol	<0. 025	0. 025	mg/liter	02/12/91	DVM
2, 4, 6-Trichlorophenol	<0. 015	0. 015	mg/liter	02/12/91	DVM
2, 4-Dinitrotoluene	<0. 030	0. 030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0. 010	0. 010	mg/liter	02/12/91	DVM
Hexachlorobutadiene	<0. 0050	0. 0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0. 010	0. 010	mg/liter	02/12/91	DVM
Nitrobenzene	<0. 010	0. 010	mg/liter	02/12/91	DVM
Chlordane	<0. 03	0. 03	mg/liter	02/12/91	DVM
Endrin	<0. 003	0. 003	mg/liter	02/12/91	DVM
Heptachlor	<0. 001	0. 001	mg/liter	02/12/91	DVM
Lindane	<0. 06	0. 06	mg/liter	02/12/91	DVM
Methoxychlor	<1. 4	1. 4	mg/liter	02/12/91	DVM
Toxaphene	<0. 07	0. 07	mg/liter	02/12/91	DVM
2, 4-D	<1. 4	1. 4	mg/liter	02/12/91	DVM
Silver	<0. 14	0. 14	mg/liter	02/12/91	DVM
1, 4-Dichlorobenzene	<0. 020	0. 020	mg/liter	02/12/91	DVM
Cresol	<0. 15	0. 15	mg/liter	02/12/91	DVM
Zero Head Space Extraction					
Benzene	<4. 40	4. 40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2. 80	2. 80	ug/liter	02/12/91	DVM
Chlorobenzene	<6. 00	6. 00	ug/liter	02/12/91	DVM
Chloroform	<1. 60	1. 60	ug/liter	02/12/91	DVM
1, 2-Dichloroethane	<2. 80	2. 80	ug/liter	02/12/91	DVM
1, 1-Dichloroethylene	<2. 80	2. 80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10. 0	10. 0	ug/liter	02/12/91	DVM
Pyridine	<10. 0	10. 0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4. 10	4. 10	ug/liter	02/12/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 29A MND16-0015-0016

Collected: 01/29/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.86	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.06	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/12/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/12/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/12/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/12/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/12/91	DVM
Endrin	<0.003	0.003	mg/liter	02/12/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/12/91	DVM
Lindane	<0.06	0.06	mg/liter	02/12/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/12/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Toxaphene	<0.07	0.07	mg/liter	02/12/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/12/91	DVM
Silver	<0.14	0.14	mg/liter	02/12/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/12/91	DVM
Cresol	<0.15	0.15	mg/liter	02/12/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/12/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/12/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/12/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/12/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/12/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/12/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 30A MND16-0012-0002

Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.73	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.07	0.05	mg/liter	02/12/91	NR
TCLP Organics					
D-cresol	<0.050	0.050	mg/liter	02/12/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bq</u>
M-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/12/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/12/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/12/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/12/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/12/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/12/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/12/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/12/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/12/91	DVM
Endrin	<0.003	0.003	mg/liter	02/12/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/12/91	DVM
Lindane	<0.06	0.06	mg/liter	02/12/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/12/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/12/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/12/91	DVM
Silvex	<0.14	0.14	mg/liter	02/12/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/12/91	DVM
Cresol	<0.15	0.15	mg/liter	02/12/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/12/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/12/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/12/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/12/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/12/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/12/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 31A MND16-0012-0003

Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
<u>TCLP Metals</u>					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.19	0.03	mg/liter	02/12/91	NR
Cadmium	<0.05	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	<0.05	0.05	mg/liter	02/12/91	NR
<u>TCLP Organics</u>					
O-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/13/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/13/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/13/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/13/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/13/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/13/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/13/91	DVM
Endrin	<0.003	0.003	mg/liter	02/13/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/13/91	DVM
Lindane	<0.06	0.06	mg/liter	02/13/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/13/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/13/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/13/91	DVM
Silvex	<0.14	0.14	mg/liter	02/13/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/13/91	DVM
Cresol	<0.15	0.15	mg/liter	02/13/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/12/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/12/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/12/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/12/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/12/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/12/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/12/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/12/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/12/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/12/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/12/91	DVM

Sample: 32A MND16-0012-0008

Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.54	0.03	mg/liter	02/12/91	NR
Cadmium	0.09	0.03	mg/liter	02/12/91	NR
Chromium	<0.01	0.03	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.03	0.03	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/13/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/13/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/13/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/13/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/13/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/13/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/13/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/13/91	DVM
Endrin	<0.003	0.003	mg/liter	02/13/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/13/91	DVM
Lindane	<0.06	0.06	mg/liter	02/13/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/13/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/13/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/13/91	DVM
Silvex	<0.14	0.14	mg/liter	02/13/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/13/91	DVM
Cresol	<0.15	0.15	mg/liter	02/13/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/13/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/13/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/13/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/13/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/13/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/13/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/13/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/13/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/13/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/13/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/13/91	DVM

Sample: 33A MND16-0015-0001 MS/MSD Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.81	0.03	mg/liter	02/12/91	NR

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Test Description	Result	D. L.	Units	Analyzed	By
Cadmium	0.12	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.03	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.09	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/13/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/13/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/13/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/13/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/13/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/13/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/13/91	DVM
Endrin	<0.003	0.003	mg/liter	02/13/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/13/91	DVM
Lindane	<0.06	0.06	mg/liter	02/13/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/13/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/13/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/13/91	DVM
Silvex	<0.14	0.14	mg/liter	02/13/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/13/91	DVM
Cresol	<0.15	0.15	mg/liter	02/13/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/13/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/13/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/13/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/13/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/13/91	DVM

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/13/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/13/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/13/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/13/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/13/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/13/91	DVM

Sample: 34A MND16-0015-0008

Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	0.81	0.03	mg/liter	02/12/91	NR
Cadmium	0.12	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.09	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/13/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/13/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/13/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/13/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/13/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/13/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/13/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Endrin	<0.003	0.003	mg/liter	02/13/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/13/91	DVM
Lindane	<0.06	0.06	mg/liter	02/13/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/13/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/13/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/13/91	DVM
Silvex	<0.14	0.14	mg/liter	02/13/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/13/91	DVM
Cresol	<0.15	0.15	mg/liter	02/13/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/13/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/13/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/13/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/13/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/13/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/13/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/13/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/13/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/13/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/13/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/13/91	DVM

Sample: 35A MND16-0015-0011

Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TCLP Metals					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	1.12	0.03	mg/liter	02/12/91	NR
Cadmium	0.08	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.10	0.05	mg/liter	02/12/91	NR
TCLP Organics					
O-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/13/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/13/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/13/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/13/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/13/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/13/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/13/91	DVM
Endrin	<0.003	0.003	mg/liter	02/13/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/13/91	DVM
Lindane	<0.06	0.06	mg/liter	02/13/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/13/91	DVM
Toxaphene	<0.07	0.07	mg/liter	02/13/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/13/91	DVM
Silverx	<0.14	0.14	mg/liter	02/13/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/13/91	DVM
Cresol	<0.15	0.15	mg/liter	02/13/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/13/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/13/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/13/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/13/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/13/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/13/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/13/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/13/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/13/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
Trichloroethylene	<1.90	1.90	ug/liter	02/13/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/13/91	DVM

Sample: 36A MND16-0015-0017 MS/MSD Collected: 01/30/91

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analized</u>	<u>By</u>
<u>TCLP Metals</u>					
Arsenic	<0.01	0.01	mg/liter	02/08/91	JK
Barium	2.02	0.03	mg/liter	02/12/91	NR
Cadmium	0.12	0.05	mg/liter	02/12/91	NR
Chromium	<0.01	0.05	mg/liter	02/12/91	JK
Lead	<0.01	0.05	mg/liter	02/13/91	JK
Mercury	<0.0004	0.0004	mg/liter	02/11/91	JK
Selenium	<0.01	0.01	mg/liter	02/12/91	JK
Silver	0.11	0.05	mg/liter	02/12/91	NR
<u>TCLP Organics</u>					
O-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
M-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
P-cresol	<0.050	0.050	mg/liter	02/13/91	DVM
Pentachlorophenol	<0.020	0.020	mg/liter	02/13/91	DVM
2,4,5-Trichlorophenol	<0.025	0.025	mg/liter	02/13/91	DVM
2,4,6-Trichlorophenol	<0.015	0.015	mg/liter	02/13/91	DVM
2,4-Dinitrotoluene	<0.030	0.030	mg/liter	02/13/91	DVM
Hexachlorobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Hexachlorobutadiene	<0.0050	0.0050	mg/liter	02/13/91	DVM
Hexachloroethane	<0.010	0.010	mg/liter	02/13/91	DVM
Nitrobenzene	<0.010	0.010	mg/liter	02/13/91	DVM
Chlordane	<0.03	0.03	mg/liter	02/13/91	DVM
Endrin	<0.003	0.003	mg/liter	02/13/91	DVM
Heptachlor	<0.001	0.001	mg/liter	02/13/91	DVM
Lindane	<0.06	0.06	mg/liter	02/13/91	DVM
Methoxychlor	<1.4	1.4	mg/liter	02/13/91	DVM

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<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Toxaphene	<0.07	0.07	mg/liter	02/13/91	DVM
2,4-D	<1.4	1.4	mg/liter	02/13/91	DVM
Silverx	<0.14	0.14	mg/liter	02/13/91	DVM
1,4-Dichlorobenzene	<0.020	0.020	mg/liter	02/13/91	DVM
Cresol	<0.15	0.15	mg/liter	02/13/91	DVM
Zero Head Space Extraction					
Benzene	<4.40	4.40	ug/liter	02/13/91	DVM
Carbon Tetrachloride	<2.80	2.80	ug/liter	02/13/91	DVM
Chlorobenzene	<6.00	6.00	ug/liter	02/13/91	DVM
Chloroform	<1.60	1.60	ug/liter	02/13/91	DVM
1,2-Dichloroethane	<2.80	2.80	ug/liter	02/13/91	DVM
1,1-Dichloroethylene	<2.80	2.80	ug/liter	02/13/91	DVM
Methylethyl Ketone	<10.0	10.0	ug/liter	02/13/91	DVM
Pyridine	<10.0	10.0	ug/liter	02/13/91	DVM
Tetrachloroethylene	<4.10	4.10	ug/liter	02/13/91	DVM
Trichloroethylene	<1.90	1.90	ug/liter	02/13/91	DVM
Vinyl Chloride	<2.00	2.00	ug/liter	02/13/91	DVM

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APPENDIX E

DECEMBER 1980 QUALITY ASSURANCE DATA

QA REPORT FOR
9012490

ROY F. WESTON
MOUND EG&G #54200

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED

90-12-490	MND16-0015-0007	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0014	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0007	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0003	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0011	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91

				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0013	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0010	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0008	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0006	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/02/91
				CADMIUM	12/27/90	01/02/91
				CHROMIUM	12/27/90	01/02/91
				LEAD	12/27/90	01/02/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0012-0008	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0015-0001	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0015-0012	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0015-0006	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0015-0002	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91

				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
				PAINT FILTER	01/10/91	01/10/91
				POLYCHLORINATED BIPHENOLS	01/07/91	01/08/91
				PARTICLE SIZE 2.0mm-(75u	01/22/91	01/22/91
90-12-490	MND16-0015-0009	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0014	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0012	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0005	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0015-0015	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0017	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0011	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0009	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0004	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91

				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0004	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0013-0001	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0014-0002	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0010	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0015	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91

				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0016	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0015-0005	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0012-0001	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91
90-12-490	MND16-0014-0003	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0015-0013	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0012-0002	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0014-0001	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

90-12-490	MND16-0012-0003	12/18/90	12/26/90	ARSENIC	12/27/90	01/04/91
				BARIUM	12/27/90	01/03/91
				CADMIUM	12/27/90	01/03/91
				CHROMIUM	12/27/90	01/03/91
				LEAD	12/27/90	01/03/91
				MERCURY	12/27/90	01/09/91
				SELENIUM	12/27/90	01/02/91
				SILVER	12/27/90	01/03/91

Procedure Ag Method No. 200.2 Date of Analysis 1/2/91
 Analyst NR Matrix TCLP Supervisor [Signature]
 Detection Limit 0.050 LAB# on this report 9012321
 Number of Samples Analyzed 10 9012490
 Reference Pages 91001-002
 Date 1/2/91
 Matrix Spike/Matrix Spike Duplicates

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012321-12a	<0.05	1.00 mg	0.941	94.1	0.940	94.0	0.1

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.050	0.0451	0.044		
0.100	0.0901			
1.000	0.910			
10.00	10.4315			
Intercept/Bk		<0.05		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
11.53.02	2.97	3.06		

Date: 01/07/91

QA Reviewed & Approved By: [Signature]

03/90

Procedure Ag Method No: 700.7 Date of Analysis 1/3/91
 Analyst NR Matrix TCLP Supervisor [Signature]
 Detection Limit 0.05 LAB# on this report _____
 Number of Samples Analyzed 210 9012490 _____
 Reference Pages 90794-79p _____
 Date 1/3/91 _____
 Matrix Spike/Matrix Spike Duplicates _____

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490-15A	<0.05	1.00ppm	0.822	82.2	0.875	87.5	0.4
9012490-21B	<0.05	1	1.15	115	1.05	105	4.5
9012490-29A	<0.05	1	1.04	104	1.03	103	2.9

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000
0.050	0.0584	0.048	0.041	0.040
0.100	0.0884			
1.000	0.9133			
10.00	10.414			
Method Blank		<0.05	<0.05	<0.05

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1152.00	2.84	2.83	2.64	3.24

Date: 01/08/91

QA Reviewed & Approved By: [Signature]

Procedures AS Method No. 200.2 Date of Analysis 1/4/91
 Analyst JK Matrix H₂O Supervisor [Signature]
 Detection Limits 0.010 ppm LAB# on this report 10
 Number of Samples Analyzed 46
 Reference Pages 90 515-518
 Date 1/4/91
 Matrix Spike/Matrix Spike Duplicates

90 12 355 90 12 490
90 12 431
90 12 446
90 12 447

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
90 12 447 3A	0.000	0.050	0.049	98	0.048	96	2.067%
90 12 490 7A	0.000	0.050	0.047	94	0.049	98	4.177%
90 12 490 20A	0.000	0.050	0.057	102	0.050	100	1.987%

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.050	0.000	0.000	0.000	0.000
0.010	0.010	0.010	0.010	0.011
0.050	0.050			
0.100	0.100			
Method B1k		<0.01	<0.01	<0.01

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1CS 0.030	0.031	0.031	0.030	0.031

Date: 01/07/91

QA Reviewed & Approved By: [Signature]

03/90

11.1

Procedures AS Method No. 206.2 Date of Analysis 1/4/91
 Analyst JK Matrix H₂O Supervisor [Signature]
 Detection Limits 0.010 ppm LAB# on this report 9012490
 Number of Samples Analyzed 46 9012431
 Reference Pages 90-515-518 9012446
 Date 1/4/91 9012447
 Matrix Spike/Matrix Spike Duplicates

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490.29A	0.000	0.050	0.050	100	0.049	98	2.02%
9012490.36A	0.000	0.050	0.051	102	0.050	100	1.98%

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.010	0.010	0.010		
0.050				
0.100				
Method Blank	<0.01	<0.01		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
105 0.030	0.030	0.031		

Date: 01/07/91 QA Reviewed & Approved By: [Signature]

Procedure: Ha Method No: 200.2 Date of Analysis: 1/2/91
 Analyst: NR Matrix: PLP Supervisor: [Signature]
 Detection Limit: 0.050 LAB# on this report: _____
 Number of Samples Analyzed: 40 9012321
 Reference Pages: 9001-007 9012440
 Date: 1/2/91
 Matrix Spike/Matrix Spike Duplicates: _____

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012321-120	<0.05	1.000g	1.00g	101%	1.00g	101%	0

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.050	0.048	0.048		
0.100	0.094			
1.000	0.984			
10.00	10.210			
100.00		<0.05		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
11.53.00	3.25	3.4		

Date: 01/07/91

QA Reviewed & Approved By: [Signature]

Procedure Ba Method No. 700.7 Date of Analysis 1/3/91
 Analyst NR Matrix TCLP Supervisor PLP
 Detection Limit 0.05 LAB on this report
 Number of Samples Analyzed 210 9012490
 Reference Pages 90794-790
 Date 1/3/91
 Matrix Spike/Matrix Spike Duplicates

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490-15a	0.54	1.00 ppm	1.40	86	1.41	87	0.7
9012490-21a	0.71	1	1.85	109	1.86	110	0.5
9012490-29a	0.80	1	1.77	97	1.80	100	1.7

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000
0.050	0.0471	0.048	0.047	0.043
0.100	0.0929			
1.000	0.9914			
10.00	10.361			
Method Blank		<0.05	<0.05	<0.05

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1653.00	3.07	2.99	2.98	2.98

Date 01/08/91

QA Reviewed & Approved By PLP

Procedure: Cd Method No: 200.7 Date of Analysis: 1/2/91
 Analyst: NR Matrix: SLP Supervisor: [Signature]
 Detection Limits: 0.050 LAB# on this report: 9012321
 Number of Samples Analyzed: 20 9012440
 Reference Pages: 9001-007
 Dates: 1/2/91
 Matrix Spike/Matrix Spike Duplicates:

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012321-120	<0.05	1.000	1.02	102	1.02	102	0

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.050	0.0455	0.043		
0.100	0.0918			
1.000	0.9684			
10.00	10.1806			
Limit of Detection		<0.05		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
11.3.02	3.03	3.24		

Dates: 01/07/91 QA Reviewed & Approved By: [Signature]

Procedure CD Method No. 7007 Date of Analysis 1/3/91
 Analyst NR Matrix TCLP Supervisor 7/2
 Detection Limits 0.05 LAB# on this report _____
 Number of Samples Analyzed 2/0 9012490 _____
 Reference Pages 90794-799 _____
 Dates 1/2/91 _____
 Matrix Spike/Matrix Spike Duplicates _____

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490-15A	<0.05	1.00 _{ppm}	0.970	97.0	0.985	98.5	1.5
9012490-21A	<0.05	1	1.06	106	1.00	100	5.8
9012490-29A	<0.05	1	0.864	86.4	0.903	90.3	4.4

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000
0.050	0.0525	0.048	0.047	0.038
0.100	0.0821			
1.000	0.9533			
10.00	10.007			
Method Blank		<0.05	<0.05	<0.05

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1153.00	2.95	2.78	2.71	3.16

Date: 01/08/91

QA Reviewed & Approved By: AD

Procedure: Cr Method No: 200.7 Date of Analysis: 1/2/91
 Analyst: NR Matrix: TLR Supervisor: [Signature]
 Detection Limit: 0.050 LAB# on this report: 9012321
 Number of Samples Analyzed: 10 9012490
 Reference Pages: 90001-007
 Date: 1/2/91
 Matrix Spike/Matrix Spike Duplicates:

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012321-12	0.05	1.00	1.12	112	1.08	108	3.4

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.050	0.0431	0.063		
0.100	0.128			
1.000	1.0117			
10.00	9.9913			
Blank		0.05		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1153.02	3.00	3.44		

Date: 01/07/91 QA Reviewed & Approved By: [Signature]

03/90

Procedures Cir Method No. 700.7 Date of Analysis 1/3/91
 Analyst NR Matrix TCLP Supervisor [Signature]
 Detection Limit 0.05 LAB# on this report _____
 Number of Samples Analyzed 210 9012490 _____
 Reference Pages 90794-799 _____
 Dates 1/3/91 _____
 Matrix Spike/Matrix Spike Duplicates _____

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490-15	<0.05	1.00 μ	0.934	93.4	0.934	93.4	0
9012490-21A	0.05	1	0.971	92.1	0.957	90.2	1.5
9012490-29A	0.05	1	1.02	97	0.905	85.8	11.4

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000
0.050	0.0544	0.038	0.040	0.038
0.100	0.0801			
1.000	1.0170			
10.00	9.9865			
Method Blank		<0.05	<0.05	<0.05

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1153.00	3.02	2.92	2.76	3.41

Dates 01/08/91

QA Reviewed & Approved By [Signature]

Procedures Hg Method No. 245.1 Date of Analysis 1/9/91
 Analyst JK Matrix H₂O Supervisor [Signature]
 Detection Limits 0.0004 ppm LAB# on this report
 Number of Samples Analyzed 55 90.12.344 90.12.446
 Reference Pages 70 of 38 - 141 90.12.431 90.12.447
 Dates 1/10/91 90.12.528 90.12.470
 Matrix Spike/Matrix Spike Duplicates 90.12.358

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
90.12.528.2A	0.0006	0.0010	0.0016 100%	100	0.0016	100	0
90.12.447.1A	0.0000	0.0010	0.0010	100	0.0009	90	10.5%
90.12.490.2A	0.0000	0.0010	0.0011	110	0.0011	110	0

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.0000	0.0000	0.0000	0.0000	0.0000
0.0004	0.0004	0.0004	0.0004	0.0004
0.0020	0.0020			
0.0030	0.0030			
Method Bk		<0.0004	<0.0004	<0.0004

Calibration Cross-Check

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
143 0.0010	0.0011	0.0011	0.0010	0.0009

Date: 1/11/91 QA Reviewed & Approved By: [Signature]

Procedures Hg Method No. 245.1 Date of Analysis 1/7/91
 Analyst JK Matrix H₂O Supervisor [Signature]
 Detection Limit 0.0004 ppm LAB# on this report [Signature]
 Number of Samples Analyzed 55
 Reference Page 900138-141
 Dates 1/10/91
 Matrix Spike/Matrix Spike Duplicate:

9012 344	9012 446
9012 431	9012 447
9012 528	9012 490
9012 358	

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012 490 21A	0.0038	0.0010	0.0049	110	0.0048	100	9.52%
9012 490 29A	0.0000	0.0010	0.0010	100	0.0011	110	9.52%
9012 490 32A	0.0000	0.0010	0.0010	100	0.0011	110	9.52%

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.0000	0.0000	0.0000	0.0000	
0.0004	0.0004	0.0004	0.0004	
0.0020				
0.0050				
Method Blank	<0.0004	<0.0004	<0.0004	

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
LS 0.0010	0.0009	0.0010	0.0010	

Date: 1/11/91

QA Reviewed & Approved By: [Signature]

Procedure: Pb Method No.: 700.7 Date of Analysis: 1/31/91
 Analyst: NR Matrix: TCLP Supervisor: [Signature]
 Detection Limits: 0.05 LAB# on this report: 9012490
 Number of Samples Analyzed: 2/0
 Reference Page: 90794-73p
 Date: 1/31/91
 Matrix Spike/Matrix Spike Duplicates:

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490-15A	0.13	1.00ppm	1.05	92	0.986	85.6	6.1
9012490-21A	<0.05	1	1.10	110	1.06	106	3.2
9012490-29A	<0.05	4	1.04	104	0.990	99.0	4.9

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000
0.050	0.0543	0.043	0.038	0.042
0.100	0.1247p			
1.000	0.9867			
10.00	10.0155			
Method Blank		<0.05	<0.05	<0.05

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1653.00	3.03	2.77	2.7p	3.22

Date: 01/08/91

QA Reviewed & Approved By: [Signature]

03/90

Procedures FB Method No. 700.2 Date of Analysis 1/2/91
 Analysts NR Matrix TCLP Supervisor TLF
 Detection Limits 0.050 LAB# on this report _____
 Number of Samples Analyzed 10 9012321 _____
 Reference Pages 90001-007 9012490 _____
 Dates 1/2/91 _____
 Matrix Spike/Matrix Spike Duplicates _____

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012321.12a	<0.05	1.00 mg	0.873	87.3	0.886	88.6	0.1

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.050	0.0434	0.062		
0.100	not included			
1.000	1.0347			
10.00	9.9675			
100.00				
1000.00				
10000.00				
		<0.05		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1153.02	3.12	2.94		

Dates 01/07/91

QA Reviewed & Approved By: TLF

PREPARED BY: P. J. J. Date of Analysis: 1/10/91
 ANALYST: F. H. H. H. H. H. MATRIX: Water 1 Sol Supervisor: T. J. L.
 Number of Samples Analyzed: 2 LAB# on this order: 9009577 01A
 Reference Pages: B9295 9012490 14B
 Date: 1/10/91

Duplicates: Must be within 10%

CEP Number	Calc. Conc.	Dup. Conc.	x (Avg.)
9012490 AB	Neg.	Neg.	Neg.

Standards: Must be within 10%

No Standards

Theoretical Conc.	Calculated Conc.	Calculated Conc.	Calculated Conc.	Calculated Conc.

Known References: Must be within 10%

No Reference

Theoretical Conc.	Calculated Conc.	Calculated Conc.	Calculated Conc.	Calculated Conc.

Date: 01/10/91

QA Reviewed & Approved By: [Signature]

QA#82-5

Procedures See Method No. 270.2 Date of Analysis 1/2/91
 Analyst SK Matrix H₂O Supervisor K. Rego
 Detection Limits 0.010 ppm LAB# on this report 10
 Number of Samples Analyzed 48 90 12 431 90 12 490
 Reference Pages 90-624-627 90 12 358
 Date: 1/2/91 90 12 446
 Matrix Spike/Matrix Spike Duplicates 90 12 447

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
90 12 358 3A	0.000	0.050	0.049	98	0.050	100	2.027
90 12 490 3A	0.000	0.050	0.051	102	0.050	100	1.987
90 12 490 13A	0.000	0.050	0.049	98	0.049	98	0

Calibration Standards

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000
0.010	0.010	0.010	0.009	0.009
0.050	0.050			
0.100	0.100			
Method Blk		<0.01	<0.01	<0.01

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
US 0.030	0.032	0.030	0.030	0.030

Date: 01/02/91QA Reviewed & Approved By: [Signature]

Procedures Se Method No. 270.2 Date of Analysis 1/2/91
 Analysts JK Matrix H₂O Supervisor: Atkins
 Detection Limits 0.010 ppm LAB# on this report 9012431
 Number of Samples Analyzed 48 9012490
 Reference Pages 90-624-627 9012258
 Dates 1/2/91 9012446
 Matrix Spike/Matrix Spike Duplicates: 9012447

CEP Number	Original Result	Spike Amount	Matrix Spike Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9012490-29A	0.000	0.050	0.050	100	0.047	102	1.98%
9012490-31A	0.000	0.050	0.048	96	0.048	96	0

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000		
0.010	0.010	0.009		
0.050				
0.100				
Method Blk	<0.01	<0.01		

Calibration Cross-Checks

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.030	0.030	0.030		

Dates 01/03/91

QA Reviewed & Approved By: Atkins

03/91

QA/QC REPORT

PROCEDURE: PCBs IN SOIL

Date of Analysis: 1-8-91

CEP Sample Numbers On This Report

Analyst: JT9012490-14Number of Samples Analyzed: OneReference Page: 99016, 99017Date: 1-15-91Supervisor: Dum

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9012490-1

Compound	Original Result ug/kg	Spike Amount ug/kg	MS Result ug/kg	MS % Recov	MSD Result ug/kg	MSD % Recov	RPD Relative % Diff	Interim QC Limits % Recov	RPD
PCB 1242								34-124	25
PCB 1248								49-121	25
PCB 1254	<u>ND</u>	<u>333.0</u>	<u>276.9</u>	<u>83.15</u>	<u>311.3</u>	<u>93.5</u>	<u>11.8</u>	48-114	25
PCB 1260								64-124	25

Spike % Recovery: 0 out of 2 outside limitsRPD: 0 out of 1 outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear Q = Quadratic C = Cubic

Compound	Curve Type Used	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
PCB 1016	L Q C	<u>0.20</u>	<u>3991427</u>				
PCB 1221	L Q C	<u>0.20</u>	<u>2081492</u>				
PCB 1232	L Q C	<u>0.20</u>	<u>2527739</u>				
PCB 1242	L Q C	<u>0.20</u>	<u>4304249</u>				
PCB 1248	L Q C	<u>0.20</u>	<u>5334734</u>				
PCB 1254	L Q C	<u>0.20</u>	<u>6471753</u>	<u>1.0</u>	<u>45334901</u>	<u>2.0</u>	<u>94531789</u>
PCB 1260	L Q C	<u>0.20</u>	<u>12495771</u>				

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
PCB 1016				25
PCB 1221				25
PCB 1232				25
PCB 1242				25
PCB 1248				25
PCB 1254	<u>1.00</u>	<u>0.744</u>	<u>25.6</u>	25
PCB 1260				25

Reviewed and Approved By: [Signature]Date: 01/15/91

APPENDIX F

JANUARY 1991 QUALITY ASSURANCE DATA

Controls for Environmental Pollution, Inc.

1925 Rosina • P. O. Box 5351 • Santa Fe, New Mexico 87502 • Telephone 505 982-9941

EG and G Mound
P. O. Box 3000
Miamisburg, OH 45343
Attn: Larry Klingler

Invoice No: _____

P.O. # _____

Sample Information:

Laboratory No.: 91-01-580 No. of Samples: 39

Date Collected: 01/29/91 Date Received: 01/31/91

MAR 21 1991

Date

QA Approved

Organics QA Checklist

Work Order 91-01-580

The following have been checked and meet all criteria set forth in EPA SW-846:

- Volatile Initial Calibration
- Volatile Continuing Calibration
- Bromofluorobenzene Tuning
- Semivolatile Initial Calibration
- Semivolatile Continuing Calibration
- Decafluorotriphenylphosphine Tuning
- Pesticide Initial Calibration
- Herbicide Initial Calibration

The following are submitted as part of the QA package:

- Volatile Surrogate Recoveries
- Volatile Matrix Spike Recoveries
- Semivolatile Surrogate Recoveries
- Semivolatile Matrix Spike Recoveries
- Pesticide Continuing Calibration
- Pesticide Calibration Cross Check
- Herbicide Continuing Calibration
- Herbicide Calibration Cross Check
- Process Blank Results

I G Mound

NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED

580-02	MND16-0012-0004	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/03/91	02/05/91
				PESTICIDES	02/02/91	02/05/91
				HERBICIDES	02/02/91	02/05/91
				ZERO HEADSPACE EXTRACTIONS	01/31/91	02/05/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-01	MND16-0012-0001 MS/MSD	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/03/91	02/05/91
				PESTICIDES	02/02/91	02/05/91
				HERBICIDES	02/02/91	02/05/91
				ZERO HEADSPACE EXTRACTIONS	01/31/91	02/05/91

I G Mound

NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED

580-03	MND16-0012-0005	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/03/91	02/05/91
				PESTICIDES	02/02/91	02/05/91
				HERBICIDES	02/02/91	02/05/91
				ZERO HEADSPACE EXTRACTIONS	01/31/91	02/05/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.O.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED

91-01-580-04	MND16-0012-0006	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/03/91	02/05/91
				PESTICIDES	02/02/91	02/05/91
				HERBICIDES	02/02/91	02/05/91
				ZERO HEADSPACE EXTRACTIONS	01/31/91	02/05/91

EG and 6 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-05	MND16-0012-0007	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/02/91	02/04/91
				HERBICIDES	02/02/91	02/04/91
				POLYCHLORINATED		
				DIPHENYLS	02/01/91	02/15/91
				ZERO HEADSPACE		
				EXTRACTIONS	01/31/91	02/05/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-06	MND16-0012-0009	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/02/91	02/06/91
				HERBICIDES	02/02/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	01/31/91	02/05/91

E6 and 6 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-07	MND16-0012-0010	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	01/31/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/02/91	02/04/91
				HERBICIDES	02/02/91	02/04/91
				ZERO HEADSPACE EXTRACTIONS	01/31/91	02/05/91

EG and S Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-08	IND16-0012-0011	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

EG and B Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-09	MO016-0012-0012	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

EG and 6 Round

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-530-10	WHD16-0012-0013	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

EB and 8 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-11	MND16-0012-0014	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-12	MND16-0012-0015	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

ES and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-13	MND16-0013-0001 NS/MSD	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

EG and 6 Round

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-14	IND16-0014-0001 NS/MSD	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/03/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/08/91
				HERBICIDES	02/06/91	02/08/91
				ZERO HEADSPACE EXTRACTIONS	02/03/91	02/06/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-15	MND16-0014-0002	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE EXTRACTIONS	02/01/91	02/06/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-16	NWD16-0014-0003	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/01/91	
				SEMIVOLATILES	02/05/91	02/06/91
				PESTICIDES	02/04/91	02/06/91
				HERBICIDES	02/04/91	02/06/91
				ZERO HEADSPACE		
				EXTRACTIONS	02/01/91	02/07/91

1 G Mound

TEST NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
-580-17	MND16-0015-0002	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE		
				EXTRACTIONS	02/05/91	02/11/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED

91-01-580-18	HND16-0015-0003	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

1 G Mound

NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
580-19	MND16-0015-0004	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-20	MND16-0015-0005	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

I G Mound

NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED

580-21	MND16-0015-0006	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-22	MND16-0015-0007	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

J G Mound

T NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
-580-23	MND16-0015-0009	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/07/91	02/11/91
				PESTICIDES	02/06/91	02/11/91
				HERBICIDES	02/06/91	02/11/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-24	MND16-0015-0010	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/11/91	02/12/91
				PESTICIDES	02/08/91	02/12/91
				HERBICIDES	02/09/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/11/91

ES and 6 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-25	MND16-0015-0012	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/11/91	02/12/91
				PESTICIDES	02/08/91	02/12/91
				HERBICIDES	02/08/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/12/91

ES and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-26	WMD16-0015-0013	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMI-VOLATILES	02/11/91	02/12/91
				PESTICIDES	02/09/91	02/12/91
				HERBICIDES	02/08/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/12/91

EB and B Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-27	MND16-0015-0014	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/11/91	02/12/91
				PESTICIDES	02/08/91	02/12/91
				HERBICIDES	02/08/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/12/91

ES and 6 Round

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-28	MD16-0015-0015	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/08/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/11/91	02/12/91
				PESTICIDES	02/08/91	02/12/91
				HERBICIDES	02/08/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/12/91

EG and B Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-29	MND16-0015-0016	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	*
				SEMIVOLATILES	02/11/91	02/12/91 **
				PESTICIDES	02/08/91	02/12/91
				HERBICIDES	02/08/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/12/91

* This sample underwent TCLP extraction again on 02/25/91 because acid surrogates were not added to the EWA fraction.

** These samples were re-extracted 03/06/91 and re-analyzed 03/08/91 for acid surrogates only.

E6 and 6 Round

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-50	MND16-0012-0002	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/11/91	02/12/91 **
				PESTICIDES	02/08/91	02/12/91
				HERBICIDES	02/08/91	02/12/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/12/91

* This sample underwent TCLP extraction again on 02/25/91 because acid surrogates were not added to the BNA fraction.

** These samples were re-extracted 03/06/91 and re-analyzed 03/08/91 for acid surrogates only.

ES and 6 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-31	MND16-0012-0003	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/07/91	
				SEMIVOLATILES	02/12/91	02/13/91
				PESTICIDES	02/10/91	02/13/91
				HERBICIDES	02/11/91	02/13/91
				ZERO HEADSPACE EXTRACTIONS	02/07/91	02/12/91

* This sample underwent TCLP extraction again on 02/25/91 because acid surrogates were not added to the EPA fraction.

* * These samples were re-extracted 03/06/91 and re-analyzed 03/08/91 for acid surrogates only.

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-32	MD16-0012-0008	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/07/91	*
				SEMIVOLATILES	02/12/91	02/13/91 **
				PESTICIDES	02/10/91	02/13/91
				HERBICIDES	02/11/91	02/13/91
				ZERO HEADSPACE EXTRACTIONS	02/07/91	02/13/91

* This sample underwent TCLP extraction again on 02/25/91 because acid surrogates were not added to the BNA fraction.

** These samples were re-extracted 03/06/91 and re-analyzed 03/08/91 for acid surrogates only.

EG and G Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-380-33	MND16-0015-0001 NS/MSD	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	*
				SEMIVOLATILES	02/12/91	02/13/91 **
				PESTICIDES	02/08/91	02/13/91
				HERBICIDES	02/08/91	02/13/91
				ZERO HEADSPACE EXTRACTIONS	02/05/91	02/13/91

* This sample underwent TCLP extraction again on 02/25/91 because acid surrogates were not added to the BBA fraction.

** These samples were re-extracted 02/06/91 and re-analyzed 03/08/91 for acid surrogates only.

ES and 6 Nound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-34	MND16-0015-0008	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/12/91	02/13/91
				PESTICIDES	02/10/91	02/13/91
				HERBICIDES	02/10/91	02/13/91
				ZERO HEADSPACE EXTRACTIONS	02/07/91	02/13/91

EE and 6 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-330-33	MD16-0015-0011	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMIVOLATILES	02/12/91	02/13/91
				PESTICIDES	02/10/91	02/13/91
				HERBICIDES	02/10/91	02/13/91
				ZERO HEADSPACE EXTRACTIONS	02/07/91	02/13/91

EG and 6 Mound

C.E.P. REPORT NO.	FIELD I.D.	DATE SAMPLED	DATE RECEIVED	ANALYTE	DATE PREPARED	DATE ANALYZED
91-01-580-36	MND16-0013-0017 MS/MSD	01/29/91	01/31/91	ARSENIC	02/05/91	02/08/91
				BARIUM	02/05/91	02/12/91
				CADMIUM	02/05/91	02/12/91
				CHROMIUM	02/05/91	02/12/91
				MERCURY	02/05/91	02/13/91
				LEAD	02/05/91	02/11/91
				SELENIUM	02/05/91	02/12/91
				SILVER	02/05/91	02/12/91
				TCLP PREP	02/05/91	
				SEMI-VOLATILES	02/12/91	02/13/91
				PESTICIDES	02/10/91	02/13/91
				HERBICIDES	02/10/91	02/13/91
				ZERO HEADSPACE EXTRACTIONS	02/07/91	02/13/91

Procedure: AS Method No.: 206.2 Date of Analysis: 2/8/91
 Analyst: JK Matrix: H₂O Supervisor: NR
 Detection Limits: 0.010 ppm Number of Samples Analyzed: 50
 Reference Page: G0-644-647 Date Turned in: 2/9/91
 Lab # on this report: 91 02 158
91 02 168
91 02 099
91 02 137
91 01 580
91 01 581

Matrix Spike/Matrix Spike Duplicates: Standard Log # 900255-24

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
02 157 12	0.007	0.050	0.048	92	0.047	94	2.06%
01 580 6A	0.000	0.050	0.047	94	0.047	94	0
01 580 7A	0.000	0.050	0.045	96	0.045	96	0
01 580 7B	0.000	0.050	0.050	100	0.045	96	4.05%

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	0.000
0.010	0.010	0.011	0.010	0.010	0.010
0.050	0.050				
0.100	0.100				
Method Blank		0.01	0.01	0.01	0.01

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.030	0.028	0.028	0.028	0.030	0.028

Comments:

Date: 2/11/91QA Reviewed & Approved By: DB

Procedure: As Method No.: 206.2 Date of Analysis: 2/8/91
 Analyst: JK Matrix: H₂O Supervisor: [Signature]
 Detection Limits: 0.010 ppm Number of Samples Analyzed: 98
 Reference Pages: 90-644-647 Date Turned in: 2/9/91

Lab # on this report: 91 02 158

91 02 168
91 02 049
91 02 157
91 01 650
91 01 581

Matrix Spike/Matrix Spike Duplicates:

Standard Log # 900255-44

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
91 01580 34A	0.000	0.030	0.050	100	0.049	98	2.02%

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000				
0.010	0.010				
0.050					
0.100					
Method Bk	0.01				

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.030	0.029				

Comments:

Date: 2/11/91

QA Reviewed & Approved By: [Signature]

Procedure: Ba Method No.: 2007 Date of Analysis: 2/12/91
 Analyst: NH Matrix: TCLP Supervisor: [Signature]
 Detection Limits: 0.050 Number of Samples Analyzed: 40
 Reference Page: 91137-10 Date Turned in: 2/13/91
 Lab # on this report: 9101580 9101581

Matrix Spike/Matrix Spike Duplicates: Standard Log # 1-54-AS

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9101580-10a	0.57	1.00ppm	1.48	94	1.48	94	0
9101580-12a	0.56		1.78	122	1.41	85	23.2
9101580-30a	0.73		1.48	95	1.81	110	11.8
9101581-1a	0.62		1.71	169	1.27	125	8.9

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	0.000
0.050	0.0425	0.040	0.039	0.042	0.038
0.100	0.0983				
0.000	0.9245				
10.000	10.6235				
100.000		<0.05	<0.05	<0.05	<0.05

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1.52 0.30	0.330	0.341	0.310	0.295	0.295

Comments:

Date: 2/13/91

QA Reviewed & Approved By: [Signature]

Procedure: CO Method No.: 2007 Date of Analysis: 2/12/91
 Analyst: NR Matrix: TCLP Supervisor: 7/72
 Detection Limits: 0.050 Number of Samples Analyzed: 40
 Reference Page: 91137-152 Date Turned in: 2/13/91
 Lab # on this report: 9101580 9101581

Matrix Spike/Matrix Spike Duplicates: Standard Log # 1-54-AS

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9101580-10	<0.05	1.00ppm	0.798	29.8	0.767	76.7	4.0
9101580-12	<0.05		0.759	25.9	0.809	80.9	6.4
9101580-32	<0.05		0.910	91.0	0.953	95.3	4.6
9101580-14	0.11		0.897	76.2	0.953	84.3	6.1

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	0.000
0.050	0.0466	0.046	0.046	0.053	0.038
0.100	0.0925				
1.000	0.8659				
10.00	10.0029				
method BLK		<0.05	<0.05	<0.05	<0.05

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1.50 0.30	0.289	0.343	0.294	0.272	0.278

Comments:

Date: 2/13/91QA Reviewed & Approved By: [Signature]

Procedure: CR Method No.: 200.7 Date of Analysis: 2/12/91
Analyst: JK Matrix: H₂O/ICP Supervisor: NR
Detection Limits: 0.010 ppm Number of Samples Analyzed: 40
Reference Page: 90-817-820 Date Turned in: 2/13/91

Lab # on this report: 91 01 580
91 01 581

Matrix Spike/Matrix Spike Duplicates: Standard Log # 903669-24

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
01 580 2A	<0.01	0.100	0.105	105	0.101	101	3.88%
01 580 11A	<0.01	0.100	0.094	94	0.087	87	7.73%
01 580 23A	<0.01	0.100	0.102	102	0.103	103	0.98%
01 580 37A	<0.01	0.100	0.106	106	0.109	109	2.79%

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	0.000
0.010	0.010	0.012	0.011	0.010	0.010
0.100	0.100				
1.000	1.000				
Method Blank		<0.01	<0.01	<0.01	<0.01

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.300	0.291	0.277	0.266	0.284	

Comments:

Date: 2/13/91

QA Reviewed & Approved By

JP

Procedure: Pb Method No.: 239.2 Date of Analysis: 2/13/91
Analyst: JK Matrix: H2O Supervisor: AK Royal
Detection Limits: 0.010 ppm Number of Samples Analyzed: 44
Reference Page: 90-542-545 Date Turned in: 2/14/91 ♥

Lab # on this report: 91 01 573
91 02 047
91 02 048
91 01 580
91 01 581

Matrix Spike/Matrix Spike Duplicates: Standard Log # 890296-24

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
91 01 580 5A	0.001	0.002	0.002	102	0.002	102	0
91 01 580 17A	0.001	0.002	0.002	90	0.002	92	2.15%
91 01 580 17B	0.001	0.002	0.002	94	0.002	92	2.15%
91 01 580 3A	0.001	0.002	0.002	94	0.002	92	2.10%

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	0.000
0.010	0.010	0.011	0.010	0.010	0.011
0.020	0.020				
0.100	0.100				
Method Blk		0.001	0.001	0.001	0.001

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.030	0.032	0.031	0.031	0.028	0.029

Comments: _____

Date: 2/13/91

QA Reviewed & Approved By: AK Royal

Procedure: Hg Method No.: 245.1 Date of Analysis: 2/11/91
 Analyst: JK Matrix: H2O Supervisor: NR
 Detection Limits: 0.0004 ppm Number of Samples Analyzed: 580
 Reference Page: 900150 - 153 Date Turned in: 2/13/91

Lab # on this report: 91 02 062 91 01 580
91 02 119 91 01 581
91 02 155
91 02 175
91 02 099
91 02 137
91 02 139

Matrix Spike/Matrix Spike Duplicates: Standard Log # 900134-24

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
02155 1A	0.0010	0.0010	0.0011	110	0.0010	100	9.52%
02137 1A	0.0010	0.0010	0.0010	100	0.0010	100	0
01584 2A	0.0010	0.0010	0.0009	90	0.0010	100	10.57%
01584 18A	0.0010	0.0010	0.0010	100	0.0010	100	0

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
0.0010	0.0010				
0.0010	0.0010				
Blank		<0.0010	<0.0010	<0.0010	<0.0010

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.0010	0.0010	0.0010	0.0010	0.0010	0.0010

Comments:

Date: 2/13/91

QA Reviewed & Approved By: AR

Procedure: Hg Method No.: 245.1 Date of Analysis: 2/11/91
 Analyst: JK Matrix: H2O Supervisor: N. Karpf
 Detection Limits: 0.0004 ppm Number of Samples Analyzed: 58
 Reference Page: 900150 - 153 Date Turned in: 2/13/91

Lab # on this report: 91 02 062 91 01 580
91 02 117 91 01 581
91 02 155
91 02 175
91 02 595
91 02 137
91 02 138

Matrix Spike/Matrix Spike Duplicates: Standard Log # 900134-24

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
91 01 580 25%	0.0004	0.0004	0.0009	90	0.0004	90	0
91 01 580 100%	0.0004	0.0004	0.0005	100	0.0004	100	0

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.0004	0.0004	0.0004			
0.0004	0.0004	0.0004			
0.0004					
0.0004					
Method Blank	<0.0004	<0.0004			

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.0010	0.0010	0.0009			

Comments:

Date: 2/12/91QA Reviewed & Approved By: [Signature]

Procedure: Se Method No.: 270.2 Date of Analysis: 2/8/91
 Analyst: JK Matrix: H₂O Supervisor: K. Rapp
 Detection Limits: 0.010 ppm Number of Samples Analyzed: 30
 Reference Page: 90-648 - GSD Date Turned in: 2/11/91

Lab # on this report: 91 02 155 _____
91 02 168 _____
91 01 580 _____

Matrix Spike/Matrix Spike Duplicates: Standard Log # 066585

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
01 540 4A	0.001	0.050	0.051	100	0.050	95	1.98%
01 550 1a	0.001	0.050	0.049	98	0.049	98	0
01 550 2a	0.000	0.050	0.050	100	0.050	100	0

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	
0.010	0.010	0.009	0.010	0.010	
0.050	0.050				
0.100	0.100				
Method Blank		0.01	0.01	0.01	

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.030	0.031	0.031	0.031	0.031	

Comments:

Date: 2/11/91 QA Reviewed & Approved By: CBava

Procedure: Se Method No.: 270.2 Date of Analysis: 2/12/91
Analyst: JK Matrix: H₂O Supervisor: XT
Detection Limits: 0.010 ppm Number of Samples Analysed: 20
Reference Page: 90-657, 652 Date Turned in: 2/13/91

Lab # on this report: 91.01580 _____
91.01581 _____
91.02155 _____
91.02175 _____
91.02497 _____

Matrix Spike/Matrix Spike Duplicates: Standard Log # 066585

CEP Number	Original Result	Spike Amount	MS Result	MS # Rec	MSD Result	MSD # Rec	Relative % Difference
91.01586.31A	0.000	0.050	0.047	94	0.048	96	2.567.36.2
91.02155.2A	0.000	0.050	0.047	94	0.047	94	0

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000		
0.010	0.010	0.010	0.010		
0.050	0.050				
0.100	0.100				
Method Blank		<0.01	<0.01		

Calibration Cross-Check:

ILS LOG # _____

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
ILS 0.030	0.031	0.030	0.029		

Comments: _____

Date: 2/12/91

QA Reviewed & Approved By: [Signature]

Form No. 1

Procedure: Asp Method No.: 2007 Date of Analysis: 2/12/91
 Analyst: LR Matrix: TCHP Supervisor: 7/7c
 Detection Limits: 0.050 Number of Samples Analyzed: 40
 Reference Page: 91137-10 Date Turned in: 2/13/91
 Lab # on this report: 9101580 9101581

Matrix Spike/Matrix Spike Duplication: Standard Log # 1-54-AB

CEP Number	Original Result	Spike Amount	MS Result	MS % Rec	MSD Result	MSD % Rec	Relative % Difference
9101580-10	<0.05	1.0000	0.940	94.4	0.935	93.5	1.0
9101580-15	<0.05	1.0000	0.937	93.7	0.972	97.2	3.7
9101580-20	0.02		1.14	107	0.520	91.0	14.5
9101580-25	0.06		0.560	83	0.903	84.7	1.9

Calibration Standards:

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
0.000	0.000	0.000	0.000	0.000	0.000
0.050	0.052	0.050	0.050	0.050	0.050
0.100	0.0980				
1.000	0.8867				
10.000	10.455				
method blank		<0.05	<0.05	<0.05	<0.05

Calibration Cross-Check:

ILS LOG #

Theoretical Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l	Calculated Conc. mg/l
1.50	0.280	0.284	0.273	0.275	0.282

Comments:

Date:

2/13/91

QA Reviewed & Approved By:

Asa

00054A

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	vol. Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Finish Time
9101484-01A	1/28/91	oily soil	25.0g/	100%		TCLP			1:30	7:30
Comments		West ID Nuc (500ml)	ZHE		500ml				1/28/91	1/29/91
9101484-01A										
Comments										
9101484-02A										
Comments										
9101484-02A										
Comments										
Blank		TCLP								
Comments										
Blank										
Comments										
9101580-01A	2/1/91	EG+G soil	25.0g/	~95%	500 ml.	TCLP #1			5:00p.m.	11:00a
Comments			ZHE						1/31/91	2/1/91
9101580-02A	2/1/91	EG+G								
Comments										
9101580-03A	2/1/91	EG+G								
Comments										
9101580-04A	2/1/91	EG+G								
Comments										
9101580-05A	2/1/91	EG+G								
Comments										

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Finis Time
9101580-06A	2/1/91	EG+G	Soil	25.0g/ 2HE (500ml)	~95% 500 ml.	TCLP			5:00pm. 11:00am	1/31/91 2/1/91
9101580-07A	2/1/91	EG+G								
MS-9010580-01A	2/1/91	EG+G								
MSD-9010580-01A	2/1/91	EG+G								
Blank	2/1/91	EG+G	TCLP	0%						
9010580-08A	2/1/91	EG+G	Soil	25.0g. 2HE (500ml)	~95% 500 ml.	TCLP#1			4:30pm 11:00am	2/1/91 2/2/91
9010580-09A	2/1/91	EG+G								
9101580-10A	2/1/91	EG+G								
9101580-11A	2/1/91	EG+G								
9101580-12A	2/1/91	EG+G								
9101580-13A	2/1/91	EG+G								

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Vol. We Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Fin: Time
9000580-15A	2/1/91	EG+G soil	250g	~95%	300 ml	TCLP#1			4:30 pm	1:00
Comments			(500ml)						2/1/91	2/2
9000580-16A	2/1/91	EG+G								
Comments										
MS-9000580-13A	2/1/91	EG+G								
Comments										
MSD-9000580-13A	2/1/91	EG+G								
Comments										
Blank	2/1/91	EG+G TCLP		0%						
Comments										
9101580-14A	2/3/91	soil	250g	~95%		TCLP#1			5:30 pm	11:00
EG+G			2HE						2/3/91	2/4
Comments			(500ml)							
9101580-17A										
EG+G										
Comments										
9101580-18A										
EG+G										
Comments										
9101580-19A										
EG+G										
Comments										
9101580-20A										
EG+G										
Comments										
9101580-21A										
EG+G										
Comments										

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Finis Time
9101580-29A	2-5-91	SOIL		25g/24E 90%		TCLP#1			4:30pm	10:30am
EGTG Comments										
9101580-30A										
EGTG Comments										
9101580-33A				25g/24E 95%						
EGTG Comments										
9101580-33A										
MS										
EGTG Comments										
9101580-33A										
MS										
EGTG Comments										
9101580										
BLANK										
EGTG Comments										
9101580-31A	2-7-91	SOIL		25g/24E (50me)		TCLP#1			4:00pm	10:30am
EGTG Comments										
9101580-32A										
EGTG Comments										
9101580-34A										
EGTG Comments										
9101580-35A										
EGTG Comments										
9101580-36A										
EGTG Comments										

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Fin Time
9101580-22A	2-3-91	50:1	25g/24h ~ 95%	(50:1)	TCLP#1				5:30pm	11:00
EG+G Comments.									2:30pm	2:4
9101580-23A										
EG+G Comments										
9101580-24A										
EG+G Comments										
9101580-14A										
EG+G Comments										
9101580-14A										
EG+G Comments										
Blank		TCLP #1	12	~0%						
EG+G Comments										
9101580-25A	2-5-91	50:1	25g/24h ~ 98%	(50:1)	TCLP#1					
EG+G Comments										
9101580-26A										
EG+G Comments										
9101580-27A										
EG+G Comments										
9101580-28A										
EG+G Comments										

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Finish Time
910550-3A	2-2-11	Soil	25g	~95%		TCLP#1			4:00pm	10:30am
EG+G Comments			(Save)							
910550-3A										
EG+G Comments										
910550-29A										
EG+G Comments										
910550-3A										
MS										
EG+G Comments										
910550-3A										
MS										
EG+G Comments										
Blank		TCLP #1		~0%						
EG+G Comments										
910581-01B	2-2-11	Grease	5g	~97.5%		TCLP#1			5:00pm	11:00am
EG+G Comments			100% trap							
910581-01B										
MS										
EG+G Comments										
910581-01B										
MS										
EG+G Comments										
910581-01B										
Blank										
EG+G Comments										
910581-01B	2-11-91	Grease	20g/100	~100%		TCLP#1			1:00pm	7:30am
EG+G Comments			10g/2NE	30g/13NE						

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Fin Time
9102580-29	2/23/91	Soil	25g/2AE	90%	TCLP #1				8:00 p.m.	9 a.
102580 EG+G			500 ml						2/25/91	2/7
Comments										
9102580-30										
102580 EG+G										
Comments										
9102580-31										
102580 EG+G										
Comments										
9102580-32										
102580 EG+G										
Comments										
9102580-33				95%						
102580 EG+G										
Comments										
9102580-33										
102580 MS										
Comments										
9102580-33										
102580 MS										
Comments										
BLANK										
102580 EG+G		TCLP #1	12	0%						
Comments			TCLP							

Comments

Comments

Comments

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Finish Time
910550-37A	2/24/11	Soil	25g	~95%		TCLP#1			4:00pm	10:30am
EG&G Comments			(same)							
910550-38A										
EG&G Comments										
910550-39A										
EG&G Comments										
910550-36A										
MS										
EG&G Comments										
910550-36A										
MS										
EG&G Comments										
Blank		TCLP #1		~0%						
EG&G Comments										
910581-01B	2-24-11	Grease	5g	~97.5%		TCLP#1			6:00pm	11:00am
EG&G Comments			100% TCLP							
910581-01B										
MS										
EG&G Comments										
910581-01B										
MS										
EG&G Comments										
910581-01B										
Blank										
EG&G Comments										
910581-01B	2-21-91	Grease	20g	100% TCLP	~100%	TCLP#1			1:00pm	7:30am
EG&G Comments			10g/2HE 7mbed 33K/12HE		30m					

TCLP

Note: MS for each batch or matrix type, blank for each batch

CEP No.	Date	Matrix	Wt	% Solid	Wt Ext Fluid	Type Ext Fluid	Initial pH	Final pH	Start Time	Fi Ti
9102580-27	4/23/91	Soil	25g/210	90%	TCLP #1				5:00 PM	2/
9102580-28			50 mL							
9102580-29										
9102580-30										
9102580-31										
9102580-32										
9102580-33				95%						
9102580-34										
9102580-35										
9102580-36										
9102580-37										
9102580-38										
9102580-39										
9102580-40										
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9102580-100										

Comments

Comments

Comments

Controls for Environmental Pollution, Inc.

1925 Rosine • P. O. Box 5351 • Santa Fe, New Mexico 87502 • Telephone 505/882-9841

April 26, 1991

VIA FAX

Mr. Larry Klingler
EG&G Mound
Mound Road
Miamisburg, OH 45342

Dear Mr. Klingler:

The surrogate recovery ranges for TCLP extracts reported to you were determined by calculating mean recoveries of 65 data points along with their standard deviations. As with the ranges published in all EPA Methods and Studies, the ranges are ± 3 standard deviations from the mean.

Please let me know if you need any further information.

Very truly yours,

CONTROLS FOR ENVIRONMENTAL POLLUTION, INC.

A handwritten signature in black ink, appearing to read "J. R. Tye", is written over a horizontal line.

Jeffrey R. Tye
Director of Chemical Sciences

JRT:emr

SOIL VOLATILE SURROGATE RECOVERY

Client Name: EGTB 91-01-580

Date Analyzed: 2/6/91

Analyst: DVM

Data Reviewed By:

Procedure: TCLP variables

Reference Page: _____

CEP Surrogate Standard Log Number:

[illegible]

Surrogate Compound Recovery: 0 out of 17 outside limits

1,2-DCE-d4 = 1,2-Dichloroethane-d4
Tol-d8 = Toluene-d8
BFB = Bromofluorobenzene

QC LIMITS
(82-113)
(71-119)
(73-116)

Q. A. APPR

* Value outside of required QC limit

Comments: _____

SOIL VOLATILE SURROGATE RECOVERY

Client Name: E646 91-01-RS0

Date Analyzed: 2/11/91

Analyst: DVM

Data Reviewed By: 3/7

Procedure: TLLP. 1/4 ct. 1/2 s.

Reference Page:

CEP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0 out of 42 outside limits

1,2-DCE-d4 = 1,2-Dichloroethane-d4

Tol-d8 = Toluene-d8

BFB = Bromofluorobenzene

CC LIMITS

(82-113)

(71-119)

(73-116)

~~CA~~ APPROVED

BY James

DATE: 4/24/91

* Value outside of required OC limit

Comments: _____

SOIL VOLATILE SURROGATE RECOVERY

Client Name: EG+G 91-01-580

Date Analyzed: 2/12/51

Analyst: D v m

Data Reviewed By: STP

Procedure: T-LCP. 1/2 (A/C)

Reference Page: _____

CEP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0 out of 27 outside limits

1,2-DCE-d4 = 1,2-Dichloroethane-d4

Tol-d8 = Toluene-d8

BFB = Bromofluorobenzene

OC LIMITS

(82-113)

(71-119)

(73-116)

~~Q.A.~~ APPROVED

Dr. [Signature]

DATE: 4/29/91

* Value outside of required OC limit

Comments: _____

SOIL VOLATILE SURROGATE RECOVERY

Client Name: EG+G 9101-530

Date Analyzed: 2/12/91

Analyst: D.V.M.

Data Reviewed By: JT/JS

Procedure: TCCP - Volatiles

Reference Page:

CEP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0% out of 70 outside limits

1,2-DCE-d4 = 1,2-Dichloroethane-d4

Tol-d8 = Toluene-d8

BBF = Bromfluorobenzene

OC LIMITS

{82-113}

(71-119)

(73-116)

~~CA~~ APPROVED

25-10-1964

Date: 4/24/91

* Value outside of required OC limit

Comments: _____

SOIL VOLATILE SURROGATE RECOVERY

Client Name: EGG 91-01-502, SBI

Date Analyzed: 2/14/91

Analyst: Dym

Data Reviewed By: TT/lu

Procedure: _____

Reference Page: _____

CEP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0 out of 21 outside limits

1,2-DCE-d4 = 1,2-Dichloroethane-d4

Tol-d8 - Toluene-d8

BFB - Bromofluorobenzene

QC LIMITS

{82-113}

(71-119)

(73-116)

QA-APPROVED

DATE: 4/24/91

* Value outside of required QC limit

Comments: _____

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

CEPH

Lab Name: EG+G Contract: 9101580-01
 Analyst: DVM Approved: [Signature] Date: 2-6-91
 Lab Code: DVM Case No.: 1112 SAS No.: 2-6-91 SDG No.:
 Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC
1,1-Dichloroethene	50	0	38 39	78%	61-1
Trichloroethene	50	0	44	88	71-1
Benzene	50	0	53	106	76-1
Toluene	50	0	45	90	76-1
Chlorobenzene	50	0	51	102	75-1

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50	34 36	67 68	20 21	14	61-14
Trichloroethene	50	43	86	2.3	14	71-12
Benzene	50	51	102	3.8	11	76-12
Toluene	50	43	86	4.5	13	76-12
Chlorobenzene	50	50	100	2.0	13	75-13

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: # 1 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: Possible interference w/ the fluid

[Signature]
2/2/91

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E646

Contract: 9101500-33

Lab Code: 2-13-71 ^{Date} ^{Analyst} Case No.: DVA ^{Approved} SAs No.: 717 SDG No.: _____

Matrix Spike - EPA Sample No.: _____

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC
1,1-Dichloroethene	50	0	0.65 98	126	61-1
Trichloroethene	50	0	46	92	71-1
Benzene	50	0	61	122	76-1
Toluene	50	0	52	112	76-1
Chlorobenzene	50	0	53	104	75-1

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC
1,1-Dichloroethene	50	0.65 47	126	12.1	14	61-14
Trichloroethene	50	49	98	6.3	14	71-12
Benzene	50	66	132	7.9	11	76-17
Toluene	50	52	118	5.2	13	76-12
Chlorobenzene	50	57	114	7.3	13	75-12

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

Q. A. APPROVED

BY: [Signature]

DATE: 07/20/91

FORM III VOA-1

063

3/90

244

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ECL 6

Contract: 9/01580-36

~~Lab Code:~~ 2-17-91

Case No. :

~~SAS Net:~~

SDG No. :

Date _____ Analyst _____

Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS REC #	QC. LIMIT REC.
1,1-Dichloroethane	50	0	50	100	61-14
Trichloroethene	50	0	44	88	71-12
Benzene	50	0	60	120	76-12
Toluene	50	0	58	116	76-12
Chlorobenzene	50	0	57	114	75-13

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.	
1,1-Dichloroethene	50	50	100	0	14	61-145
Trichloroethene	50	42	84	4.6	14	71-120
Benzene	50	57	114	5.1	11	76-127
Toluene	50	56	112	3.5	13	76-125
Chlorobenzene	50	55	110	3.6	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

Q. A. APPROVED

FORM III VOA-1

BY: Y. H. E. E. E.

3/90-

064

DATE: 6/20/91

Base Neutral/ Acid Extractable

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Method, Solv pH	Clean Up	Surr I.D.	Surr Vol	Final Conc. Vol.
9010580-01A	2/3/91	TCLP (from soils)	190 ml sample 210 ml TCLP	0%	BNA/ surrog.	180 ml 1 ml X.2 hex	AS# 07677 BS# 07671	100 µl 100 µl	1 ml.
9010580-02A	2/3/91	Comments EG+G							
9010580-03A	2/3/91	Comments EG+G							
9010580-04A	2/3/91	Comments EG+G							
9010580-05A	2/3/91	Comments EG+G	195 ml sample 805 ml TCLP						
9010580-06A	2/3/91	Comments EG+G	155 ml sample 845 ml TCLP						
9010580-07A	2/3/91	Comments EG+G	190 ml sample 810 ml TCLP						
IS-9010580-01A	2/3/91	Comments EG+G	288 ml sample 722 ml TCLP				BS# 07642 Base Spike #10 07646 Acid Spike #10 07559	AS# 07678	
SD-9010580-01A	2/3/91	Comments EG+G	190 ml sample 810 ml TCLP						
Blank	2/3/91	Comments EG+G	300 ml sample 700 ml TCLP					AS# 07676	

Comments

Base Neutral/ Acid Extractable

Note: MS/MSD at 1 per 20 or for each matrix type whichever is large
blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Method, Solv pH	Clean Up	Surr I.D.	Surr Vol	Fir Ger
9101580-08A (redo)	2/5/91	TCLP	200 ml sample (from 800 ml soil)	~0%	BNA/ surrog.	180 ml x 2	BS.# 07642 AS.#07642	100ul 100ul	1m
9101580-08A	2/5/91		200 ml sample 800 ml TCLP						
9101580-09A	2/5/91		170 ml sample 230 ml TCLP						
9101580-10A	2/5/91		157 ml sample 243 ml TCLP						
9101580-11A	2/5/91		200 ml sample 800 ml TCLP						
9101580-12A	2/5/91								
9101580-13A	2/5/91								
9101580-15A	2/5/91						BS.# 07643		
9101580-16A	2/5/91						AS#07643		
MS-9101580-13A	2/3/91		155 ml sample 845 ml TCLP				BS# 10#07646 100ul		
MSD-9101580-13A	2/5/91		200 ml sample 800 ml TCLP				ASp 10#07649 50ul		
Blank	2/5/91				066				

Base Neutral/ Acid Extractable

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger,
blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Method, Solv pH Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
910550-14A	2-7-91	FLCP Extract From Soil	200ml Extract 50ml Toluene	~0.75	BNAS mg. 100ml x2	1ml	B.S. #07643 P.S. #07673	100ul	1ml
EG+G Comments									
910550-17A									
EG+G Comments									
910550-18A									
EG+G Comments									
910550-19A			175ml Extract 50ml Toluene				B.S. #07638		
EG+G Comments									
910550-20A			200ml Extract 50ml Toluene						
EG+G Comments									
910550-21A									
EG+G Comments									
910550-22A			190ml Extract 50ml Toluene				A.S. #07672		
EG+G Comments									
910550-23A			200ml Extract off 50ml Toluene Put in 1600ml						
EG+G Comments									
910550-14A MS			170ml Extract 50ml Toluene				B.S. #07646 P.S. #07674	100ul 50ul	
EG+G Comments									
910550-14A MSD			200ml Extract 50ml Toluene						
EG+G Comments									
Blank		FLCP							
EG+G Comments		111							

Base Neutral/ Acid Extractable

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger
blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Method, Solv pH	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101580-24A	2/11/91	TECP (Gun Sec 1)	200ml sample 800ml TECP	~1%	8-11/1 Surring	100ml R2	1ml hops	SS # 07669	100ul 1ml
EG+G Comments							AS # 07704		
9101580-25A	2/11/91								
EG+G Comments									
9101580-26A									
Comments									
9101580-27A									
EG+G Comments									
9101580-28A									
EG+G Comments									
9101580-29A							✓ AS # 07650		
EG+G Comments									
9101580-30A									
EG+G Comments									
9101580-33A									
EG+G Comments									
MS 9101580-23A							Blank 07647 AS # 07551		
EG+G Comments									
MSD 9101580-23H									
EG+G Comments									
BLANK EG+G Comments									

Base Neutral/ Acid Extractable

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger.
blank every batch

CEP No.	Date	Matrix Vol/Wt	% Solids	Method, Solv pH Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101580-31A	7/12/91	250 ml sample 200 ml TOLP	~0%	200 ml Surr 15	100 ml x 2	1 ml hex	BS# 07694	100 µl 1 ml
EG + G Comments							MS# 07650	
9101580-32A								
EG + G Comments								
9101580-34A							45# 07703	
EG + G Comments								
9101580-35A								
EG + G Comments								
9101580-36A								
EG + G Comments								
9101580-37A								
EG + G Comments								
9101580-38A								
EG + G Comments								
9101580-39A								
EG + G Comments								
9101580-36A							45# 07647 100 µl	
MS EG + G Comments							45# 07559 100 µl	
9101590-36A								
MSD EG + G Comments								
9101590-36A							BS# 07696	
BLANK EG + G Comments								

Base Neutral/ Acid Extractable

Note: MS/MSD at 1 per 20 or for each matrix type whichever is large
blank every batch

CEP No.	Date	Matrix Vol/Wt	% Solids	Method, Solv pH Vol	Clean Up	Surr I.D.	Surr Vol	Fi Co
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EG + G REDOS
Comments

~~9101550-32A~~
Comments

9101550-29A	3.6 g	100 ml Extract from Sc.1		100 ml X 2	BS# 1756 AS# 07163	100 ml	100 ml	1
EG + G's		100 ml TCLP #1						

9101550-30A

EG + G
Comments

9101550-31A

EG + G
Comments

9101550-32A

EG + G
Comments

9101550-33A

EG + G
Comments

MS
9101550-33A

EG + G
Comments

MSD
9101550-33A

EG + G
Comments

Blank

EG + G
Comments

Comments

GC/MS TCLP EXTRACTION DATA SHEET

Page No: 91 201Client name: ELGCEP No: BlankFile name: MB05DMatrix: Soil ~~ET~~ TCLP FluidAnalyst: DVMDate analyzed: 2-11-91Data reviewed by: [Signature]

Date extracted: _____

Amount analyzed: 200 (mg) (circle one) Dilution factor: 5

Parameter	Reg level mg/l	Detection limit mg/l	Results mg/l
O-cresol	10.0	0.01	< 0.05
M-cresol	10.0	0.01	< 0.05
P-cresol	10.0	0.01	< 0.05
Pentachlorophenol	3.6	0.004	< 0.02
2,4,5-Trichlorophenol	5.0	0.005	< 0.025
2,4,6-Trichlorophenol	0.30	0.003	< 0.015
2,4-Dinitrotoluene	0.13	0.006	< 0.03
Hexachlorobenzene	0.13	0.002	< 0.01
Hexachlorobutadiene	0.72	0.001	< 0.005
Hexachloroethane	4.3	0.002	< 0.01
Nitrobenzene	0.13	0.002	< 0.01
1,4-Dichlorobenzene	4.3	0.004	< 0.02
Cresol (total)	30.0	0.03	< 0.15

Comments: _____

Q. A. APPROVED

BY: [Signature]DATE: 02/21/91

071

GC/MS TCLP EXTRACTION DATA SHEET

Page No: 91 210Client name: ELLCCEP No: BlankFile name: NB065Matrix: TCLP FluidAnalyst: DVADate analyzed: 2-12-91Data reviewed by: [Signature]

Date extracted: _____

Amount analyzed: 200 (mg) (circle one) Dilution factor: 5

Parameter	Reg level mg/l	Detection limit mg/l	Results mg/l
O-cresol	10.0	0.01	<
M-cresol	10.0	0.01	<
P-cresol	10.0	0.01	<
Pentachlorophenol	3.6	0.004	<
2,4,5-Trichlorophenol	5.0	0.005	<
2,4,6-Trichlorophenol	0.30	0.003	<
2,4-Dinitrotoluene	0.13	0.006	<
Hexachlorobenzene	0.13	0.002	<
Hexachlorobutadiene	0.72	0.001	<
Hexachloroethane	4.3	0.002	<
Nitrobenzene	0.13	0.002	<
1,4-Dichlorobenzene	4.3	0.004	<
Cresol (total)	30.0	0.03	<

Comments: See 91204 For LLA.C. Added spike rather than surrogate

072

Q. A. APPROVED

B.L. [Signature]
DATE: 02/12/91

GC/MS TCLP EXTRACTION DATA SHEET

Page No: 91 222Client name: ELLCCEP No: BlankFile name: NB078Matrix: TCLP fluidAnalyst: DVRDate analyzed: 2-13-91Data reviewed by: [Signature]Date extracted: Amount analyzed: 250 mlg (circle one) Dilution factor: 5

Parameter	Reg level mg/l	Detection limit mg/l	Results mg/l
O-cresol	10.0	0.01	<
M-cresol	10.0	0.01	<
P-cresol	10.0	0.01	<
Pentachlorophenol	3.6	0.004	<
2,4,5-Trichlorophenol	5.0	0.005	<
2,4,6-Trichlorophenol	0.30	0.003	<
2,4-Dinitrotoluene	0.13	0.006	<
Hexachlorobenzene	0.13	0.002	<
Hexachlorobutadiene	0.72	0.001	<
Hexachloroethane	4.3	0.002	<
Nitrobenzene	0.13	0.002	<
1,4-Dichlorobenzene	4.3	0.004	<
Cresol (total)	30.0	0.03	<

Comments: See 9/20/91 For dL

J. A. APPROVED

073

DATE: 2/14/91

254

GC/MS TCLP EXTRACTION DATA SHEET

Page No: 91 231Client name: Q 21 CLFCEP No: BlankFile name: NB091Matrix: TLLS FluidAnalyst: DVMDate analyzed: 2-14-71Data reviewed by: [Signature]Date extracted: Amount analyzed: 26.0 mg (circle one) Dilution factor: 5

Parameter	Reg level mg/l	Detection limit mg/l	Results mg/l
O-cresol	10.0	0.01	<u><</u>
M-cresol	10.0	0.01	<u><</u>
P-cresol	10.0	0.01	<u><</u>
Pentachlorophenol	3.6	0.004	<u><</u>
2,4,5-Trichlorophenol	5.0	0.005	<u><</u>
2,4,6-Trichlorophenol	0.30	0.003	<u><</u>
2,4-Dinitrotoluene	0.13	0.006	<u><</u>
Hexachlorobenzene	0.13	0.002	<u><</u>
Hexachlorobutadiene	0.72	0.001	<u><</u>
Hexachloroethane	4.3	0.002	<u><</u>
Nitrobenzene	0.13	0.002	<u><</u>
1,4-Dichlorobenzene	4.3	0.004	<u><</u>
Cresol (total)	30.0	0.03	<u><</u>

Comments: See 9/204 For DL

074

Q. A. APPROVED

By: [Signature]
Date: 02/21/91

255

GC/MS ZHE EXTRACTION DATA SHEET

Page No: 91 120Client name: EC-16CRP No: PRO-22 B/entFile name: # BB047Matrix: LC-2Analyst: DumDate analyzed: 2-11-71

Data reviewed by: _____

Date extracted: _____

Amount analyzed: 12 (ml/g (circle one) Dilution factor: _____

Parameter	Reg level mg/l	Detection limit (ug/l)	Results ug/l
Benzene	0.07	< 4.4	_____
Carbon Tetrachloride	0.07	< 2.8	_____
Chlorobenzene	1.4	< 6.0	_____
Chloroform	0.07	< 1.8	_____
1,2-Dichloroethane	0.40	< 2.8	<u>12.0</u>
1,1-Dichloroethylene	0.10	< 2.8	_____
Methyl ethyl ketone	7.2	< 10.0	_____
Pyridine	5.0	< 10.0	_____
Tetrachloroethylene	0.10	< 6.9	_____
Trichloroethylene	0.07	< 1.9	_____
Vinyl chloride	0.05	< 2.0	_____

Comments: _____

APPROVED

2/12/91

GC/MS ZHE EXTRACTION DATA SHEET

Page No: 91 101Client name: Process Blank testCEP No: Process BlankFile name: BS 107Matrix: ETHE Ph. LAnalyst: DJMDate analyzed: 2-5-91Data reviewed by: [Signature]

Date extracted: _____

Amount analyzed: 12 (mg) (circle one) Dilution factor: _____

Parameter	Reg level mg/l	Detection limit (ug/l)	Results
Benzene	0.07	< 4.4	
Carbon Tetrachloride	0.07	< 2.8	
Chlorobenzene	1.4	< 6.0	
Chloroform	0.07	< 1.6	
1,2-Dichloroethane	0.40	< 2.8	
1,1-Dichloroethylene	0.10	< 2.8	
Methyl ethyl ketone	7.2	< 10.0	
Pyridine	5.0	< 10.0	
Tetrachloroethylene	0.10	< 6.9	
Trichloroethylene	0.07	< 1.9	
Vinyl chloride	0.05	< 2.0	

Comments: _____

_____[Signature] APPROVEDDATE: 2/8/91

SOIL SEMIVOLATILE SURROGATE RECOVERY

Client Name: EG + G 71-01-580

Date Analyzed: 2/5/91

analyst: DVM

Data Reviewed By: JT

procedure: TCLP 30.15 det/c

Reference Page: _____

SP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0 out of 60 outside limits

	QC LIMITS
NB2 = Nitrobenzene-d5	(10-109)
FEP = 2-Fluorobiphenyl	(4-130)
TPH = Terphenyl-d14	(18-127)
PHL = Phenol-d5	(1- 99)
2FP = 2-Fluorophenol	(8- 98)
TBP = 2,4,6-Tribromophenol	(5-116)

Q. APPROVED
DATE: 4/24/91

* Value outside of required QC limit

Comments: _____

SOIL SEMIVOLATILE SURROGATE RECOVERY

Client Name: E6+6 91-01-580

Date Analyzed: 2/6/91

Analyst: DVM

Data Reviewed By: TTT

Procedure: TCLP Seems valid

Reference Page: _____

CEP Surrogate Standard Log Number:

[illegible]

Surrogate Compound Recovery: 0 out of 66 outside limits

NBZ = Nitrobenzene-d5
 FBP = 2-Fluorobiphenyl
 TPH = Terphenyl-d14
 PHL = Phenol-d5
 2FP = 2-Fluorophenol
 TBP = 2,4,6-Tribromophenol

QC LIMITS
(10-109)
(4-130)
(18-127)
(1- 99)
(8- 98)
(5-116)

Q. A. APPROVED
BY: [Signature]
DATE: 4/24/91

* Value outside of required OC limit

Comments: _____

SOIL SEMIVOLATILE SURROGATE RECOVERY

Client Name: EG 46 71-01-582

Date Analyzed: 2/11/51

analyst: DVM

Data Reviewed By:

procedure: TCLP, Semivolatile

Reference Page:

EP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0 out of 64 outside limits

NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TFH = Terphenyl-d14
PHL = Phenol-d5
2FP = 2-Fluorophenol
TEP = 2,4,6-Tribromophenol

QC LIMITS

{10-109}

{ 4-130 }

{18-127}

{ 1- 99}

(8- 98)

{ 5-116 }

* Value outside of required OC limit

Comments: _____

SOIL SEMIVOLATILE SURROGATE RECOVERY

Client Name: E6+6 9/01/58

Date Analyzed: 2/12/91

Analyst: DVM

Data Reviewed By: S. J.

Procedure: TCLP - Semi-automated

Reference Page: _____

CEP Surrogate Standard Log Number: _____

[illegible]

Surrogate Compound Recovery: 0 out of 66 outside limits

NBZ = Nitrobenzene-d5
 FBP = 2-Fluorobiphenyl
 TPH = Terphenyl-d14
 PHL = Phenol-d5
 2FP = 2-Fluorophenol
 TBP = 2,4,6-Tribromophenol

QC LIMITS

{ 10-109 }

{ 4-130 }

(18-127)

{ 1- 99 }

(8- 98)

(5-116)

* Value outside of required QC limit

Comments: _____

Bar
4/24/91

41 42

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EG+L Contract: 910180-01 01 103

Lab Code: 2-8-91 Case No.: DIA SAS No.: 18000000 SDG No.:

Date: Analyst

Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS REC #	QC LIMIT REC.
Phenol	100	0	51	57	12-11
2-Chlorophenol	100	0	90	90	27-12
1,4-Dichlorobenzene	100	0	21	21	36-9
N-Nitroso-di-n-prop. (1)	100	0	50	50	41-11
1,2,4-Trichlorobenzene	100	0	24	24	39-9
4-Chloro-3-methylphenol	100	0	78	78	23-9
Acenaphthene	100	0	44	44	46-11
4-Nitrophenol	100	0	25	25	10-8
2,4-Dinitrotoluene	100	0	42	42	24-9
Pentachlorophenol	100	0	15	15	9-10
Pyrene	100	0	40	40	26-12

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD REC #	RPD #	QC LIMITS RPD REC.
Phenol	100	33	33	42	42 12-110
2-Chlorophenol	100	64	64	34	40 27-123
1,4-Dichlorobenzene	100	37	37	35	28 36-97
N-Nitroso-di-n-prop. (1)	100	70	70	33	38 41-116
1,2,4-Trichlorobenzene	100	39	35	47	28 39-98
4-Chloro-3-methylphenol	100	55	55	35	42 23-97
Acenaphthene	100	61	61	32	31 46-118
4-Nitrophenol	100	13	13	86	50 10-80
2,4-Dinitrotoluene	100	60	66	44	38 24-96
Pentachlorophenol	100	10	12	40	50 9-103
Pyrene	100	Dr 89 44	Dr 89 44	10	31 26-127

(1) N-Nitroso-di-n-propylamine

* Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 5 out of 11 outside limits

Spike Recovery: 3 out of 22 outside limits

COMMENTS: Apparent matrix interference - sample was re-analyzed.

QA APPROVED

BY: [Signature]

DATE: 2/12/91

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E646 Contract: 9/2158-43 91 104
 Lab code: 28-71 Case No.: 4-16715 DM SDG No.: 7/11/97
 Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS # REC #	QC LIMIT REC
Phenol	100	0	32	32	12-1
2-Chlorophenol	100	0	61	61	27-1
1,4-Dichlorobenzene	100	0	42	42	36-1
N-Nitroso-di-n-prop. (1)	100	0	62	62	41-1
1,2,4-Trichlorobenzene	100	0	45	45	39-1
4-Chloro-3-methylphenol	100	0	49	49	23-1
Acenaphthene	100	0	54	54	46-1
4-Nitrophenol	100	0	11	11	10-1
2,4-Dinitrotoluene	100	0	50	50	24-1
Pentachlorophenol	100	0	1	1	9-1
Pyrene	100	0	75	75	26-1

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD # REC #	# RPD #	QC LIMITS RPD REC
Phenol	100	30	30	6	42 12-1
2-Chlorophenol	100	61	61	0	40 27-1
1,4-Dichlorobenzene	100	32	32	27	28 36-1
N-Nitroso-di-n-prop. (1)	100	64	64	3	38 41-1
1,2,4-Trichlorobenzene	100	34	34	28	28 39-1
4-Chloro-3-methylphenol	100	49	49	0	42 23-1
Acenaphthene	100	57	57	5	31 46-1
4-Nitrophenol	100	10	10	9.5	50 10-1
2,4-Dinitrotoluene	100	53	53	6	38 24-1
Pentachlorophenol	100	1	1	0	50 9-1
Pyrene	100	112	112	70	31 26-1

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 1 out of 11 outside limits
 Spike Recovery: 4 out of 22 outside limits

QAA APPROVED
 BY: [Signature]
 DATE: 2/12/97

COMMENTS:

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E610 Contract: 9101580-14 91 105
Lab Code: 2-12-91 Case No.: 211 SAS No.: Approved SDG No.:
Date: Analyst:
Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC.
Phenol	100	0	28	28	12-110
2-Chlorophenol	100	0	60	60	27-123
1,4-Dichlorobenzene	100	0	42	42	36- 97
N-Nitroso-di-n-prop. (1)	100	0	63	63	41-116
1,2,4-Trichlorobenzene	100	0	43	43	39- 98
4-Chloro-3-methylphenol	100	0	50	50	23- 97
Acenaphthene	100	0	67	67	46-118
4-Nitrophenol	100	0	12	12	10- 80
2,4-Dinitrotoluene	100	0	64	64	24- 96
Pentachlorophenol	100	0	10	10	9-103
Pyrene	100	0	89	89	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	100	28	28	0	42 12-110
2-Chlorophenol	100	50	50	18	40 27-123
1,4-Dichlorobenzene	100	38	38	10	28 36- 97
N-Nitroso-di-n-prop. (1)	100	62	62	1.6	38 41-116
1,2,4-Trichlorobenzene	100	39	39	9.8	28 39- 98
4-Chloro-3-methylphenol	100	45	45	10.5	42 23- 97
Acenaphthene	100	64	64	4.6	31 46-118
4-Nitrophenol	100	14	14	15.4	50 10- 80
2,4-Dinitrotoluene	100	56	56	13	38 24- 96
Pentachlorophenol	100	13	13	26	50 9-103
Pyrene	100	75	75	17	31 26-127

1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
Values outside of QC limits

D: 0 out of 10 outside limits
like Recovery: 0 out of 11 outside limits

Q. A. APPROVED

BY: [Signature]

DATE: 02/21/91

REMARKS:

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Name: EG-10 Contract: 9101580-33
 Date: 2-12-91 Analyst: DVM Approved: Q. A. SDG No.: 91 103
 Case No.: 2-12-91 SAS No.:
 Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMIT REC.
Phenol	100	66.	96	30	12-110
Chlorophenol	100	129	161	32	27-123
4-Dichlorobenzene	100	6	38	38	36- 97
Nitroso-di-n-prop. (1)	100	0	88	88	41-116
2,4-Trichlorobenzene	100	0	36	36	39- 98
Chloro-3-methylphenol	100	121	168	47	23- 97
Naphthalene	100	0	56	56	46-118
Nitrophenol	100	10	33	23	10- 80
4-Dinitrotoluene	100	10	76	56	24- 96
2,4-Dichlorophenol	100	71	142	71	9-103
2,6-Dichlorophenol	100	0	97	97	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMIT RPD REC.
Phenol	100	84 105	39	26	42 12-110
Chlorophenol	100	177	48	40	40 27-123
4-Dichlorobenzene	100	40	40	40 2.1	28 36- 97
Nitroso-di-n-prop. (1)	100	100	100	100 13	38 41-116
2,4-Trichlorobenzene	100	34	34	9.7	28 39- 98
Chloro-3-methylphenol	100	178	57	19	42 23- 97
Naphthalene	100	59	59	57 5.4	31 46-118
Nitrophenol	100	36	36	8.7	50 10- 80
4-Dinitrotoluene	100	75	75	75 13	38 24- 96
2,4-Dichlorophenol	100	67 167	96	23	50 9-103
2,6-Dichlorophenol	100	97	97	97 0	31 26-127

N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 values outside of QC limits

0 out of 11 outside limits
 % Recovery: 2 out of 22 outside limits

Q. A. APPROVED

BY: [Signature]
 DATE: 02/21/91

REMARKS:

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EL-6

Contract: 9101580-36

91 110

Date: 2-14-91 Analyst: Dum

Approval:

SAS No.:

SDG No.:

Revised 2-20-91

Matrix Spike - EPA Sample No.:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC.
Phenol	100	0	22	22	12-11
2-Chlorophenol	100	0	46	46	27-12
1,4-Dichlorobenzene	100	0	50	50	36-9
N-Nitroso-di-n-prop. (1)	100	0	78	78	41-11
1,2,4-Trichlorobenzene	100	0	57	57	39-9
4-Chloro-3-methylphenol	100	0	49	49	23-9
Acenaphthene	100	0	57	57	46-11
4-Nitrophenol	100	0	20	20	10-8
2,4-Dinitrotoluene	100	0	60	60	24-9
Pentachlorophenol	100	0	14	14	9-10
Pyrene	100	0	101	101	26-11

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	100	24	24	8.7	42 12-11
2-Chlorophenol	100	49	49	6.3	40 27-12
1,4-Dichlorobenzene	100	52	52	3.5	28 36-9
N-Nitroso-di-n-prop. (1)	100	55 74	74	5.2	38 41-11
1,2,4-Trichlorobenzene	100	57	57	0	28 39-9
4-Chloro-3-methylphenol	100	56	56	13.3	42 23-9
Acenaphthene	100	58	58	1.7	31 46-11
4-Nitrophenol	100	16	16	22	50 10-8
2,4-Dinitrotoluene	100	64	64	6.5	38 24-9
Pentachlorophenol	100	17	17	19	50 9-10
Pyrene	100	79	79	2	31 26-12

(1) N-Nitroso-di-n-propylamine

* Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS:

Q. A. APPROVED

Signature: [Signature]

DATE: 02/21/91

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101580-C1A	2-24-91	2CLP From sol's	100ml 2CLP sample	95%	8087 Surrog.	150ml CH ₂ Cl ₂	15ml H ₂ O	07602 CEP# for surrogate	100ul	1ml
EG+G Comments										
9101580-C2A										
EG+G Comments										
9101580-C3A										
EG+G Comments										
9101580-C4A										
EG+G Comments										
9101580-C5A										
EG+G Comments										
9101580-C6A										
EG+G Comments										
9101580-C7A										
EG+G Comments										
MS 9101580-C1A								CEP Spike #07605	100ul	
EG+G Comments										
MS 9101580-C2A										
EG+G Comments										
Blank										
EG+G Comments										

Comments

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101530-09A	2/2/91	TCLP Extract from soil	100ml Extract	~170	8000/Sony	180ml EtH2O	15ml H ₂ O	07002	100ml	1M
EG+G Comments										
9101530-09A										
EG+G Comments										
9101530-10A										
EG+G Comments										
9101530-11A										
EG+G Comments										
9101530-12A										
EG+G Comments										
9101530-13A										
EG+G Comments										
9101530-15A										
EG+G Comments										
9101530-16A										
EG+G Comments										
9101530-13A								07805	100ml	
MS										
EG+G Comments										
9101530-13A										
MSD										
EG+G Comments										
Blank		TCLP								
EG+G Comments										

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101580-14A EG+G Comments	2/5/91	TCLP (from 30113) 100ml sample 900 ml TCLP	40%	ES22/ surrog.	150 ml.	1 ml. hex.	Pest Surr. R07602	100 ml	1 ml.
9101580-17A EG+G Comments									
9101580-18A EG+G Comments									
9101580-19A EG+G Comments									
9101580-20A EG+G Comments									
9101580-21A EG+G Comments									
9101580-22A EG+G Comments									
9101580-23A EG+G Comments									
MS-9101580-14A EG+G Comments							Pest Spike		
MSD-9101580-14A EG+G Comments							CT565 100ml		
Blank, EG+G Comments									

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
910550-24A	2-9-11	TCLP Exhst from soil	100ml Extract	~0%	2000 Surr	150ml CH ₂ Cl ₂	15ml Hex	0702	100ml	1ml
EG+G Comments										
910550-25A										
EG+G Comments										
910550-26A										
EG+G Comments										
910550-27A										
EG+G Comments										
910550-28A										
EG+G Comments										
910550-29A										
EG+G Comments										
910550-30A										
EG+G Comments										
910550-33A										
EG+G Comments										
910550-33A								0705	100ml	
MS								sp. Res		
EG+G Comments										
910550-33A										
MS										
EG+G Comments										
Blank		TCLP #1								
EG+G Comments										

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101580-31	2/10/91	TECP (FROM SOILS)	100ML EXTRACT 900ML TECP	0%	8000/SURROG.	100 ML	15ML Hex	D# 07602	100ul	1ML
EB 46 Comments										
9101580-32										
EB 46 Comments										
9101580-34										
EB 46 Comments										
9101580-35										
EB 46 Comments										
9101580-36										
EB 46 Comments										
9101580-37										
EB 46 Comments										
9101580-38										
EB 46 Comments										
9101580-39										
EB 46 Comments										
MS 9101580-36										
EB 46 Comments										
MSD 9101580-36										
EB 46 Comments										
BLANK										
EB 46 Comments										

Spike
Test
ID#

07665
100
ul

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger
blank every batch

CEP No.	Date	Matrix Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101550-01A	2-2-91	TCLP from soil	100ml TCLP Sample 900 ml TCLP solution	MS	500 150ml Hex chlorom	1ml Hex	none	none	1ml
EG+G Comments									
9101550-02A									
EG+G Comments									
9101550-03A									
EG+G Comments									
9101550-04A									
EG+G Comments									
9101550-05A									
EG+G Comments									
9101550-06A									
EG+G Comments									
9101550-07A									
EG+G Comments									
9101550-01A									
MS EG+G Comments									
9101550-01A									
MSD EG+G Comments									
BLANK									
EG+G Comments									

Spike: Ranthree
Herb spike in
methanol
2,4 D - 500 ug/l
silver - 500 ug/l
used 100 ml
on each

Comments

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger,
blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
1101550-03A	2.4.91	TCLP Extract from soil samples	100ml Extract 600ml TCLP	~95%	Std HPLC	100ml Chloroform	1ml/100ml	none	none	1ml
EG+G Comments										
1101550-04A										
EG+G Comments										
9101550-10A										
EG+G Comments										
9101550-11A										
EG+G Comments										
9101550-12A										
EG+G Comments										
9101550-13A										
EG+G Comments										
9101550-15A										
EG+G Comments										
9101550-16A										
EG+G Comments										
9101550-13A MS										Spike: 2.4D-500ug/ml 5.14V-500ug/ml in methanol added 100ml on MS and 100ml on MSD
EG+G Comments										
9101550-13A MSD										
EG+G Comments										
Blank Blank EG+G Comments										

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is large
blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Fin. Con.
9101550-19A	2.6.91	TZLP Extract from S-1	100ml Extract 400ml TZLP	~10%	std. Herb	100ml chloroform	1ml Hex	none	none	1ml
EG+G Comments										
9101550-19A										
EG+G Comments										
9101550-18A										
EG+G Comments										
9101550-19A										
EG+G Comments										
9101550-20A										
EG+G Comments										
9101550-21A										
EG+G Comments										
9101550-22A										
EG+G Comments										
9101550-23A										
EG+G Comments										
MS 9101550-19A										
EG+G Comments										
MSD EG+G 9101550-19A										
Comments										
Blank										
EG+G Comments										

Spike:
24 D-580ug/ml
SIXK-50ug/ml
100ug/ml
used 100ul
on MS +
100ul on MSD

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger, blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Final Conc
9101580-24A EG+G Comments	2/8/91	TCLP (from soil)	100ml sample 900ml TCLP	~0%	st. herb.	180 ml.	1 ml. hex.		AEB 2/8/91 1000ml	1 ml.
9101580-25A EG+G Comments	2/8/91									
9101580-26A EG+G Comments	2/8/91									
9101580-27A EG+G Comments	2/8/91									
9101580-28A EG+G Comments	2/8/91									
9101580-29A EG+G Comments	2/8/91									
9101580-30A EG+G Comments	2/8/91									
9101580-33A EG+G Comments	2/8/91									
MS-9101580-33A EG+G Comments	2/8/91							Herb Spks in # (none)		
MSD-9101580-33A EG+G Comments	2/8/91									
Blank EG+G Comments	2/8/91									

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is larger
blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.O.	Surr Vol	Fina Conc
9101580-31A	2-11-91	soil TCLP Extract	100ml Extract 1000ml TCLP#1 * 100x dilution		std herb	100ml chloroform	inert	none	NA	W.
EG+G Comments										
9101580-32A										
EG+G Comments										
9101580-34A										
EG+G Comments										
9101580-35A										
EG+G Comments										
9101580-36A										
EG+G Comments										
9101580-37A										
EG+G Comments										
9101580-38A										
EG+G Comments										
9101580-39A										
EG+G Comments										
9101580-36A MS										
EG+G Comments										
9101580-36A MSD										
EG+G Comments										
Blank										
EG+G Comments										

Spike: 100ml
std herb spike in ml.
2,4 D - 500 µg/ml
silver - 50 µg/ml

00071

CEP Sample No.: EG+G METHOD B1K, File ID: CFEB 56 | DFEB 35Date Analyzed: 2-4-91 | 2-4-91 Analyst: JT | JTDilution Factor: 10x | 10x Amount Analyzed: 1000 ml | 1000 mlReviewed By: D.M.

Parameter	Reg Level mg/L	Detection Limit mg/L	Results mg/L
Lindane	0.06	< 0.0001	
Heptachlor	0.001	< 0.0001	
Endrin	0.003	< 0.0001	
Methoxychlor	1.4	< 0.0005	
Chlordane	0.03	< 0.0005	
Toxaphene	0.07	< 0.002	
2,4-D	1.4	< 0.01	
Alvex	0.14	< 0.001	

CEP Sample No.: EG+G METHOD B1K, File ID: CFEB 104 | DFEB 44Date Analyzed: 2-5-91 | 2-5-91 Analyst: JT | JTDilution Factor: 10x | 50x Amount Analyzed: 1000 ml | 1000 mlReviewed By: DVA

Parameter	Reg Level mg/L	Detection Limit mg/L	Results mg/L
Lindane	0.06	< 0.0001	
Heptachlor	0.001	< 0.0001	
Endrin	0.003	< 0.0001	
Methoxychlor	1.4	< 0.0005	
Chlordane	0.03	< 0.0005	
Toxaphene	0.07	< 0.002	
2,4-D	1.4	< 0.01	
Alvex	0.14	< 0.001	

Q. A. APPROVED

RV

90072

GC Methods -- TCLP Pesticides & Herbicides

Page No.: _____

CEP Sample No.: EG+G Method BIK File ID: CFEB 102 | DFEB 113

Date Analyzed: 2-12-91 | 2-12-91 Analyst: JT | JT

Dilution Factor: 10X | 10X Amount Analyzed: 1000 ml | 1000 ml

Reviewed By: DM

Parameter	Reg Level mg/L	Detection Limit mg/L	Results mg/L
Lindane	0.06	< 0.0001	_____
Heptachlor	0.001	< 0.0001	_____
Endrin	0.003	< 0.0001	_____
Methoxychlor	1.4	< 0.0005	_____
Chlordane	0.03	< 0.0005	_____
Toxaphene	0.07	< 0.002	_____
2,4-D	1.4	< 0.01	_____
Silvex	0.14	< 0.001	_____

CEP Sample No.: EG+G Method BIK File ID: CFEB 115 | DFEB 127

Date Analyzed: 2-13-91 | 2-13-91 Analyst: JT | JT

Dilution Factor: 10X | 10X Amount Analyzed: 1000 ml | 1000 ml

Reviewed By: DM

Parameter	Reg Level mg/L	Detection Limit mg/L	Results mg/L
Lindane	0.06	< 0.0001	_____
Heptachlor	0.001	< 0.0001	_____
Endrin	0.003	< 0.0001	_____
Methoxychlor	1.4	< 0.0005	_____
Chlordane	0.03	< 0.0005	_____
Toxaphene	0.07	< 0.002	_____
2,4-D	1.4	< 0.01	_____
Silvex	0.14	< 0.001	_____

Q. A. APPROVED
BY: [Signature]

90073

CEP Sample No.: EG+G METHOD B/K File ID: DFEB 81 | DFEB 63

Date Analyzed: 2-8-91 | 2-7-91 Analyst: JT | JT

Dilution Factor: 1 | 10x Amount Analyzed: 1000 ml | 1000 ml

Reviewed By: DVM

Parameter	Reg Level mg/L	Detection Limit mg/L	Results mg/L
Lindane	0.06	< 0.0001	
Heptachlor	0.001	< 0.0001	
Endrin	0.003	< 0.0001	
Methoxychlor	1.4	< 0.0005	
Chlordane	0.03	< 0.0005	
Toxaphene	0.07	< 0.002	
2,4-D	1.4	< 0.01	
Silvex	0.14	< 0.001	

Q. A. APPROVED
BY [Signature]
DATE 4/24/91

CEP Sample No.: _____ File ID: _____

Date Analyzed: _____ Analyst: _____

Dilution Factor: _____ Amount Analyzed: _____

Reviewed By: _____

Parameter	Reg Level mg/L	Detection Limit mg/L	Results mg/L
Lindane	0.06	0.0001	
Heptachlor	0.001	0.0001	
Endrin	0.003	0.0001	
Methoxychlor	1.4	0.0005	
Chlordane	0.03	0.0005	
Toxaphene	0.07	0.002	
2,4-D	1.4	0.01	
Silvex	0.14	0.001	

QA/QC REPORT

PROCEDURE: TCLP PESTICIDES & HERBICIDES

Date of Analysis: 2-4-91
 Analyst: JT
 Matrix: Soil
 Number of Samples Analyzed: Seven
 Reference Page: _____
 Date: 2-6-91
 Supervisor: Dun

CEP Sample Numbers On This Report

9101580-01A -06A
-02A -07A
-03A
-04A
-05A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9101580-01A

Compound	Original Result ug/L	Spike Amount ug/L	MS Result ug/L	MS % Recov	MSD Result ug/L	MSD % Recov	RPD Relative % Diff	Interim QC Limits % Recov	RPD
Lindane	ND	0.20	0.122	61.0	0.121	60.5	0.0	55-135	25
Heptachlor	ND	0.20	0.126	63.0	0.136	68.0	7.6	40-131	25
Endrin	ND	0.50	0.390	78.0	0.374	74.8	12.43	63-124	25
2,4-D	ND	50.0	35.93	71.9	30.37	60.7	16.77	36-144	25
Silvex	ND	5.0	3.95	79.0	2.55	51.0	43.1	13-161	25

Spike % Recovery: 0 out of 10 outside limits RPD: 1 out of 5 outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear O = Quadratic C = Cubic

Compound	Curve Type Used	Retention Time	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
Lindane	L O C	14.31	0.01	448432	0.05	1539210	0.20	3453553
Heptachlor	L O C	16.65	0.01	466411	0.05	1641307	0.20	4181414
Endrin	L O C	26.23	0.01	317219	0.05	1327732	0.20	308116
Methoxychlor	L O C	32.80	0.04	355384	0.20	1326960	0.80	3320798
Chlordane	L O C	RET	0.20	997072				
Toxaphene	L O C	RET	0.20	21107				
2,4-D	L O C	14.24	0.05	521563	0.20	1809233	1.0	6696063
Silvex	L O C	15.40	0.05	3489922	0.20	10992560	1.0	26690308

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
Lindane	0.20	0.165	17.5	25
Heptachlor	0.20	0.160	20.0	25
Endrin	0.20	0.142	29.0	25
Methoxychlor	0.80	0.435	45.6	25
Chlordane	—	—	—	25
Toxaphene	—	—	—	25
2,4-D	0.20	0.176	12.0	25
Silvex	0.20	0.164	18.0	25

Reviewed and Approved By: AR

099

Date: 2/13/91

QA/QC REPORT

PROCEDURE: TCLP PESTICIDES & HERBICIDES

Date of Analysis: 2-5-91
 Analyst: JT
 Matrix: Soil
 Number of Samples Analyzed: Eight
 Reference Page: _____
 Date: 2-6-91
 Supervisor: DCR

CEP Sample Numbers On This Report

9101580-08A	-13A
-09A	-15A
-10A	-16A
-11A	
-12A	

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9101580-13A

Compound	Original Result ug/L	Spike Amount ug/L	MS Result ug/L	MS % Recov	MSD Result ug/L	MSD % Recov	RPD Relative % Diff	Interim QC Limits % Recov	RPD
Lindane	ND	0.20	0.155	77.5	0.133	66.5	15.3	55-135	25
Heptachlor	ND	0.20	0.120	60.0	0.084	42.0	35.3	40-131	25
Endrin	ND	0.50	0.340	68.0	0.372	74.4	8.92	63-124	25
2,4-D	ND	50.0	28.30	56.6	32.25	64.5	18.0	36-144	25
Silvex	ND	5.0	3.53	70.6	3.67	73.4	3.88	13-161	25

Spike % Recovery: 0 out of 10 outside limits RPD: 1 out of 5 outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear Q = Quadratic C = Cubic

Compound	Curve Type Used	Retention Time	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
Lindane	L Q C	14.31	0.01	352674	0.05	1274758	0.10	2047327
Heptachlor	L Q C	14.65	0.01	372343	0.05	1376341	0.10	2264036
Endrin	L Q C	26.23	0.01	391034	0.05	1176966	0.10	2031021
Methoxychlor	L Q C	22.80	0.04	315303	0.20	1127141	0.40	1531322
Chlordane	L Q C	MRT	0.20	997078	—	—	—	—
Toxaphene	L Q C	MRT	0.20	311107	—	—	—	—
2,4-D	L Q C	14.24	0.05	581569	0.20	1809233	1.0	6696063
Silvex	L Q C	15.40	0.05	3489482	0.20	10992560	1.0	22690308

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
Lindane	—	—	—	25
Heptachlor	—	—	—	25
Endrin	—	—	—	25
Methoxychlor	—	—	—	25
Chlordane	—	—	—	25
Toxaphene	—	—	—	25
2,4-D	0.20	0.240	20.0	25
Silvex	0.20	0.190	5.0	25

Generated new calibration curve with this group of samples

Reviewed and Approved by: JD

100

Date: 2/13/91 282

QA/QC REPORT

PROCEDURE: TCLP PESTICIDES & HERBICIDES

Date of Analysis: 2-8-91
 Analyst: ST
 Matrix: Soil
 Number of Samples Analyzed: Eight
 Reference Page: _____
 Date: 2-13-91
 Supervisor: DM

CEP Sample Numbers On This Report

9101540-14A	21-A
17A	22-A
18A	23-A
19A	
20A	

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9101540-14A

Compound	Original Result ug/L	Spike Amount ug/L	MS Result ug/L	MS % Recov	MSD Result ug/L	MSD % Recov	RPD Relative % Diff	Interim QC Limits % Recov	RPD
Lindane	ND	0.20	0.099	49.5	0.120	60.0	19.1	55-135	25
Heptachlor	ND	0.20	0.085	42.5	0.098	49.0	14.1	40-131	25
Endrin	ND	0.50	0.233	46.6	0.300	60.0	25.1	63-124	25
2,4-D	ND	50.0	30.00	60.0	29.10	58.2	3.0	36-144	25
Silvex	ND	5.0	4.27	85.4	4.34	86.8	1.6	13-161	25

Spike % Recovery: 3 out of 10 outside limitsRPD: 0 out of 5 outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear Q = Quadratic C = Cubic

Compound	Curve Type Used	Retention Time	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
Lindane	L Q C	14.31	0.01	448432	0.05	1539010	0.20	3483553
Heptachlor	L Q C	16.65	0.01	466411	0.05	1149307	0.20	4181414
Endrin	L Q C	26.23	0.01	317219	0.05	1327732	0.20	3508116
Methoxychlor	L Q C	32.80	0.04	355384	0.20	1326960	0.80	3320798
Chlordane	L Q C	MRT	0.20	997078				
Toxaphene	L Q C	MRT	0.20	311107				
2,4-D	L Q C	14.24	0.05	581568	0.20	1809233	1.0	6696063
Silvex	L Q C	15.40	0.05	3489980	0.20	10992540	1.0	26690308

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
Lindane	0.02	0.019	5.0	25
Heptachlor	0.02	0.019	5.0	25
Endrin	0.02	0.021	5.0	25
Methoxychlor	0.08	0.075	5.0	25
Chlordane	—	—	—	25
Toxaphene	—	—	—	25
2,4-D	0.05	0.060	20.0	25
Silvex	0.05	0.050	0.0	25

Reviewed and Approved By: ST

101

Date: 2/13/91

25

QA/QC REPORT

PROCEDURE: TCLP PESTICIDES & HERBICIDES

Date of Analysis: 2-12-91

CEP Sample Numbers On This Report

Analyst: ST9101580-24A29AMatrix: Soil- 25A30ANumber of Samples Analyzed: Eight- 26A33A

Reference Page: _____

- 27ADate: 2-21-91- 28ASupervisor: Dir

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9101580-33A

Compound	Original Result ug/L	Spike Amount ug/L	MS Result ug/L	MS % Recov	MSD Result ug/L	MSD % Recov	RPD Relative Diff	Interim QC Limits
Lindane	ND	0.20	0.130	65.0	0.140	70.0	20.7	55-135
Heptachlor	ND	0.20	0.170	85.0	0.200	100.0	16.2	40-131
Endrin	ND	0.50	0.470	94.0	0.598	119.6	21.9	63-124
2,4-D	ND	50.0	30.83	61.7	28.98	57.9	2.8	36-144
Silver	ND	5.0	4.43	88.6	4.41	88.2	0.45	13-161

Spike & Recovery: 0 out of 10 outside limits RPD: 0 out of 5 outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear Q = Quadratic C = Cubic

Compound	Curve Type Used	Retention Time	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
Lindane	L Q C	14.50	0.01	3939867	0.05	11066099	0.10	15381735
Heptachlor	L Q C	16.87	0.01	2776570	0.05	12440660	0.10	18767197
Endrin	L Q C	26.55	0.01	1621624	0.05	9788594	0.10	18971052
Methoxychlor	L Q C	33.27	0.04	2060719	0.20	10198723	0.40	15558355
Chlordane	L Q C	70.87	0.05	1149836	—	—	—	—
Toxaphene	L Q C	70.87	0.20	15455325	—	—	—	—
2,4-D	L Q C	14.22	0.05	439103	0.20	1490869	1.0	4838250
Silver	L Q C	15.38	0.05	1980850	0.20	6352244	1.0	14660219

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
Lindane	0.01	0.008	20.0	25
Heptachlor	0.01	0.008	20.0	25
Endrin	0.01	0.008	20.0	25
Methoxychlor	0.04	0.032	20.0	25
Chlordane	—	—	—	25
Toxaphene	—	—	—	25
2,4-D	0.10	0.093	7.0	25
Silver	0.10	0.100	0.0	25

Prepared and Approved By: Christy Baker

102

Date: 2/22/91

284

QA/QC REPORT

PROCEDURE: TOLP PESTICIDES & HERBICIDES

Date of Analysis: 2-12-91

CEP Sample Numbers On This Report

Analyst: ST9101580-24AMatrix: 2,4-D9101580-25ANumber of Samples Analyzed: 2,4-D9101580-26A

Reference Page: _____

9101580-27ADate: 2-21-919101580-28ASupervisor: D9101580-28A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9101580-33A

Compound	Original Result ug/L	Spike Amount ug/L	MS Result ug/L	MS % Recov	MSD Result ug/L	MSD % Recov	RPD Relative % Diff	Interim QC Limits
Lindane	ND	0.20	Results for later today		MS 4MSD will follow			55-135
Heptachlor	ND	0.20						40-131
Endrin	ND	0.50						63-124
2,4-D	ND	50.0	30.83	61.7	29.98	60.0	2.8	36-144
Silvex	ND	5.0	4.43	88.6	4.41	88.2	0.45	13-161

Spike % Recovery: _____ out of _____ outside limits RPD: _____ out of _____ outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = linear Q = Quadratic C = Cubic

Compound	Curve Type	Retention Time	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
Lindane	L Q C	14.50	0.01	3091867	0.05	11016049	0.10	15381935
Heptachlor	L Q C	16.87	0.01	2476570	0.05	12492060	0.10	18927197
Endrin	L Q C	21.55	0.01	1821626	0.05	9788596	0.10	18496058
Methoxychlor	L Q C	33.27	0.04	8902719	0.20	10195723	0.40	15558355
Chlordane	L Q C	10.87	0.05	11194936				
Toxaphene	L Q C	10.87	0.20	1585335				
2,4-D	L Q C	14.28	0.05	434603	0.20	1490864	1.0	4738250
Silvex	L Q C	15.38	0.05	1980350	0.20	6359249	1.0	14860014

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
Lindane	0.01	0.003	20.0	25
Heptachlor	0.01	0.008	20.0	25
Endrin	0.01	0.008	20.0	25
Methoxychlor	0.04	0.032	20.0	25
Chlordane	—	—	—	25
Toxaphene	—	—	—	25
2,4-D	0.10	0.093	7.0	25
Silvex	0.10	0.100	0.0	25

Reviewed and Approved By: Y. H. Hing

103

Date: 02/21/91

QA/QC REPORT

PROCEDURE: TCLP PESTICIDES & HERBICIDES

Date of Analysis: 2-13-91
 Analyst: ST
 Matrix: Soil
 Number of Samples Analyzed: 8
 Reference Page: _____
 Date: 2-21-91
 Supervisor: Dur

CEP Sample Numbers On This Report

9101580-31A 9101580-37A
9101580-32A 9101580-38A
9101580-34A 9101580-39A
9101580-35A
9101580-36A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: 9101580-36A

Compound	Original Result ug/L	Spike Amount ug/L	MS Result ug/L	MS % Recov	MSD Result ug/L	MSD % Recov	RPD Relative % Diff	Interim QC Limits % Recov	RPD
Lindane	ND	0.20	0.185	92.5	0.150	75.0	20.8	55-135	25
Heptachlor	ND	0.20	0.220	110.0	0.180	90.0	20.0	40-131	25
Endrin	ND	0.50	0.444	88.8	0.574	115.8	10.6	63-124	25
2,4-D	ND	50.0	24.54	49.08	25.12	50.24	2.33	36-144	25
Silvex	ND	5.0	3.85	77.0	4.38	87.6	12.9	13-161	25

Spike % Recovery: 0 out of 10 outside limitsRPD: 0 out of 5 outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear Q = Quadratic C = Cubic

Compound	Curve Type Used	Retention Time	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
Lindane	L Q C	14.50	0.01	3099867	0.05	11066099	0.10	15981935
Heptachlor	L Q C	16.37	0.01	2976570	0.05	12499060	0.10	18967197
Endrin	L Q C	26.55	0.01	1821621	0.05	9781596	0.10	18496052
Methoxychlor	L Q C	33.27	0.04	2010719	0.20	10198573	0.40	15558355
Chlordane	L Q C	MRT	0.05	11149931				
Toxaphene	L Q C	MRT	0.20	15455375				
2,4-D	L Q C	14.22	0.05	434603	0.20	1490864	1.0	4838750
Silvex	L Q C	15.38	0.05	1980250	0.20	6359244	1.0	14860014

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
Lindane	0.01	0.008	20.0	25
Heptachlor	0.01	0.008	20.0	25
Endrin	0.01	0.008	20.0	25
Methoxychlor	0.04	0.032	20.0	25
Chlordane	—	—	—	25
Toxaphene	—	—	—	25
2,4-D	0.10	0.093	7.0	25
Silvex	0.10	0.100	0.0	25

Reviewed and Approved By: [Signature]

10d

Date: 2/22/91

286

Pesticides/Herbicides/PCBs

Note: MS/MSD at 1 per 20 or for each matrix type whichever is large blank every batch

CEP No.	Date	Matrix	Vol/Wt	% Solids	Ext. Method	Solv Vol	Clean Up	Surr I.D.	Surr Vol	Fin. Comp
4012348 MS	1/17/91	oil	100 ml		Florisil + Silica	10 ml isooctane	1 ml isooctane			1 ml
Comments	SEG - Redo				40 ml + 50 mg/ml 1254 PCB Spike					
4012348 MSD	1/17/91	oil	100 ml							
Comments	SEG - Redo									
9010580-05A	2/1/91	soil	30.0g	~95%	Sonicate	180 ml	1 ml hex.			1 ml
Comments										
9010580-37A	2/1/91			~90%						
Comments										
9010580-38A	2/1/91									
Comments										
9010580-39A	2/1/91									
Comments										
Blank	2/1/91									
Comments										
9010581-01A	2/1/91	oil	0.5g	~100%						
Comments										
MS-9010581-01A	2/1/91									
Comments										
MSD-9010581-01A	2/1/91									
Comments										
Blank	2/1/91									
Comments										

QA/QC REPORT

PROCEDURE: PCBs IN SOIL

Date of Analysis: 2-15-91
 Analyst: 57
 Number of Samples Analyzed: 5
 Reference Page: 90020, 90021
 Date: 2-18-91
 Supervisor: DLF

CEP Sample Numbers On This Report

9101580-5A
9101580-37A
9101580-38A
9101580-39A

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

CEP Sample Number Used For MS/MSD: _____

Compound	Original Result ug/kg	Spike Amount ug/kg	MS Result ug/kg	MS % Recov	MSD Result ug/kg	MSD % Recov	RPD Relative % Diff	Interim QC Limits % Recov	RPD
PCB 1242	No MS or MSD was run on these samples as they were not scheduled for MS or MSD							34-124	25
PCB 1248								49-121	25
PCB 1254								48-114	25
PCB 1260								64-124	25

Spike % Recovery: _____ out of _____ outside limits RPD: _____ out of _____ outside limits

INITIAL CALIBRATION DATA

Curve Type Code: L = Linear Q = Quadratic C = Cubic

Compound	Curve Type Used	Low Conc ug/ml	Area	Mid Conc ug/ml	Area	High Conc ug/ml	Area
PCB 1016	L Q C						
PCB 1221	L Q C						
PCB 1232	L Q C						
PCB 1242	L Q C						
PCB 1248	L Q C						
PCB 1254	L Q C	0.20	2051009	0.50	5157148	1.0	11779500
PCB 1260	L Q C						

CALIBRATION CROSS CHECK OR CONTINUING CALIBRATION CHECK DATA

Compound	True Conc ug/ml	Calc Conc ug/ml	% Diff	QC Limits % Diff
PCB 1016				25
PCB 1221				25
PCB 1232				25
PCB 1242				25
PCB 1248				25
PCB 1254	0.50	0.462	7.6	25
PCB 1260				25

Reviewed and Approved By: Y. WilliamsDate: 02/18/91