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Los Alamos National Laboratory
Environmental Restoration

A Department of Energy environmental cleanup program

QUARTERLY TECHNICAL REPORT
APRIL-JUNE 1994

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August 18, 1994

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LIST OF ACRONYMS AND ABBREVIATIONS

ADS	Activity data sheet
CST	Chemical Science and Technology (Division)
CST-9	Environmental Chemistry Group
DOE	US Department of Energy
ESA	Engineering Sciences and Applications (Division)
ESA-4	Technical Support Group
ESH	Environment, Safety, and Health (Division)
ESH-8	Environmental Protection Group
EPA	US Environmental Protection Agency
ER	Environmental restoration
FY	Fiscal year
HSWA	Hazardous and Solid Waste Amendments
LANL	Los Alamos National Laboratory
LOD	Limit of detection
MDA	Material disposal area
MSL	Mean sea level
NMED	New Mexico Environment Department
NPDES	National pollutant discharge elimination system
OU	Operable unit
PCB	Polychlorinated biphenyl
PRS	Potential release site
PVC	Polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
SAL	Screening action level
SVOC	Semivolatile organic compound
SWMU	Solid waste management unit
TA	Technical area
VOC	Volatile organic compound

**QUARTERLY TECHNICAL REPORT
APRIL-JUNE 1994
LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT**

ALBUQUERQUE OPERATIONS OFFICE

CONTRACTOR: University of California

PROJECT MANAGER: Jorg Jansen

NUMBER OF POTENTIAL RELEASE SITES (sampling sites): Approximately 1,700, of which approximately 1,100 are solid waste management units

SUSPECT WASTE: Radionuclides, High Explosives, Metals, Solvents, Organics

1.0 INTRODUCTION

This quarterly report describes the technical status of activities in the Los Alamos National Laboratory (the Laboratory) Environmental Restoration (ER) Project. Each activity is identified by an activity data sheet (ADS) number, a brief title describing the activity or the technical area (TA) where the activity is located, and the name of the project leader. The Hazardous and Solid Waste Amendments (HSWA) portion of the facility operating permit (Module VIII, Section Q, Task V, c) requires the submission of a technical progress report on a quarterly basis. This report, submitted to fulfill the permit's requirement, summarizes the work performed and the results of sampling and analysis in the ER Project.

The data provided in this report have not been validated. These data are considered "reviewed data."

In the summary tables of this report, each individual measurement was classified as being either greater than or equal to the limit of detection (LOD) or below the LOD for that analyte. The LOD varies for analytes and for individual measurements. For analytes with measured values greater than or equal to the LOD, the range of concentration is given. For analytes for which no values greater than or equal to the LOD were observed, the LOD range is given. Some of the LOD values for strontium-90 and tritium radionuclides are means rather than actual LODs. Screening action levels (SALs) have been developed for many, but not all, analytes. The SALs are explained in the Installation Work Plan for Environmental Restoration, Revision 3 (LANL 1993, 1017). The SALs listed in the tables are those given in that revision of the Installation Work Plan. The summary data tables in this report provide comparisons of the analytical data with the SALs. The comparison process placed each value in one of four categories: (1) values greater than or equal to SAL, (2) values below SAL, (3) values where the SAL and the measured value are below the LOD, and (4) values below the LOD, with the LOD greater than or equal to SAL.

2.0 ACTIVITY DATA SHEETS

2.1 ADS 1049—Canyons (Project Leader: Everett Springer)

An agreement was reached with the Laboratory's Technical Support Group (ESA-4) to provide the administrative and field support for the eight mini work plans scheduled for Operable Unit (OU) 1049. The outline for the Los Alamos and Pueblo Canyons work plan was revised and reviewed. The scope of the hydrology investigations was reviewed. The biological survey report for Los Alamos and Pueblo Canyons is in preparation. Biological survey personnel are performing reconnaissance surveys of Barrancas and Rendija Canyons.

2.2 ADS 1071—TAs-0, -19, -26, -73, -74 (Project Leader: Jim Aldrich)

The primary focus for OU 1071 during this past quarter has been to perform field work at several solid waste management units (SWMUs).

SWMU Group 0-3. The location of Septic Tank 0-030(c) was confirmed through hand augering in early April. Surface geophysical methods were used to obtain a geophysical signature for the buried tank before it was removed; this information was then used to better define suspected tank locations at 0-030 (e-south), (f), and (q). Tank removal activities for 0-030(c) began in May, and the tank and outfall pipelines were removed in early June. All field-screening and sample analytical results received to date have been below SALs or at or below background levels. Results received to date for chemical analyses on samples taken from hand-auger holes and excavation soils are presented on Table 2-1 (see Section 1.0 for an explanation of this summary table).

Bandelier National Monument. OU 1071 personnel prepared the field sampling plans for the borrow pits, landfill, and surface disposal site within the boundaries of Bandelier National Monument. The documentation was completed for classifying the sites as areas of concern and SWMUs, subject to US Environmental Protection Agency (EPA) approval. Contact with representatives from Bandelier National Monument was maintained regarding the status of activities and the anticipated implementation schedule. The field work has been rescheduled in FY95.

SWMU Group 0-4. Field activities, begun in February of 1994, continued through this quarter. Coring in the vicinity of the Building 1 drain sumps (SWMU 0-032) and the Building 3 waste pits [SWMU 0-031(b)] was completed by mid-April. Removal of contaminated soils and backfilling of the Building 3 underground storage tank excavations were completed in late April. Analytical results of the shallow borehole advanced in the Building 3 waste pit indicated the presence of elevated concentrations of petroleum hydrocarbons. Approximately three feet of soil was removed from the waste pit and surrounding area.

Excavation of piping, fuel lines, and fuel pumps at SWMU 0-031(b) was initiated in early May. Organic vapors detected during field screening suggested the release of organic constituents from a distribution line beneath one of the fuel pumps and from an auxiliary fill port. Shallow excavations and a drilling program were initiated to delineate the extent of subsurface contamination associated with the two releases. Results received to date for chemical analyses on samples taken from excavation soils and borehole cores are presented in Table 2-1.

SWMU 0-016. An investigation of the area behind the former firing range and a new estimate of the soil to be processed revealed the presence of an additional 8,000 yds³ of lead-contaminated soil. This material will be removed and processed next quarter. Other activities included soil-washing activities initiated at the inactive firing range; of the estimated 10,000 yds³ of lead-contaminated soil, nearly 2,000 yds³ has been processed. The average lead, copper, and zinc concentrations in the processed soil have been 94 ppm, 5.2 ppm, and 20.3 ppm, respectively. All of the soil processed to date has been removed from the SWMU and used as road base on a local construction operation. Results received to date for chemical analyses on samples taken for background, samples from the area investigated behind the former firing range, and processed soil samples are presented in Table 2-1.

SWMU Group 73-1. A surface radiological survey was conducted at the airport landfill; no elevated radiation levels were encountered. Geodetic surveying of the airplane hangars, buried trenches, and geophysical/soil gas survey grids was completed. The surface geophysical survey was initiated at the airport landfill. The magnetic survey has been completed.

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥SAL, Including ≥LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD≥SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
00-016												
1 Copper	7	7	3.3	7.2	3,000	mg/kg						7
2 Lead	7	7	11	65	500	mg/kg						7
3 Zinc	7	7	18	41	24,000	mg/kg						7
00-030(c)												
4 Acenaphthene	12				4,800	mg/kg	12	0.33	0.33			12
5 Acenaphthylene	12					mg/kg	12	0.33	0.33			
6 Acetone	12	8	0.032	0.26	8,000	mg/kg	4	0.02	0.02			12
7 Aldrin	12					mg/kg	12	0.0018	0.00196			
8 Americium-241	12	8	0.003	0.039	22	pCi/g	4	0.183	1.37			12
9 Aniline	12					mg/kg	12	0.33	0.33			
10 Anthracene	12				24,000	mg/kg	12	0.33	0.33			12
11 Antimony	13				32	mg/kg	13	0.1	0.3			13
12 Aroclor 1016	12					mg/kg	12	0.034	0.0381			
13 Aroclor 1221	12					mg/kg	12	0.069	0.0774			
14 Aroclor 1232	12					mg/kg	12	0.034	0.0381			
15 Aroclor 1242	24					mg/kg	24	0.034	0.276			
16 Aroclor 1248	12					mg/kg	12	0.034	0.0381			
17 Aroclor 1254	24	1	0.251	0.251		mg/kg	23	0.034	0.276			
18 Aroclor 1260	24					mg/kg	24	0.034	0.276			
19 Aroclor [Mixed-]	12	1	0.251	0.251	0.09	mg/kg	11	0.2267	0.276	1		11
20 Arsenic	12	12	0.6	3.4	0.4	mg/kg				12		
21 Azobenzene	12					mg/kg	12	0.33	0.33			
22 BHC [alpha-]	12				0.1	mg/kg	12	0.0018	0.00196			12
23 BHC [beta-]	12				4	mg/kg	12	0.0018	0.00196			12
24 BHC [delta-]	12					mg/kg	12	0.0018	0.00196			
25 Barium	13	13	11	140	5,600	mg/kg						13
26 Benzene	12				0.67	mg/kg	12	0.005	0.005			12
27 Benzdine [m-]	12					mg/kg	12	0.33	0.33			
28 Benzo[a]anthracene	12				0.64	mg/kg	12	0.33	0.33			12
29 Benzo[a]pyrene	12				0.1	mg/kg	12	0.33	0.33			
30 Benzo[b]fluoranthene	12				0.7	mg/kg	12	0.33	0.33			12
31 Benzo[g,h,i]perylene	12				44	mg/kg	12	0.33	0.33			12
32 Benzo[k]fluoranthene	12				1.5	mg/kg	12	0.33	0.33			12
33 Benzoic acid	12				320,000	mg/kg	12	0.33	0.33			12

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥SAL, Including ≥LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD ≥SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
34 Benzyl alcohol	12					mg/kg	12	0.33	0.33			
35 Beryllium	13	13	0.2	0.99	0.16	mg/kg				13		
36 Bis(2-chloroethoxy)methane	12					mg/kg	12	0.33	0.33			
37 Bis(2-chloroethyl)ether	12				0.12	mg/kg	12	0.33	0.33			12
38 Bis(2-chloroisopropyl)ether	12				100	mg/kg	12	0.33	0.33		12	
39 Bis(2-ethylhexyl)phthalate	12				50	mg/kg	12	0.33	0.33		12	
40 Bromobenzene	12					mg/kg	12	0.005	0.005			
41 Bromochloromethane	12					mg/kg	12	0.005	0.005			
42 Bromodichloromethane	12				11	mg/kg	12	0.005	0.005		12	
43 Bromoform	12				89	mg/kg	12	0.005	0.005		12	
44 Bromomethane	12				0.43	mg/kg	12	0.01	0.01		12	
45 Bromophenylphenyl ether [4-]	12					mg/kg	12	0.33	0.33			
46 Butanone [2-]	12				4,000	mg/kg	12	0.02	0.046		12	
47 Butyl benzyl phthalate	12				16,000	mg/kg	12	0.33	0.33		12	
48 Butylbenzene [n-]	12					mg/kg	12	0.005	0.005			
49 Butylbenzene [sec-]	12					mg/kg	12	0.005	0.005			
50 Butylbenzene [tert-]	12					mg/kg	12	0.005	0.005			
51 Cadmium	13	2	0.3	0.63	80	mg/kg	11	0.4	0.4		13	
52 Carbon disulfide	12				7.4	mg/kg	12	0.005	0.0079		12	
53 Carbon tetrachloride	12				0.21	mg/kg	12	0.005	0.005		12	
54 Chlordane [alpha-]	12					mg/kg	12	0.0018	0.00196			
55 Chlordane [gamma-]	12					mg/kg	12	0.0018	0.00196			
56 Chloro-3-methylphenol [4-]	12				16,000	mg/kg	12	0.33	0.33		12	
57 Chloroaniline [4-]	12				320	mg/kg	12	0.33	0.33		12	
58 Chlorobenzene	12				67	mg/kg	12	0.005	0.005		12	
59 Chlorodibromomethane	12				83	mg/kg	12	0.005	0.005		12	
60 Chloroethane	12				3,300	mg/kg	12	0.01	0.01		12	
61 Chloroform	12				0.21	mg/kg	12	0.005	0.005		12	
62 Chloromethane	12				6.4	mg/kg	12	0.01	0.01		12	
63 Chloronaphthalene [2-]	12				6,400	mg/kg	12	0.33	0.33		12	
64 Chlorophenol [o-]	12				400	mg/kg	12	0.33	0.33		12	
65 Chlorophenylphenyl ether [4-]	12					mg/kg	12	0.33	0.33			
66 Chlorotoluene [o-]	12					mg/kg	12	0.005	0.005			
67 Chlorotoluene [p-]	12					mg/kg	12	0.005	0.005			
68 Chromium	13	13	2.6	9.3	400	mg/kg					13	
69 Chrysene	12				22	mg/kg	12	0.33	0.33		12	
70 DDD [p,p']	12	8	0.00863	2.71	2.9	mg/kg	4	0.0034	0.0035		12	
71 DDE [p,p']	12	7	0.0393	0.577		mg/kg	5	0.0034	0.00371			

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Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
72 DDT [p,p']	12	8	0.0391	0.648	2.1	mg/kg	4	0.0034	0.0035		12	
73 Di-n-butyl phthalate	12				8,000	mg/kg	12	0.33	0.33		12	
74 Di-n-octyl phthalate	12				1,600	mg/kg	12	0.33	0.33		12	
75 Dibenzo[a,h]anthracene	12				0.086	mg/kg	12	0.33	0.33			12
76 Dibenzofuran	12					mg/kg	12	0.33	0.33			
77 Dibromo-3-chloropropane [1,2-]	12					mg/kg	12	0.01	0.01			
78 Dibromoethane [1,2-]	12					mg/kg	12	0.005	0.005			
79 Dibromomethane	12					mg/kg	12	0.005	0.005			
80 Dichlorobenzene (1,2) [o-]	24				1,600	mg/kg	24	0.005	0.33		24	
81 Dichlorobenzene (1,3) [m-]	24				7,200	mg/kg	24	0.005	0.33		24	
82 Dichlorobenzene (1,4) [p-]	24				290	mg/kg	24	0.005	0.33		24	
83 Dichlorobenzidine [3,3']	12				1.6	mg/kg	12	0.33	0.33		12	
84 Dichlorodifluoromethane	12					mg/kg	12	0.01	0.01			
85 Dichloroethane [1,1-]	12				410	mg/kg	12	0.005	0.005		12	
86 Dichloroethane [1,2-]	12				0.2	mg/kg	12	0.005	0.005		12	
87 Dichloroethene [1,1-]	12				0.4	mg/kg	12	0.005	0.005		12	
88 Dichloroethene [trans-1,2-]	12				1,600	mg/kg	12	0.005	0.005		12	
89 Dichloroethylene [cis-1,2-]	12				800	mg/kg	12	0.005	0.005		12	
90 Dichlorophenol [2,4-]	12				240	mg/kg	12	0.33	0.33		12	
91 Dichloropropane [1,2-]	12				6.5	mg/kg	12	0.005	0.005		12	
92 Dichloropropane [1,3-]	12					mg/kg	12	0.005	0.005			
93 Dichloropropane [2,2-]	12					mg/kg	12	0.005	0.005			
94 Dichloropropene [1,1-]	12					mg/kg	12	0.005	0.005			
95 Dichloropropene [cis-1,3-]	12				0.17	mg/kg	12	0.005	0.005		12	
96 Dichloropropene [trans-1,3-]	12				0.17	mg/kg	12	0.005	0.005		12	
97 Dieldrin	12					mg/kg	12	0.0034	0.00381			
98 Diethyl phthalate	12				64,000	mg/kg	12	0.33	0.33		12	
99 Dimethyl phthalate	12				800,000	mg/kg	12	0.33	0.33		12	
100 Dimethylphenol [2,4-]	12				1,600	mg/kg	12	0.33	0.33		12	
101 Dinitrophenol [2,4-]	12				160	mg/kg	12	0.33	0.33		12	
102 Dinitrotoluene [2,4-]	12				1	mg/kg	12	0.33	0.33		12	
103 Dinitrotoluene [2,6-]	12				1	mg/kg	12	0.33	0.33		12	
104 Endosulfan I	12					mg/kg	12	0.0018	0.00196			
105 Endosulfan II	12					mg/kg	12	0.0034	0.00381			
106 Endosulfan sulfate	12					mg/kg	12	0.0034	0.00381			
107 Endrin	12	1	0.0743	0.0743		mg/kg	11	0.0034	0.00381			
108 Endrin aldehyde	12	2	0.00534	0.0122		mg/kg	10	0.0034	0.00374			
109 Endrin ketone	12					mg/kg	12	0.0034	0.00381			

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Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
110 Ethylbenzene	12				3,100	mg/kg	12	0.005	0.005		12	
111 Fluoranthene	12				3,200	mg/kg	12	0.33	0.33		12	
112 Fluorene	12				3,200	mg/kg	12	0.33	0.33		12	
113 Heptachlor	12					mg/kg	12	0.0018	0.00196			
114 Heptachlor epoxide	12	1	0.00319	0.00319		mg/kg	11	0.0018	0.00192			
115 Hexachlorobenzene	12				0.44	mg/kg	12	0.33	0.33		12	
116 Hexachlorobutadiene	12				90	mg/kg	12	0.33	0.33		12	
117 Hexachlorocyclopentadiene	12				560	mg/kg	12	0.33	0.33		12	
118 Hexachloroethane	12				80	mg/kg	12	0.33	0.33		12	
119 Hexanone [2-]	12					mg/kg	12	0.02	0.02			
120 Indeno[1,2,3-cd]pyrene	12				0.41	mg/kg	12	0.33	0.33		12	
121 Isophorone	12				7,400	mg/kg	12	0.33	0.33		12	
122 Isopropylbenzene	12					mg/kg	12	0.005	0.005			
123 Isopropyltoluene [4-]	12					mg/kg	12	0.005	0.005			
124 Lead	13	13	3.3	31	500	mg/kg					13	
125 Lindane	12					mg/kg	12	0.0018	0.00196			
126 Mercury	36	16	0.1	0.6	24	mg/kg	20	0.1	0.1		36	
127 Methoxychlor	12					mg/kg	12	0.018	0.0196			
128 Methyl iodide	12					mg/kg	12	0.005	0.005			
129 Methyl-2-pentanone [4-]	12				510	mg/kg	12	0.02	0.02		12	
130 Methyl-4,6-dinitrophenol [2-]	12					mg/kg	12	0.33	0.33			
131 Methylene chloride	12				5.6	mg/kg	12	0.005	0.005		12	
132 Methyl-naphthalene [2-]	12					mg/kg	12	0.33	0.33			
133 Methylphenol [2-]	12				4,000	mg/kg	12	0.33	0.33		12	
134 Methylphenol [4-]	12				400	mg/kg	12	0.33	0.33		12	
135 Naphthalene	12				3,200	mg/kg	12	0.33	0.33		12	
136 Nickel	13	12	2.6	8.3	1,600	mg/kg	1	2	2		13	
137 Nitroaniline [2-]	12					mg/kg	12	0.33	0.33			
138 Nitroaniline [3-]	12					mg/kg	12	0.33	0.33			
139 Nitroaniline [4-]	12				5.3	mg/kg	12	0.33	0.33		12	
140 Nitrobenzene	12					mg/kg	12	0.33	0.33			
141 Nitrophenol [2-]	12					mg/kg	12	0.33	0.33			
142 Nitrophenol [4-]	12				0.1	mg/kg	12	0.33	0.33			12
143 Nitrosodi-n-propylamine [N-]	12					mg/kg	12	0.33	0.33			
144 Nitrosodimethylamine [N-]	12				140	mg/kg	12	0.33	0.33		12	
145 Nitrosodiphenylamine [N-]	12				5.8	mg/kg	12	0.33	0.33		12	
146 Pentachlorophenol	12					mg/kg	12	0.33	0.33			
147 Phenanthrene	12											

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
148 Phenol	12				48,000	mg/kg	12	0.33	0.33		12	
149 Plutonium-238	13	3	0.03	1.53	27	pCi/g	10	0.01	0.01		13	
150 Plutonium-239	13	11	0.05	1.81	24	pCi/g	2	0.01	0.01		13	
151 Propylbenzene	12					mg/kg	12	0.005	0.005			
152 Pyrene	12				2,400	mg/kg	12	0.33	0.33		12	
153 Selenium	11	8	0.3	0.4	400	mg/kg	3	0.2	0.3		11	
154 Silver	13				400	mg/kg	13	1	1		13	
155 Styrene	12				16,000	mg/kg	12	0.005	0.005		12	
156 Tetrachloroethane [1,1,1,2-]	12					mg/kg	12	0.005	0.005			
157 Tetrachloroethane [1,1,2,2-]	12				3.9	mg/kg	12	0.005	0.005		12	
158 Tetrachloroethylene	12				5.9	mg/kg	12	0.005	0.005		12	
159 Thallium	13	1	0.1	0.1	6.4	mg/kg	12	0.1	0.3		13	
160 Toluene	12				890	mg/kg	12	0.005	0.005		12	
161 Toxaphene	12					mg/kg	12	0.18	0.196			
162 Trichloro-1,2,2-trifluoroethane [1,1,2-]	12					mg/kg	12	0.005	0.005			
163 Trichlorobenzene [1,2,4-]	12				160	mg/kg	12	0.33	0.33		12	
164 Trichloroethane [1,1,1-]	12				1,000	mg/kg	12	0.005	0.005		12	
165 Trichloroethane [1,1,2-]	12				6.3	mg/kg	12	0.005	0.005		12	
166 Trichloroethene	12				3.2	mg/kg	12	0.005	0.005		12	
167 Trichlorofluoromethane	12					mg/kg	12	0.005	0.005			
168 Trichlorophenol [2,4,5-]	12				8,000	mg/kg	12	0.33	0.33		12	
169 Trichlorophenol [2,4,6-]	12				64	mg/kg	12	0.33	0.33		12	
170 Trichloropropane [1,2,3-]	12					mg/kg	12	0.005	0.005			
171 Trimethylbenzene [1,2,4-]	12					mg/kg	12	0.005	0.005			
172 Trimethylbenzene [1,3,5-]	12					mg/kg	12	0.005	0.005			
173 Uranium	12	12	0.398	4.1		mg/kg						
174 Vinyl chloride	12				0.012	mg/kg	12	0.01	0.01		12	
175 Xylenes (o + m + p) [Mixed-]	12				160,000	mg/kg	12	0.005	0.005		12	
00-030(f)												
176 Acenaphthene	6				4,800	mg/kg	6	0.33	0.33		6	
177 Acenaphthylene	6					mg/kg	6	0.33	0.33			
178 Acetone	5	5	0.056	0.57	8,000	mg/kg					5	
179 Aldrin	6					mg/kg	6	0.0019	0.002			
180 Americium-241	7				22	pCi/g	7	0.156	1.56		7	
181 Aniline	6					mg/kg	6	0.33	0.33			
182 Anthracene	6				24,000	mg/kg	6	0.33	0.33		6	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
183 Antimony	6				32	mg/kg	6	0.3	0.3		6	
184 Aroclor 1016	6					mg/kg	6	0.037	0.039			
185 Aroclor 1221	6					mg/kg	6	0.076	0.08			
186 Aroclor 1232	6					mg/kg	6	0.037	0.039			
187 Aroclor 1242	12					mg/kg	12	0.037	0.3038			
188 Aroclor 1248	6					mg/kg	6	0.037	0.039			
189 Aroclor 1254	12					mg/kg	12	0.037	0.3038			
190 Aroclor 1260	12					mg/kg	12	0.037	0.3038			
191 Aroclor [Mixed-]	6				0.09	mg/kg	6	0.2674	0.3038			6
192 Arsenic	6	6	1.7	2.9	0.4	mg/kg	6	0.33	0.33	6		
193 Azobenzene	6					mg/kg	6	0.0019	0.002		6	
194 BHC [alpha-]	6				0.1	mg/kg	6	0.0019	0.002		6	
195 BHC [beta-]	6				4	mg/kg	6	0.0019	0.002		6	
196 BHC [delta-]	6					mg/kg	6	0.0019	0.002			
197 Barium	7	7	48	120	5,600	mg/kg	5	0.005	0.005		7	
198 Benzene	5				0.67	mg/kg	5	0.33	0.33			
199 Benzidine [m-]	6					mg/kg	6	0.33	0.33			
200 Benzo[a]anthracene	6				0.64	mg/kg	6	0.33	0.33		6	
201 Benzo[a]pyrene	6				0.1	mg/kg	6	0.33	0.33			6
202 Benzo[b]fluoranthene	6				0.7	mg/kg	6	0.33	0.33		6	
203 Benzo[g,h,i]perylene	6				44	mg/kg	6	0.33	0.33		6	
204 Benzo[k]fluoranthene	6				1.5	mg/kg	6	0.33	0.33		6	
205 Benzoic acid	6				320,000	mg/kg	6	0.33	0.33		6	
206 Benzyl alcohol	6					mg/kg	6	0.33	0.33			
207 Beryllium	7	7	0.5	0.85	0.16	mg/kg	6	0.33	0.33	7		
208 Bis(2-chloroethoxy)methane	6					mg/kg	6	0.33	0.33			6
209 Bis(2-chloroethyl)ether	6				0.12	mg/kg	6	0.33	0.33		6	
210 Bis(2-chloroisopropyl)ether	6				100	mg/kg	6	0.33	0.33		6	
211 Bis(2-ethylhexyl)phthalate	6				50	mg/kg	6	0.33	0.33		6	
212 Bromobenzene	5					mg/kg	5	0.005	0.005			
213 Bromochloromethane	5					mg/kg	5	0.005	0.005			
214 Bromodichloromethane	5				11	mg/kg	5	0.005	0.005		5	
215 Bromoform	5				~	mg/kg	5	0.005	0.005		5	
216 Bromomethane	5				0.43	mg/kg	5	0.01	0.01		5	
217 Bromophenylphenyl ether [4-]	6					mg/kg	6	0.33	0.33			
218 Butanone [2-]	5				4,000	mg/kg	5	0.02	0.02		5	
219 Butyl benzyl phthalate	6				16,000	mg/kg	6	0.33	0.33		6	
220 Butylbenzene [n-]	5					mg/kg	5	0.005	0.005			

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Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
221 Butylbenzene [sec-]	5					mg/kg	5	0.005	0.005			
222 Butylbenzene [tert-]	5					mg/kg	5	0.005	0.005			
223 Cadmium	7	6	0.25	2.4	80	mg/kg	1	0.6	0.6		7	
224 Carbon disulfide	5				7.4	mg/kg	5	0.005	0.005		5	
225 Carbon tetrachloride	5				0.21	mg/kg	5	0.005	0.005		5	
226 Chlordane [alpha-]	6					mg/kg	6	0.0019	0.002			
227 Chlordane [gamma-]	6					mg/kg	6	0.0019	0.002			
228 Chloro-3-methylphenol [4-]	6				16,000	mg/kg	6	0.33	0.33		6	
229 Chloroaniline [4-]	6				320	mg/kg	6	0.33	0.33		6	
230 Chlorobenzene	5				67	mg/kg	5	0.005	0.005		5	
231 Chlorodibromomethane	5				83	mg/kg	5	0.005	0.005		5	
232 Chloroethane	5				3,300	mg/kg	5	0.01	0.01		5	
233 Chloroform	5				0.21	mg/kg	5	0.005	0.005		5	
234 Chloromethane	5				6.4	mg/kg	5	0.01	0.01		5	
235 Chloronaphthalene [2-]	6				6,400	mg/kg	6	0.33	0.33		6	
236 Chlorophenol [o-]	6				400	mg/kg	6	0.33	0.33		6	
237 Chlorophenylphenyl ether [4-]	6					mg/kg	6	0.33	0.33			
238 Chlorotoluene [o-]	5					mg/kg	5	0.005	0.005			
239 Chlorotoluene [p-]	5					mg/kg	5	0.005	0.005			
240 Chromium	7	7	4.2	8.7	400	mg/kg					7	
241 Chrysene	6				22	mg/kg	6	0.33	0.33		6	
242 DDD [p,p'-]	6	1	0.0073	0.0073	2.9	mg/kg	5	0.0037	0.0039		6	
243 DDE [p,p'-]	6	1	0.036	0.036		mg/kg	5	0.0037	0.0039			
244 DDT [p,p'-]	6	1	0.024	0.024	2.1	mg/kg	5	0.0037	0.0039		6	
245 Di-n-butyl phthalate	6				8,000	mg/kg	6	0.33	0.33		6	
246 Di-n-octyl phthalate	6				1,600	mg/kg	6	0.33	0.33		6	
247 Dibenzo[a,h]anthracene	6				0.086	mg/kg	6	0.33	0.33			6
248 Dibenzofuran	6					mg/kg	6	0.33	0.33			
249 Dibromo-3-chloropropane [1,2-]	5					mg/kg	5	0.01	0.01			
250 Dibromoethane [1,2-]	5					mg/kg	5	0.005	0.005			
251 Dibromomethane	5					mg/kg	5	0.005	0.005			
252 Dichlorobenzene (1,2) [o-]	11				1,800	mg/kg	11	0.005	0.33		11	
253 Dichlorobenzene (1,3) [m-]	11				7,200	mg/kg	11	0.005	0.33		11	
254 Dichlorobenzene (1,4) [p-]	11				290	mg/kg	11	0.005	0.33		11	
255 Dichlorobenzidine [3,3'-]	6				1.6	mg/kg	6	0.33	0.33		6	
256 Dichlorodifluoromethane	5					mg/kg	5	0.01	0.01			
257 Dichloroethane [1,1-]	5				410	mg/kg	5	0.005	0.005		5	
258 Dichloroethane [1,2-]	5				0.2	mg/kg	5	0.005	0.005		5	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
259 Dichloroethene [1,1-]	5				0.4	mg/kg	5	0.005	0.005		5	
260 Dichloroethene [trans-1,2-]	5				1,600	mg/kg	5	0.005	0.005		5	
261 Dichloroethylene [cis-1,2-]	5				800	mg/kg	5	0.005	0.005		5	
262 Dichlorophenol [2,4-]	6				240	mg/kg	6	0.33	0.33		6	
263 Dichloropropane [1,2-]	5				6.5	mg/kg	5	0.005	0.005		5	
264 Dichloropropane [1,3-]	5					mg/kg	5	0.005	0.005			
265 Dichloropropane [2,2-]	5					mg/kg	5	0.005	0.005			
266 Dichloropropene [1,1-]	5					mg/kg	5	0.005	0.005			
267 Dichloropropene [cis-1,3-]	5				0.17	mg/kg	5	0.005	0.005		5	
268 Dichloropropene [trans-1,3-]	5				0.17	mg/kg	5	0.005	0.005		5	
269 Dieldrin	6					mg/kg	6	0.0037	0.0039			
270 Diethyl phthalate	6				64,000	mg/kg	6	0.33	0.33		6	
271 Dimethyl phthalate	6				800,000	mg/kg	6	0.33	0.33		6	
272 Dimethylphenol [2,4-]	6				1,600	mg/kg	6	0.33	0.33		6	
273 Dinitrophenol [2,4-]	6				160	mg/kg	6	0.33	0.33		6	
274 Dinitrotoluene [2,4-]	6				1	mg/kg	6	0.33	0.33		6	
275 Dinitrotoluene [2,6-]	6				1	mg/kg	6	0.33	0.33		6	
276 Endosulfan I	6					mg/kg	6	0.0019	0.002			
277 Endosulfan II	6					mg/kg	6	0.0037	0.0039			
278 Endosulfan sulfate	6					mg/kg	6	0.0037	0.0039			
279 Endrin	6					mg/kg	6	0.0037	0.0039			
280 Endrin aldehyde	6					mg/kg	6	0.0037	0.0039			
281 Endrin ketone	6					mg/kg	6	0.0037	0.0039			
282 Ethylbenzene	5				3,100	mg/kg	5	0.005	0.005		5	
283 Fluoranthene	6				3,200	mg/kg	6	0.33	0.33		6	
284 Fluorene	6				3,200	mg/kg	6	0.33	0.33		6	
285 Heptachlor	6					mg/kg	6	0.0019	0.002			
286 Heptachlor epoxide	6					mg/kg	6	0.0019	0.002			
287 Hexachlorobenzene	6				0.44	mg/kg	6	0.33	0.33		6	
288 Hexachlorobutadiene	6				90	mg/kg	6	0.33	0.33		6	
289 Hexachlorocyclopentadiene	6				560	mg/kg	6	0.33	0.33		6	
290 Hexachloroethane	6				80	mg/kg	6	0.33	0.33		6	
291 Hexanone [2-]	5					mg/kg	5	0.02	0.02			
292 Indeno[1,2,3-cd]pyrene	6				0.41	mg/kg	6	0.33	0.33		6	
293 Isophorone	6				7,400	mg/kg	6	0.33	0.33		6	
294 Isopropylbenzene	5					mg/kg	5	0.005	0.005			
295 Isopropyltoluene [4-]	5					mg/kg	5	0.005	0.005			
296 Lead	6	6	9.6	56	500	mg/kg					6	

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Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
297 Lindane	6					mg/kg	6	0.0019	0.002			
298 Mercury	18				24	mg/kg	18	0.1	0.1		18	
299 Methoxychlor	6					mg/kg	6	0.019	0.02			
300 Methyl iodide	5					mg/kg	5	0.005	0.005			
301 Methyl-2-pentanone [4-]	5				510	mg/kg	5	0.02	0.02		5	
302 Methyl-4,6-dinitrophenol [2-]	6					mg/kg	6	0.33	0.33			
303 Methylene chloride	5				5.6	mg/kg	5	0.005	0.005		5	
304 Methyl-naphthalene [2-]	6					mg/kg	6	0.33	0.33			
305 Methylphenol [2-]	6				4,000	mg/kg	6	0.33	0.33		6	
306 Methylphenol [4-]	6				400	mg/kg	6	0.33	0.33		6	
307 Naphthalene	6				3,200	mg/kg	6	0.33	0.33		6	
308 Nickel	7	7	3.4	7	1,600	mg/kg					7	
309 Nitroaniline [2-]	6					mg/kg	6	0.33	0.33			
310 Nitroaniline [3-]	6					mg/kg	6	0.33	0.33			
311 Nitroaniline [4-]	6					mg/kg	6	0.33	0.33			
312 Nitrobenzene	6				5.3	mg/kg	6	0.33	0.33		6	
313 Nitrophenol [2-]	6					mg/kg	6	0.33	0.33			
314 Nitrophenol [4-]	6					mg/kg	6	0.33	0.33			
315 Nitrosodi-n-propylamine [N-]	6				0.1	mg/kg	6	0.33	0.33			6
316 Nitrosodimethylamine [N-]	6					mg/kg	6	0.33	0.33			
317 Nitrosodiphenylamine [N-]	6				140	mg/kg	6	0.33	0.33		6	
318 Pentachlorophenol	6				5.8	mg/kg	6	0.33	0.33		6	
319 Phenanthrene	6					mg/kg	6	0.33	0.33			
320 Phenol	6				48,000	mg/kg	6	0.33	0.33		6	
321 Plutonium-238	6	4	0.02	0.0802	27	pCi/g	2	0.01	0.01		6	
322 Plutonium-239	6	2	0.04	0.103	24	pCi/g	4	0.01	0.01		6	
323 Propylbenzene	5					mg/kg	5	0.005	0.005			
324 Pyrene	6				2,400	mg/kg	6	0.33	0.33		6	
325 Selenium	6	5	0.3	0.4	400	mg/kg	1	0.2	0.2		6	
326 Silver	7	1	6	6	400	mg/kg	6	1.6	1.6		7	
327 Styrene	5				16,000	mg/kg	5	0.005	0.005		5	
328 Tetrachloroethane [1,1,1,2-]	5					mg/kg	5	0.005	0.005			
329 Tetrachloroethane [1,1,2,2-]	5				3.9	mg/kg	5	0.005	0.005		5	
330 Tetrachloroethylene	5				5.9	mg/kg	5	0.005	0.005		5	
331 Thallium	6				6.4	mg/kg	6	0.3	0.3		6	
332 Toluene	5				890	mg/kg	5	0.005	0.005		5	
333 Toxaphene	6					mg/kg	6	0.19	0.2			
334 Trichloro-1,2,2-trifluoroethane [1,1,2-]	5	1	0.27	0.27		mg/kg	4	0.005	0.005			

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SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
335 Trichlorobenzene [1,2,4-]	6				160	mg/kg	6	0.33	0.33		6	
336 Trichloroethane [1,1,1-]	5				1,000	mg/kg	5	0.005	0.005		5	
337 Trichloroethane [1,1,2-]	5				6.3	mg/kg	5	0.005	0.005		5	
338 Trichloroethene	5				3.2	mg/kg	5	0.005	0.005		5	
339 Trichlorofluoromethane	5					mg/kg	5	0.005	0.005			
340 Trichlorophenol [2,4,5-]	6				8,000	mg/kg	6	0.33	0.33		6	
341 Trichlorophenol [2,4,6-]	6				64	mg/kg	6	0.33	0.33		6	
342 Trichloropropane [1,2,3-]	5					mg/kg	5	0.005	0.005			
343 Trimethylbenzene [1,2,4-]	5					mg/kg	5	0.005	0.005			
344 Trimethylbenzene [1,3,5-]	5					mg/kg	5	0.005	0.005			
345 Uranium	6	6	2,400	5,300		mg/kg						
346 Vinyl chloride	5				0.012	mg/kg	5	0.01	0.01		5	
347 Xylenes (o + m + p) [Mixed-]	5				160,000	mg/kg	5	0.005	0.005		5	
00-030(g)												
348 Acenaphthene	2				4,800	mg/kg	2	0.33	0.33		2	
349 Acenaphthylene	2					mg/kg	2	0.33	0.33			
350 Acetone	2	1	0.022	0.022	8,000	mg/kg	1	0.02	0.02		2	
351 Aldrin	2					mg/kg	2	0.00197	0.002			
352 Americium-241	3	3	2.108	7.668	22	pCi/g					3	
353 Aniline	2					mg/kg	2	0.33	0.33			
354 Anthracene	2				24,000	mg/kg	2	0.33	0.33		2	
355 Antimony	3				32	mg/kg	3	0.1	0.1		3	
356 Aroclor 1016	2					mg/kg	2	0.0383	0.0389			
357 Aroclor 1221	2					mg/kg	2	0.0777	0.079			
358 Aroclor 1232	2					mg/kg	2	0.038	0.0383			
359 Aroclor 1242	4					mg/kg	4	0.038	0.2816			
360 Aroclor 1248	2					mg/kg	2	0.038	0.0383			
361 Aroclor 1254	4	2	0.297	1.07		mg/kg	2	0.2757	0.2816			
362 Aroclor 1260	4	1	0.71	0.71		mg/kg	3	0.038	0.2757			
363 Aroclor [Mixed-]	2	1	0.71	0.71	0.09	mg/kg	1	0.2757	0.2757	1		1
364 Arsenic	3	3	1.4	2	0.4	mg/kg				3		
365 Azobenzene	2					mg/kg	2	0.33	0.33			
366 BHC [alpha-]	2				0.1	mg/kg	2	0.00197	0.002		2	
367 BHC [beta-]	2				4	mg/kg	2	0.00197	0.002		2	
368 BHC [delta-]	2					mg/kg	2	0.00197	0.002			
369 Barium	2	2	61	63	5,600	mg/kg					2	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
370 Benzene	2				0.67	mg/kg	2	0.005	0.005		2	
371 Benzidine [m-]	2					mg/kg	2	0.33	0.33			
372 Benzo[a]anthracene	2				0.64	mg/kg	2	0.33	0.33		2	
373 Benzo[a]pyrene	2				0.1	mg/kg	2	0.33	0.33			2
374 Benzo[b]fluoranthene	2				0.7	mg/kg	2	0.33	0.33		2	
375 Benzo[g,h,i]perylene	2				44	mg/kg	2	0.33	0.33		2	
376 Benzo[k]fluoranthene	2				1.5	mg/kg	2	0.33	0.33		2	
377 Benzoic acid	2				320,000	mg/kg	2	0.33	0.33		2	
378 Benzyl alcohol	2					mg/kg	2	0.33	0.33			
379 Beryllium	2	2	0.4	0.58	0.16	mg/kg				2		
380 Bis(2-chloroethoxy)methane	2					mg/kg	2	0.33	0.33			2
381 Bis(2-chloroethyl)ether	2				0.12	mg/kg	2	0.33	0.33			
382 Bis(2-chloroisopropyl)ether	2				100	mg/kg	2	0.33	0.33		2	
383 Bis(2-ethylhexyl)phthalate	2				50	mg/kg	2	0.33	0.33		2	
384 Bromobenzene	2					mg/kg	2	0.005	0.005			
385 Bromochloromethane	2					mg/kg	2	0.005	0.005			
386 Bromodichloromethane	2				11	mg/kg	2	0.005	0.005		2	
387 Bromoform	2				89	mg/kg	2	0.005	0.005		2	
388 Bromomethane	2				0.43	mg/kg	2	0.01	0.01		2	
389 Bromophenylphenyl ether [4-]	2					mg/kg	2	0.33	0.33			
390 Butanone [2-]	2				4,000	mg/kg	2	0.031	0.038		2	
391 Butyl benzyl phthalate	2				16,000	mg/kg	2	0.33	0.33		2	
392 Butylbenzene [n-]	2					mg/kg	2	0.005	0.005			
393 Butylbenzene [sec-]	2					mg/kg	2	0.005	0.005			
394 Butylbenzene [tert-]	2					mg/kg	2	0.005	0.005			
395 Cadmium	2				80	mg/kg	2	0.4	0.4		2	
396 Carbon disulfide	2				7.4	mg/kg	2	0.0058	0.0099		2	
397 Carbon tetrachloride	2				0.21	mg/kg	2	0.005	0.005		2	
398 Chlordane [alpha-]	2	2	0.0087	0.0274		mg/kg						
399 Chlordane [gamma-]	2	2	0.0023	0.0122		mg/kg						
400 Chloro-3-methylphenol [4-]	2				16,000	mg/kg	2	0.33	0.33		2	
401 Chloroaniline [4-]	2				320	mg/kg	2	0.33	0.33		2	
402 Chlorobenzene	2				67	mg/kg	2	0.005	0.005		2	
403 Chlorodibromomethane	2				83	mg/kg	2	0.005	0.005		2	
404 Chloroethane	2				3,300	mg/kg	2	0.01	0.01		2	
405 Chloroform	2				0.21	mg/kg	2	0.005	0.005		2	
406 Chloromethane	2				6.4	mg/kg	2	0.01	0.01		2	
407 Chloronaphthalene [2-]	2				6,400	mg/kg	2	0.33	0.33		2	

TABLE 2-1

SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
408 Chlorophenol [o-]	2				400	mg/kg	2	0.33	0.33		2	
409 Chlorophenylphenyl ether [4-]	2					mg/kg	2	0.33	0.33			
410 Chlorotoluene [o-]	2					mg/kg	2	0.005	0.005			
411 Chlorotoluene [p-]	2					mg/kg	2	0.005	0.005			
412 Chromium	2	2	2.9	5.5	400	mg/kg					2	
413 Chrysene	2				22	mg/kg	2	0.33	0.33		2	
414 DDD [p,p']	2	2	0.00448	0.0108	2.9	mg/kg					2	
415 DDE [p,p']	2	1	0.00626	0.00626		mg/kg	1	0.00389	0.00389			
416 DDT [p,p']	2	2	0.0196	0.0387	2.1	mg/kg					2	
417 Di-n-butyl phthalate	2				8,000	mg/kg	2	0.33	0.33		2	
418 Di-n-octyl phthalate	2				1,600	mg/kg	2	0.33	0.33		2	
419 Dibenzo[a,h]anthracene	2				0.086	mg/kg	2	0.33	0.33			2
420 Dibenzofuran	2					mg/kg	2	0.33	0.33			
421 Dibromo-3-chloropropane [1,2-]	2					mg/kg	2	0.01	0.01			
422 Dibromoethane [1,2-]	2					mg/kg	2	0.005	0.005			
423 Dibromomethane	2					mg/kg	2	0.005	0.005			
424 Dichlorobenzene (1,2) [o-]	4				1,600	mg/kg	4	0.005	0.33		4	
425 Dichlorobenzene (1,3) [m-]	4				7,200	mg/kg	4	0.005	0.33		4	
426 Dichlorobenzene (1,4) [p-]	4				290	mg/kg	4	0.005	0.33		4	
427 Dichlorobenzidine [3,3']	2				1.6	mg/kg	2	0.33	0.33		2	
428 Dichlorodifluoromethane	2					mg/kg	2	0.01	0.01			
429 Dichloroethane [1,1-]	2				410	mg/kg	2	0.005	0.005		2	
430 Dichloroethane [1,2-]	2				0.2	mg/kg	2	0.005	0.005		2	
431 Dichloroethene [1,1-]	2				0.4	mg/kg	2	0.005	0.005		2	
432 Dichloroethene [trans-1,2-]	2				1,600	mg/kg	2	0.005	0.005		2	
433 Dichloroethylene [cis-1,2-]	2				800	mg/kg	2	0.005	0.005		2	
434 Dichlorophenol [2,4-]	2				240	mg/kg	2	0.33	0.33		2	
435 Dichloropropane [1,2-]	2				6.5	mg/kg	2	0.005	0.005		2	
436 Dichloropropane [1,3-]	2					mg/kg	2	0.005	0.005			
437 Dichloropropane [2,2-]	2					mg/kg	2	0.005	0.005			
438 Dichloropropene [1,1-]	2					mg/kg	2	0.005	0.005			
439 Dichloropropene [cis-1,3-]	2				0.17	mg/kg	2	0.005	0.005		2	
440 Dichloropropene [trans-1,3-]	2				0.17	mg/kg	2	0.005	0.005		2	
441 Dieldrin	2	2	0.00784	0.0439		mg/kg						
442 Diethyl phthalate	2				64,000	mg/kg	2	0.33	0.33		2	
443 Dimethyl phthalate	2				800,000	mg/kg	2	0.33	0.33		2	
444 Dimethylphenol [2,4-]	2				1,600	mg/kg	2	0.33	0.33		2	
445 Dinitrophenol [2,4-]	2				160	mg/kg	2	0.33	0.33		2	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
446 Dinitrotoluene [2,4-]	2				1	mg/kg	2	0.33	0.33		2	
447 Dinitrotoluene [2,6-]	2				1	mg/kg	2	0.33	0.33		2	
448 Endosulfan I	2					mg/kg	2	0.00197	0.002			
449 Endosulfan II	2	2	0.00552	0.0211		mg/kg						
450 Endosulfan sulfate	2					mg/kg	2	0.00383	0.00389			
451 Endrin	2					mg/kg	2	0.00383	0.00389			
452 Endrin aldehyde	2	1	0.00866	0.00866		mg/kg	1	0.00383	0.00383			
453 Endrin ketone	2					mg/kg	2	0.00383	0.00389			
454 Ethylbenzene	2				3,100	mg/kg	2	0.005	0.005		2	
455 Fluoranthene	2				3,200	mg/kg	2	0.33	0.33		2	
456 Fluorene	2				3,200	mg/kg	2	0.33	0.33		2	
457 Heptachlor	2					mg/kg	2	0.00197	0.002			
458 Heptachlor epoxide	2					mg/kg	2	0.00197	0.002			
459 Hexachlorobenzene	2				0.44	mg/kg	2	0.33	0.33		2	
460 Hexachlorobutadiene	2				90	mg/kg	2	0.33	0.33		2	
461 Hexachlorocyclopentadiene	2				560	mg/kg	2	0.33	0.33		2	
462 Hexachloroethane	2				80	mg/kg	2	0.33	0.33		2	
463 Hexanone [2-]	2					mg/kg	2	0.02	0.02			
464 Indeno[1,2,3-cd]pyrene	2				0.41	mg/kg	2	0.33	0.33		2	
465 Isophorone	2				7,400	mg/kg	2	0.33	0.33		2	
466 Isopropylbenzene	2					mg/kg	2	0.005	0.005			
467 Isopropyltoluene [4-]	2					mg/kg	2	0.005	0.005			
468 Lead	3	3	11	22	500	mg/kg					3	
469 Lindane	2					mg/kg	2	0.00197	0.002			
470 Mercury	6	6	0.1	0.2	24	mg/kg					6	
471 Methoxychlor	2					mg/kg	2	0.0197	0.02			
472 Methyl iodide	2					mg/kg	2	0.005	0.005			
473 Methyl-2-pentachloro [4-]	2				510	mg/kg	2	0.02	0.02		2	
474 Methyl-4,6-dinitrophenol [2-]	2					mg/kg	2	0.33	0.33			
475 Methylene chloride	2				5.6	mg/kg	2	0.005	0.005		2	
476 Methyl-naphthalene [2-]	2					mg/kg	2	0.33	0.33			
477 Methylphenol [2-]	2				4,000	mg/kg	2	0.33	0.33		2	
478 Methylphenol [4-]	2				400	mg/kg	2	0.33	0.33		2	
479 Naphthalene	2				3,200	mg/kg	2	0.33	0.33		2	
480 Nickel	2	2	4.8	5.8	1,600	mg/kg					2	
481 Nitroaniline [2-]	2					mg/kg	2	0.33	0.33			
482 Nitroaniline [3-]	2					mg/kg	2	0.33	0.33			
483 Nitroaniline [4-]	2					mg/kg	2	0.33	0.33			

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
484 Nitrobenzene	2				5.3	mg/kg	2	0.33	0.33		2	
485 Nitrophenol [2-]	2					mg/kg	2	0.33	0.33			
486 Nitrophenol [4-]	2					mg/kg	2	0.33	0.33			
487 Nitrosodi-n-propylamine [N-]	2				0.1	mg/kg	2	0.33	0.33			2
488 Nitrosodimethylamine [N-]	2					mg/kg	2	0.33	0.33			
489 Nitrosodiphenylamine [N-]	2				140	mg/kg	2	0.33	0.33		2	
490 Pentachlorophenol	2				5.8	mg/kg	2	0.33	0.33		2	
491 Phenanthrene	2					mg/kg	2	0.33	0.33			
492 Phenol	2				48,000	mg/kg	2	0.33	0.33		2	
493 Plutonium-238	3	3	0.208	0.644	27	pCi/g				2	3	
494 Plutonium-239	3	3	11.48	35.116	24	pCi/g					1	
495 Propylbenzene	2					mg/kg	2	0.005	0.005			
496 Pyrene	2				2,400	mg/kg	2	0.33	0.33		2	
497 Selenium	3	3	0.3	0.4	400	mg/kg					3	
498 Silver	2				400	mg/kg	2	1	1		2	
499 Styrene	2				16,000	mg/kg	2	0.005	0.005		2	
500 Tetrachloroethane [1,1,1,2-]	2					mg/kg	2	0.005	0.005			
501 Tetrachloroethane [1,1,2,2-]	2				3.9	mg/kg	2	0.005	0.005		2	
502 Tetrachloroethylene	2				5.9	mg/kg	2	0.005	0.005		2	
503 Thallium	3	1	0.3	0.3	6.4	mg/kg	2	0.1	0.1		3	
504 Toluene	2				890	mg/kg	2	0.005	0.005		2	
505 Toxaphene	2					mg/kg	2	0.197	0.2			
506 Trichloro-1,2,2-trifluoroethane [1,1,2-]	2					mg/kg	2	0.005	0.005			
507 Trichlorobenzene [1,2,4-]	2				160	mg/kg	2	0.33	0.33		2	
508 Trichloroethane [1,1,1-]	2				1,000	mg/kg	2	0.005	0.005		2	
509 Trichloroethane [1,1,2-]	2				6.3	mg/kg	2	0.005	0.005		2	
510 Trichloroethene	2				3.2	mg/kg	2	0.005	0.005		2	
511 Trichlorofluoromethane	2					mg/kg	2	0.005	0.005			
512 Trichlorophenol [2,4,5-]	2				8,000	mg/kg	2	0.33	0.33		2	
513 Trichlorophenol [2,4,6-]	2				64	mg/kg	2	0.33	0.33		2	
514 Trichloropropane [1,2,3-]	2					mg/kg	2	0.005	0.005			
515 Trimethylbenzene [1,2,4-]	2					mg/kg	2	0.005	0.005			
516 Trimethylbenzene [1,3,5-]	2					mg/kg	2	0.005	0.005			
517 Uranium	3	3	4.1	4.4		mg/kg						
518 Vinyl chloride	2				0.012	mg/kg	2	0.01	0.01		2	
519 Xylenes (o + m + p) [Mixed-]	2				160,000	mg/kg	2	0.005	0.005		2	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥SAL, Including ≥LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD≥SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
00-030(q)												
520 Acenaphthene	2				4,800	mg/kg	2	0.33	0.33		2	
521 Acenaphthylene	2					mg/kg	2	0.33	0.33			
522 Acetone	2	1	0.043	0.043	8,000	mg/kg	1	0.02	0.02		2	
523 Aldrin	2					mg/kg	2	0.00187	0.00191			
524 Aniline	2					mg/kg	2	0.33	0.33			
525 Anthracene	2				24,000	mg/kg	2	0.33	0.33		2	
526 Antimony	3				32	mg/kg	3	0.25	0.25		3	
527 Aroclor 1016	2					mg/kg	2	0.0731	0.0736			
528 Aroclor 1221	2					mg/kg	2	0.0362	0.0371			
529 Aroclor 1232	2					mg/kg	3	0.0362	0.2614			
530 Aroclor 1242	3					mg/kg	2	0.0362	0.0371			
531 Aroclor 1248	3					mg/kg	3	0.0362	0.2614			
532 Aroclor 1254	3					mg/kg	3	0.0362	0.2614			
533 Aroclor 1260	3					mg/kg	3	0.0362	0.2614			1
534 Aroclor [Mixed-]	1				0.09	mg/kg	1	0.2614	0.2614			
535 Arsenic	3	3	3	3.2	0.4	mg/kg				3		
536 Azobenzene	2					mg/kg	2	0.33	0.33			
537 BHC [alpha-]	2				0.1	mg/kg	2	0.00187	0.00191		2	
538 BHC [beta-]	2				4	mg/kg	2	0.00187	0.00191		2	
539 BHC [delta-]	2					mg/kg	2	0.00187	0.00191			
540 Barium	3	3	110	210	5,600	mg/kg					3	
541 Benzene	2				0.67	mg/kg	2	0.005	0.005		2	
542 Benzidine [m-]	2					mg/kg	2	0.33	0.33			
543 Benzo[a]anthracene	2				0.64	mg/kg	2	0.33	0.33		2	
544 Benzo[a]pyrene	2				0.1	mg/kg	2	0.33	0.33			2
546 Benzo[b]fluoranthene	2				0.7	mg/kg	2	0.33	0.33		2	
546 Benzo[g,h,i]perylene	2				44	mg/kg	2	0.33	0.33		2	
547 Benzo[k]fluoranthene	2				1.5	mg/kg	2	0.33	0.33		2	
548 Benzoic acid	2				320,000	mg/kg	2	0.33	0.33		2	
549 Benzyl alcohol	2					mg/kg	2	0.33	0.33			
550 Beryllium	3	3	0.67	0.76	0.16	mg/kg				3		
551 Bis(2-chloroethoxy)methane	2					mg/kg	2	0.33	0.33			2
552 Bis(2-chloroethyl)ether	2				0.12	mg/kg	2	0.33	0.33			
553 Bis(2-chloroisopropyl)ether	2				100	mg/kg	2	0.33	0.33		2	
554 Bis(2-ethylhexyl)phthalate	2				50	mg/kg	2	0.33	0.33		2	
555 Bromobenzene	2					mg/kg	2	0.005	0.005			

TABLE 2-1

SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
556 Bromochloromethane	2					mg/kg	2	0.005	0.005			
557 Bromodichloromethane	2				11	mg/kg	2	0.005	0.005		2	
558 Bromoform	2				89	mg/kg	2	0.005	0.005		2	
559 Bromomethane	2				0.43	mg/kg	2	0.01	0.01		2	
560 Bromophenylphenyl ether [4-]	2					mg/kg	2	0.33	0.33			
561 Butanone [2-]	2				4,000	mg/kg	2	0.02	0.02		2	
562 Butyl benzyl phthalate	2				16,000	mg/kg	2	0.33	0.33		2	
563 Butylbenzene [n-]	2					mg/kg	2	0.005	0.005			
564 Butylbenzene [sec-]	2					mg/kg	2	0.005	0.005			
565 Butylbenzene [tert-]	2					mg/kg	2	0.005	0.005			
566 Cadmium	3	1	2	2	80	mg/kg	2	0.4	0.4		3	
567 Carbon disulfide	2				7.4	mg/kg	2	0.005	0.005		2	
568 Carbon tetrachloride	2				0.21	mg/kg	2	0.005	0.005		2	
569 Chlordane [alpha-]	2					mg/kg	2	0.00187	0.00191			
570 Chlordane [gamma-]	2					mg/kg	2	0.00187	0.00191			
571 Chloro-3-methylphenol [4-]	2				16,000	mg/kg	2	0.33	0.33		2	
572 Chloroaniline [4-]	2				320	mg/kg	2	0.33	0.33		2	
573 Chlorobenzene	2				67	mg/kg	2	0.005	0.005		2	
574 Chlorodibromomethane	2				83	mg/kg	2	0.005	0.005		2	
575 Chloroethane	2				3,300	mg/kg	2	0.01	0.01		2	
576 Chloroform	2				0.21	mg/kg	2	0.005	0.005		2	
577 Chloromethane	2				6.4	mg/kg	2	0.01	0.01		2	
578 Chloronaphthalene [2-]	2				6,400	mg/kg	2	0.33	0.33		2	
579 Chlorophenol [o-]	2				400	mg/kg	2	0.33	0.33		2	
580 Chlorophenylphenyl ether [4-]	2					mg/kg	2	0.33	0.33			
581 Chlorotoluene [o-]	2					mg/kg	2	0.005	0.005			
582 Chlorotoluene [p-]	2					mg/kg	2	0.005	0.005			
583 Chromium	3	3	7.5	13	400	mg/kg					3	
584 Chrysene	2				22	mg/kg	2	0.33	0.33		2	
585 DDD [p,p']	2	1	0.0104	0.0104	2.9	mg/kg	1	0.00362	0.00362		2	
586 DDE [p,p']	2	1	0.12	0.12		mg/kg	1	0.00362	0.00362			
587 DDT [p,p']	2	1	0.112	0.112	2.1	mg/kg	1	0.00362	0.00362		2	
588 Di-n-butyl phthalate	2				8,000	mg/kg	2	0.98	1.1		2	
589 Di-n-octyl phthalate	2				1,600	mg/kg	2	0.33	0.33		2	
590 Dibenzo[a,h]anthracene	2				0.086	mg/kg	2	0.33	0.33			2
591 Dibenzokuran	2					mg/kg	2	0.33	0.33			
592 Dibromo-3-chloropropane [1,2-]	2					mg/kg	2	0.01	0.01			
593 Dibromoethane [1,2-]	2					mg/kg	2	0.005	0.005			

TABLE 2-1

SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
594 Dibromomethane	2					mg/kg	2	0.005	0.005			
595 Dichlorobenzene (1,2) [o-]	4				1,600	mg/kg	4	0.005	0.33		4	
596 Dichlorobenzene (1,3) [m-]	4				7,200	mg/kg	4	0.005	0.33		4	
597 Dichlorobenzene (1,4) [p-]	4				290	mg/kg	4	0.005	0.33		4	
598 Dichlorobenzidine [3,3'-]	2				1.6	mg/kg	2	0.33	0.33		2	
599 Dichlorodifluoromethane	2					mg/kg	2	0.01	0.01			
600 Dichloroethane [1,1-]	2				410	mg/kg	2	0.005	0.005		2	
601 Dichloroethane [1,2-]	2				0.2	mg/kg	2	0.005	0.005		2	
602 Dichloroethene [1,1-]	2				0.4	mg/kg	2	0.005	0.005		2	
603 Dichloroethene [trans-1,2-]	2				1,600	mg/kg	2	0.005	0.005		2	
604 Dichloroethylene [cis-1,2-]	2				800	mg/kg	2	0.005	0.005		2	
605 Dichlorophenol [2,4-]	2				240	mg/kg	2	0.33	0.33		2	
606 Dichloropropane [1,2-]	2				6.5	mg/kg	2	0.005	0.005		2	
607 Dichloropropane [1,3-]	2					mg/kg	2	0.005	0.005			
608 Dichloropropane [2,2-]	2					mg/kg	2	0.005	0.005			
609 Dichloropropene [1,1-]	2					mg/kg	2	0.005	0.005		2	
610 Dichloropropene [cis-1,3-]	2				0.17	mg/kg	2	0.005	0.005		2	
611 Dichloropropene [trans-1,3-]	2				0.17	mg/kg	2	0.005	0.005		2	
612 Dieldrin	2					mg/kg	2	0.00362	0.00371			
613 Diethyl phthalate	2				64,000	mg/kg	2	0.33	0.33		2	
614 Dimethyl phthalate	2				800,000	mg/kg	2	0.33	0.33		2	
615 Dimethylphenol [2,4-]	2				1,600	mg/kg	2	0.33	0.33		2	
616 Dinitrophenol [2,4-]	2				160	mg/kg	2	0.33	0.33		2	
617 Dinitrotoluene [2,4-]	2				1	mg/kg	2	0.33	0.33		2	
618 Dinitrotoluene [2,6-]	2				1	mg/kg	2	0.33	0.33		2	
619 Endosulfan I	2					mg/kg	2	0.00187	0.00191			
620 Endosulfan II	2					mg/kg	2	0.00362	0.00371			
621 Endosulfan sulfate	2					mg/kg	2	0.00362	0.00371			
622 Endrin	2					mg/kg	2	0.00362	0.00371			
623 Endrin aldehyde	2					mg/kg	2	0.00362	0.00371			
624 Endrin ketone	2					mg/kg	2	0.005	0.005		2	
625 Ethylbenzene	2				3,100	mg/kg	2	0.33	0.33		2	
626 Fluoranthene	2				3,200	mg/kg	2	0.33	0.33		2	
627 Fluorene	2				3,200	mg/kg	2	0.00187	0.00191			
628 Heptachlor	2					mg/kg	2	0.00187	0.00191			
629 Heptachlor epoxide	2					mg/kg	2	0.33	0.33		2	
630 Hexachlorobenzene	2				0.44	mg/kg	2	0.33	0.33		2	
631 Hexachlorobutadiene	2				90	mg/kg	2	0.33	0.33		2	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥SAL, Including ≥LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD ≥SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
632 Hexachlorocyclopentadiene	2				560	mg/kg	2	0.33	0.33		2	
633 Hexachloroethane	2				80	mg/kg	2	0.33	0.33		2	
634 Hexanone [2-]	2					mg/kg	2	0.02	0.02			
635 Indeno[1,2,3-cd]pyrene	2				0.41	mg/kg	2	0.33	0.33		2	
636 Isophorone	2				7,400	mg/kg	2	0.33	0.33		2	
637 Isopropylbenzene	2					mg/kg	2	0.005	0.005			
638 Isopropyltoluene [4-]	2					mg/kg	2	0.005	0.005			
639 Lead	2	2	20.4	65	500	mg/kg					2	
640 Lindane	2					mg/kg	2	0.00187	0.00191			
641 Mercury	9	3	1	2	24	mg/kg	6	0.1	0.1		9	
642 Methoxychlor	2					mg/kg	2	0.0187	0.0191			
643 Methyl iodide	2					mg/kg	2	0.005	0.005			
644 Methyl-2-pentanone [4-]	2				510	mg/kg	2	0.02	0.02		2	
645 Methyl-4,6-dinitrophenol [2-]	2					mg/kg	2	0.33	0.33			
646 Methylene chloride	2				5.6	mg/kg	2	0.005	0.005		2	
647 Methylnaphthalene [2-]	2					mg/kg	2	0.33	0.33			
648 Methylphenol [2-]	2				4,000	mg/kg	2	0.33	0.33		2	
649 Methylphenol [4-]	2				400	mg/kg	2	0.33	0.33		2	
650 Naphthalene	2				3,200	mg/kg	2	0.33	0.33		2	
651 Nickel	3	3	7	7.6	1,600	mg/kg					3	
652 Nitroaniline [2-]	2					mg/kg	2	0.33	0.33			
653 Nitroaniline [3-]	2					mg/kg	2	0.33	0.33			
654 Nitroaniline [4-]	2					mg/kg	2	0.33	0.33			
655 Nitrobenzene	2				5.3	mg/kg	2	0.33	0.33		2	
656 Nitrophenol [2-]	2					mg/kg	2	0.33	0.33			
657 Nitrophenol [4-]	2					mg/kg	2	0.33	0.33			2
658 Nitrosodi-n-propylamine [N-]	2				0.1	mg/kg	2	0.33	0.33			
659 Nitrosodimethylamine [N-]	2					mg/kg	2	0.33	0.33		2	
660 Nitrosodiphenylamine [N-]	2				140	mg/kg	2	0.33	0.33		2	
661 Pentachlorophenol	2				5.8	mg/kg	2	0.33	0.33			
662 Phenanthrene	2					mg/kg	2	0.33	0.33			
663 Phenol	2				48,000	mg/kg	2	0.33	0.33		2	
664 Plutonium-238	2	2	0.003	0.015	27	pCi/g					2	
665 Plutonium-239	2	2	0.012	0.013	24	pCi/g					2	
666 Propylbenzene	2					mg/kg	2	0.005	0.005			
667 Pyrene	2				2,400	mg/kg	2	0.33	0.33		2	
668 Selenium	3				400	mg/kg	3	0.3	0.3		3	
669 Silver	3				400	mg/kg	3	1	1		3	

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SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
670 Styrene	2				16,000	mg/kg	2	0.005	0.005		2	
671 Tetrachloroethane [1,1,1,2-]	2					mg/kg	2	0.005	0.005			
672 Tetrachloroethane [1,1,2,2-]	2				3.9	mg/kg	2	0.005	0.005		2	
673 Tetrachloroethylene	2				5.9	mg/kg	2	0.005	0.005		2	
674 Thallium	3				6.4	mg/kg	3	0.25	0.25		3	
675 Toluene	2				890	mg/kg	2	0.005	0.005		2	
676 Toxaphene	2					mg/kg	2	0.187	0.191			
677 Trichloro-1,2,2-trifluoroethane [1,1,2-]	2					mg/kg	2	0.005	0.005			
678 Trichlorobenzene [1,2,4-]	2				160	mg/kg	2	0.33	0.33		2	
679 Trichloroethane [1,1,1-]	2				1,000	mg/kg	2	0.005	0.005		2	
680 Trichloroethane [1,1,2-]	2				6.3	mg/kg	2	0.005	0.005		2	
681 Trichloroethene	2				3.2	mg/kg	2	0.005	0.005		2	
682 Trichlorofluoromethane	2					mg/kg	2	0.005	0.005			
683 Trichlorophenol [2,4,5-]	2				8,000	mg/kg	2	0.33	0.33		2	
684 Trichlorophenol [2,4,6-]	2				64	mg/kg	2	0.33	0.33		2	
685 Trichloropropane [1,2,3-]	2					mg/kg	2	0.005	0.005			
686 Trimethylbenzene [1,2,4-]	2					mg/kg	2	0.005	0.005			
687 Trimethylbenzene [1,3,5-]	2					mg/kg	2	0.005	0.005			
688 Uranium	2	2	1.66	1.71		pCi/g						
689 Vinyl chloride	2				0.012	mg/kg	2	0.01	0.01		2	
690 Xylenes (o + m + p) [Mixed-]	2				160,000	mg/kg	2	0.005	0.005		2	
00-031(b)												
691 Lead	6	5	6.4	10.1	500	mg/kg	1	0.4	0.4		6	
692 Petroleum Hydrocarbons, Total Recoverable	4	2	3	9		mg/kg	2	1	1			
00-031(b) UST-2												
693 Lead	1	1	0.86	0.86	500	mg/kg						1
694 Petroleum Hydrocarbons, Total Recoverable	4	2	13	81		mg/kg	2	1	1			
00-032												
695 Acenaphthene	26				4,800	mg/kg	26	0.33	0.33		26	
696 Acenaphthylene	26					mg/kg	26	0.33	0.33			

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
697 Acetone	28	10	0.024	0.058	8,000	mg/kg	18	0.02	0.044		28	
698 Aniline	26					mg/kg	26	0.33	0.33			
699 Anthracene	26				24,000	mg/kg	26	0.33	0.33		26	
700 Azobenzene	26					mg/kg	26	0.33	0.33			
701 Benzene	28				0.67	mg/kg	28	0.005	0.005		28	
702 Benzdine [m-]	26					mg/kg	26	0.33	0.33			
703 Benzo[a]anthracene	26				0.64	mg/kg	26	0.33	0.33		26	
704 Benzo[a]pyrene	26				0.1	mg/kg	26	0.33	0.33			26
705 Benzo[b]fluoranthene	26				0.7	mg/kg	26	0.33	0.33		26	
706 Benzo[g,h,i]perylene	26				44	mg/kg	26	0.33	0.33		26	
707 Benzo[k]fluoranthene	26				1.5	mg/kg	26	0.33	0.33		26	
708 Benzoic acid	26				320,000	mg/kg	26	0.33	0.33		26	
709 Benzyl alcohol	26					mg/kg	26	0.33	0.33			
710 Bis(2-chloroethoxy)methane	26					mg/kg	26	0.33	0.33			
711 Bis(2-chloroethyl)ether	26				0.12	mg/kg	26	0.33	0.33			26
712 Bis(2-chloroisopropyl)ether	26				100	mg/kg	26	0.33	0.33		26	
713 Bis(2-ethylhexyl)phthalate	26				50	mg/kg	26	0.33	0.33		26	
714 Bromobenzene	28					mg/kg	28	0.005	0.005			
715 Bromochloromethane	28					mg/kg	28	0.005	0.005			
716 Bromodichloromethane	28				11	mg/kg	28	0.005	0.005		28	
717 Bromoform	28				89	mg/kg	28	0.005	0.005		28	
718 Bromomethane	28				0.43	mg/kg	28	0.01	0.01		28	
719 Bromophenylphenyl ether [4-]	26					mg/kg	26	0.33	0.33			
720 Butanone [2-]	28	1	0.028	0.028	4,000	mg/kg	27	0.02	0.04		28	
721 Butyl benzyl phthalate	26				16,000	mg/kg	26	0.33	0.33		26	
722 Butylbenzene [n-]	28					mg/kg	28	0.005	0.005			
723 Butylbenzene [sec-]	28					mg/kg	28	0.005	0.005			
724 Butylbenzene [tert-]	28					mg/kg	28	0.005	0.005			
725 Carbon disulfide	28	1	0.0061	0.0061	7.4	mg/kg	27	0.005	0.005		28	
726 Carbon tetrachloride	28				0.21	mg/kg	28	0.005	0.005		28	
727 Chloro-3-methylphenol [4-]	26				16,000	mg/kg	26	0.33	0.33		26	
728 Chloroaniline [4-]	26				320	mg/kg	26	0.33	0.33		26	
729 Chlorobenzene	28				67	mg/kg	28	0.005	0.005		28	
730 Chlorodibromomethane	28				83	mg/kg	28	0.005	0.005		28	
731 Chloroethane	28				3,300	mg/kg	28	0.01	0.01		28	
732 Chloroform	28				0.21	mg/kg	28	0.005	0.005		28	
733 Chloromethane	28				6.4	mg/kg	28	0.01	0.01		28	
734 Chloronaphthalene [2-]	26				6,400	mg/kg	26	0.33	0.33		26	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
735 Chlorophenol [o-]	26				400	mg/kg	26	0.33	0.33		26	
736 Chlorophenylphenyl ether [4-]	26					mg/kg	26	0.33	0.33			
737 Chlorotoluene [o-]	28					mg/kg	28	0.005	0.005			
738 Chlorotoluene [p-]	28					mg/kg	28	0.005	0.005			
739 Chromium	26	24	0.92	19	400	mg/kg	2	0.7	0.7		26	
740 Chrysene	26				22	mg/kg	26	0.33	0.33		26	
741 Di-n-butyl phthalate	26				8,000	mg/kg	26	0.33	0.51		26	
742 Di-n-octyl phthalate	26				1,600	mg/kg	26	0.33	0.33		26	
743 Dibenzo[a,h]anthracene	26				0.086	mg/kg	26	0.33	0.33			26
744 Dibenzofuran	26					mg/kg	26	0.33	0.33			
745 Dibromo-3-chloropropane [1,2-]	28					mg/kg	28	0.01	0.01			
746 Dibromoethane [1,2-]	28					mg/kg	28	0.005	0.005			
747 Dibromomethane	28					mg/kg	28	0.005	0.005			
748 Dichlorobenzene (1,2) [o-]	54				1,600	mg/kg	54	0.005	0.33		54	
749 Dichlorobenzene (1,3) [m-]	54				7,200	mg/kg	54	0.005	0.33		54	
750 Dichlorobenzene (1,4) [p-]	54				290	mg/kg	54	0.005	0.33		54	
751 Dichlorobenzidine [3,3'-]	26				1.6	mg/kg	26	0.33	0.33		26	
752 Dichlorodifluoromethane	28					mg/kg	28	0.01	0.01			
753 Dichloroethane [1,1-]	28				410	mg/kg	28	0.005	0.005		28	
754 Dichloroethane [1,2-]	28				0.2	mg/kg	28	0.005	0.005		28	
755 Dichloroethene [1,1-]	28				0.4	mg/kg	28	0.005	0.005		28	
756 Dichloroethene [trans-1,2-]	28				1,600	mg/kg	28	0.005	0.005		28	
757 Dichloroethylene [cis-1,2-]	28				800	mg/kg	28	0.005	0.005		28	
758 Dichlorophenol [2,4-]	26				240	mg/kg	26	0.33	0.33		26	
759 Dichloropropane [1,2-]	28				6.5	mg/kg	28	0.005	0.005		28	
760 Dichloropropane [1,3-]	28					mg/kg	28	0.005	0.005			
761 Dichloropropane [2,2-]	28					mg/kg	28	0.005	0.005			
762 Dichloropropene [1,1-]	28					mg/kg	28	0.005	0.005			
763 Dichloropropene [cis-1,3-]	28				0.17	mg/kg	28	0.005	0.005		28	
764 Dichloropropene [trans-1,3-]	28				0.17	mg/kg	28	0.005	0.005		28	
765 Diethyl phthalate	26				64,000	mg/kg	26	0.33	0.33		26	
766 Dimethyl phthalate	26				800,000	mg/kg	26	0.33	0.33		26	
767 Dimethylphenol [2,4-]	26				1,600	mg/kg	26	0.33	0.33		26	
768 Dinitrophenol [2,4-]	26				160	mg/kg	26	0.33	0.33		26	
769 Dinitrotoluene [2,4-]	26				1	mg/kg	26	0.33	0.33		26	
770 Dinitrotoluene [2,6-]	26				1	mg/kg	26	0.33	0.33		26	
771 Ethylbenzene	28				3,100	mg/kg	28	0.005	0.005		28	
772 Fluoranthene	26				3,200	mg/kg	26	0.33	0.33		26	

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			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
773 Fluorene	26				3,200	mg/kg	26	0.33	0.33		26	
774 Hexachlorobenzene	26				0.44	mg/kg	26	0.33	0.33		26	
775 Hexachlorobutadiene	26				90	mg/kg	26	0.33	0.33		26	
776 Hexachlorocyclopentadiene	26				560	mg/kg	26	0.33	0.33		26	
777 Hexachloroethane	26				80	mg/kg	26	0.33	0.33		26	
778 Hexanone [2-]	28					mg/kg	28	0.02	0.02			
779 Indeno[1,2,3-cd]pyrene	26				0.41	mg/kg	26	0.33	0.33		26	
780 Isophorone	26				7,400	mg/kg	26	0.33	0.33		26	
781 Isopropylbenzene	28					mg/kg	28	0.005	0.005			
782 Isopropyltoluene [4-]	28					mg/kg	28	0.005	0.005			
783 Lead	28	19	5	70	500	mg/kg	9	4	5		28	
784 Methyl iodide	28					mg/kg	28	0.005	0.005			
785 Methyl-2-pentanone [4-]	28				510	mg/kg	28	0.02	0.02		28	
786 Methyl-4,6-dinitrophenol [2-]	26					mg/kg	26	0.33	0.33			
787 Methylene chloride	28				5.6	mg/kg	28	0.005	0.005		28	
788 Methylnaphthalene [2-]	26					mg/kg	26	0.33	0.33			
789 Methylphenol [2-]	26				4,000	mg/kg	26	0.33	0.33		26	
790 Methylphenol [4-]	26				400	mg/kg	26	0.33	0.33		26	
791 Naphthalene	26				3,200	mg/kg	26	0.33	0.33		26	
792 Nitroaniline [2-]	26					mg/kg	26	0.33	0.33			
793 Nitroaniline [3-]	26					mg/kg	26	0.33	0.33			
794 Nitroaniline [4-]	26					mg/kg	26	0.33	0.33			
795 Nitrobenzene	26				5.3	mg/kg	26	0.33	0.33		26	
796 Nitrophenol [2-]	26					mg/kg	26	0.33	0.33			
797 Nitrophenol [4-]	26					mg/kg	26	0.33	0.33			
798 Nitrosodi-n-propylamine [N-]	26				0.1	mg/kg	26	0.33	0.33			26
799 Nitrosodimethylamine [N-]	26					mg/kg	26	0.33	0.33			
800 Nitrosodiphenylamine [N-]	26				140	mg/kg	26	0.33	0.33		26	
801 Pentachlorophenol	26				5.8	mg/kg	26	0.33	0.33		26	
802 Petroleum Hydrocarbons, Total Recoverable	26	20	1	3,600		mg/kg	8	1	1			
803 Phenanthrene	26					mg/kg	26	0.33	0.33			
804 Phenol	26				48,000	mg/kg	26	0.33	0.33		26	
805 Propylbenzene	28					mg/kg	28	0.005	0.005			
806 Pyrene	26				2,400	mg/kg	26	0.33	0.33		26	
807 Styrene	28				16,000	mg/kg	28	0.005	0.005		28	
808 Tetrachloroethane [1,1,1,2-]	28					mg/kg	28	0.005	0.005			
809 Tetrachloroethane [1,1,2,2-]	28				3.9	mg/kg	28	0.005	0.005		28	
810 Tetrachloroethylene	28				5.9	mg/kg	28	0.005	0.005		28	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
811 Toluene	28				890	mg/kg	28	0.005	0.005		28	
812 Trichloro-1,2,2-trifluoroethane [1,1,2-]	28					mg/kg	28	0.005	0.005			
813 Trichlorobenzene [1,2,4-]	26				160	mg/kg	26	0.33	0.33		26	
814 Trichloroethane [1,1,1-]	28				1,000	mg/kg	28	0.005	0.005		28	
815 Trichloroethane [1,1,2-]	28				6.3	mg/kg	28	0.005	0.005		28	
816 Trichloroethene	28				3.2	mg/kg	28	0.005	0.005		28	
817 Trichlorofluoromethane	28					mg/kg	28	0.005	0.005			
818 Trichlorophenol [2,4,5-]	26				8,000	mg/kg	26	0.33	0.33		26	
819 Trichlorophenol [2,4,6-]	26				64	mg/kg	26	0.33	0.33		26	
820 Trichloropropane [1,2,3-]	28					mg/kg	28	0.005	0.005			
821 Trimethylbenzene [1,2,4-]	28					mg/kg	28	0.005	0.005			
822 Trimethylbenzene [1,3,5-]	28					mg/kg	28	0.005	0.005			
823 Vinyl chloride	28				0.012	mg/kg	28	0.01	0.01		28	
824 Xylenes (o + m + p) [Mixed-]	28				160,000	mg/kg	28	0.005	0.005		28	
00-032 JUNCTION BOX 5N												
825 Acenaphthene	7				4,800	mg/kg	7	0.33	0.33		7	
826 Acenaphthylene	7					mg/kg	7	0.33	0.33			
827 Acetone	7	4	0.054	0.28	8,000	mg/kg	3	0.02	0.02		7	
828 Aniline	7					mg/kg	7	0.33	0.33			
829 Anthracene	7				24,000	mg/kg	7	0.33	0.33		7	
830 Azobenzene	7					mg/kg	7	0.33	0.33			
831 Benzene	7				0.67	mg/kg	7	0.005	0.005		7	
832 Benzidine [m-]	7					mg/kg	7	0.33	0.33			
833 Benzo[a]anthracene	7				0.64	mg/kg	7	0.33	0.33		7	
834 Benzo[a]pyrene	7				0.1	mg/kg	7	0.33	0.33			7
835 Benzo[b]fluoranthene	7				0.7	mg/kg	7	0.33	0.33		7	
836 Benzo[g,h,i]perylene	7				44	mg/kg	7	0.33	0.33		7	
837 Benzo[k]fluoranthene	7				1.5	mg/kg	7	0.33	0.33		7	
838 Benzoic acid	7				320,000	mg/kg	7	0.33	0.33		7	
839 Benzyl alcohol	7					mg/kg	7	0.33	0.33			
840 Bis(2-chloroethoxy)methane	7					mg/kg	7	0.33	0.33			
841 Bis(2-chloroethyl)ether	7				0.12	mg/kg	7	0.33	0.33			7
842 Bis(2-chloroisopropyl)ether	7				100	mg/kg	7	0.33	0.33		7	
843 Bis(2-ethylhexyl)phthalate	7				50	mg/kg	7	0.33	0.33		7	
844 Bromobenzene	7					mg/kg	7	0.005	0.005			
845 Bromochloromethane	7					mg/kg	7	0.005	0.005			

TABLE 2-1

SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
846 Bromodichloromethane	7				11	mg/kg	7	0.005	0.005		7	
847 Bromoform	7				89	mg/kg	7	0.005	0.005		7	
848 Bromomethane	7				0.43	mg/kg	7	0.01	0.01		7	
849 Bromophenylphenyl ether [4-]	7					mg/kg	7	0.33	0.33			
850 Butanone [2-]	7				4,000	mg/kg	7	0.02	0.049		7	
851 Butyl benzyl phthalate	7				16,000	mg/kg	7	0.33	0.33		7	
852 Butylbenzene [n-]	7					mg/kg	7	0.005	0.005			
853 Butylbenzene [sec-]	7					mg/kg	7	0.005	0.005			
854 Butylbenzene [tert-]	7				7.4	mg/kg	7	0.005	0.005		7	
855 Carbon disulfide	7				0.21	mg/kg	7	0.005	0.005		7	
856 Carbon tetrachloride	7				16,000	mg/kg	7	0.33	0.33		7	
857 Chloro-3-methylphenol [4-]	7				320	mg/kg	7	0.33	0.33		7	
858 Chloroaniline [4-]	7				67	mg/kg	7	0.005	0.005		7	
859 Chlorobenzene	7				83	mg/kg	7	0.005	0.005		7	
860 Chlorodibromomethane	7				3,300	mg/kg	7	0.01	0.01		7	
861 Chloroethane	7				0.21	mg/kg	7	0.005	0.005		7	
862 Chloroform	7				6.4	mg/kg	7	0.01	0.01		7	
863 Chloromethane	7				6,400	mg/kg	7	0.33	0.33		7	
864 Chloronaphthalene [2-]	7				400	mg/kg	7	0.33	0.33		7	
865 Chlorophenol [o-]	7					mg/kg	7	0.33	0.33			
866 Chlorophenylphenyl ether [4-]	7					mg/kg	7	0.005	0.005			
867 Chlorotoluene [o-]	7					mg/kg	7	0.005	0.005			
868 Chlorotoluene [p-]	7					mg/kg	7	0.005	0.005			
869 Chromium	8	7	5.7	12	400	mg/kg	1	1	1		8	
870 Chrysene	7				22	mg/kg	7	0.33	0.33		7	
871 Di-n-butyl phthalate	7				8,000	mg/kg	7	0.33	0.42		7	
872 Di-n-octyl phthalate	7				1,600	mg/kg	7	0.33	0.33		7	
873 Dibenzo[a,h]anthracene	7				0.086	mg/kg	7	0.33	0.33			7
874 Dibenzofuran	7					mg/kg	7	0.01	0.01			
875 Dibromo-3-chloropropane [1,2-]	7					mg/kg	7	0.005	0.005			
876 Dibromoethane [1,2-]	7					mg/kg	7	0.005	0.005			
877 Dibromomethane	7					mg/kg	7	0.005	0.33		14	
878 Dichlorobenzene (1,2) [o-]	14				1,600	mg/kg	14	0.005	0.33		14	
879 Dichlorobenzene (1,3) [m-]	14				7,200	mg/kg	14	0.005	0.33		14	
880 Dichlorobenzene (1,4) [p-]	14				290	mg/kg	14	0.005	0.33		14	
881 Dichlorobenzidine [3,3'-]	7				1.6	mg/kg	7	0.33	0.33		7	
882 Dichlorodifluoromethane	7					mg/kg	7	0.01	0.01			
883 Dichloroethane [1,1-]	7				410	mg/kg	7	0.005	0.005		7	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
884 Dichloroethane [1,2-]	7				0.2	mg/kg	7	0.005	0.005		7	
885 Dichloroethene [1,1-]	7				0.4	mg/kg	7	0.005	0.005		7	
886 Dichloroethene [trans-1,2-]	7				1,600	mg/kg	7	0.005	0.005		7	
887 Dichloroethylene [cis-1,2-]	7				800	mg/kg	7	0.005	0.005		7	
888 Dichlorophenol [2,4-]	7				240	mg/kg	7	0.33	0.33		7	
889 Dichloropropane [1,2-]	7				6.5	mg/kg	7	0.005	0.005		7	
890 Dichloropropane [1,3-]	7					mg/kg	7	0.005	0.005			
891 Dichloropropane [2,2-]	7					mg/kg	7	0.005	0.005			
892 Dichloropropene [1,1-]	7					mg/kg	7	0.005	0.005			
893 Dichloropropene [cis-1,3-]	7				0.17	mg/kg	7	0.005	0.005		7	
894 Dichloropropene [trans-1,3-]	7				0.17	mg/kg	7	0.005	0.005		7	
895 Diethyl phthalate	7				64,000	mg/kg	7	0.33	0.33		7	
896 Dimethyl phthalate	7				800,000	mg/kg	7	0.33	0.33		7	
897 Dimethylphenol [2,4-]	7				1,600	mg/kg	7	0.33	0.33		7	
898 Dinitrophenol [2,4-]	7				160	mg/kg	7	0.33	0.33		7	
899 Dinitrotoluene [2,4-]	7				1	mg/kg	7	0.33	0.33		7	
900 Dinitrotoluene [2,6-]	7				1	mg/kg	7	0.33	0.33		7	
901 Ethylbenzene	7				3,100	mg/kg	7	0.005	0.005		7	
902 Fluoranthene	7				3,200	mg/kg	7	0.33	0.33		7	
903 Fluorene	7				3,200	mg/kg	7	0.33	0.33		7	
904 Hexachlorobenzene	7				0.44	mg/kg	7	0.33	0.33		7	
905 Hexachlorobutadiene	7				90	mg/kg	7	0.33	0.33		7	
906 Hexachlorocyclopentadiene	7				560	mg/kg	7	0.33	0.33		7	
907 Hexachloroethane	7				80	mg/kg	7	0.33	0.33		7	
908 Hexanone [2-]	7					mg/kg	7	0.02	0.02			
909 Indeno[1,2,3-cd]pyrene	7				0.41	mg/kg	7	0.33	0.33		7	
910 Isophorone	7				7,400	mg/kg	7	0.33	0.33		7	
911 Isopropylbenzene	7					mg/kg	7	0.005	0.005			
912 Isopropyltoluene [4-]	7					mg/kg	7	0.005	0.005			
913 Lead	8	8	9	32	500	mg/kg					8	
914 Methyl iodide	7					mg/kg	7	0.005	0.005			
915 Methyl-2-pentanone [4-]	7				510	mg/kg	7	0.02	0.02		7	
916 Methyl-4,6-dinitrophenol [2-]	7					mg/kg	7	0.33	0.33			
917 Methylene chloride	7				5.6	mg/kg	7	0.005	0.005		7	
918 Methylnaphthalene [2-]	7					mg/kg	7	0.33	0.33			
919 Methylphenol [2-]	7				4,000	mg/kg	7	0.33	0.33		7	
920 Methylphenol [4-]	7				400	mg/kg	7	0.33	0.33		7	
921 Naphthalene	7				3,200	mg/kg	7	0.33	0.33		7	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
922 Nitroaniline [2-]	7					mg/kg	7	0.33	0.33			
923 Nitroaniline [3-]	7					mg/kg	7	0.33	0.33			
924 Nitroaniline [4-]	7					mg/kg	7	0.33	0.33			
925 Nitrobenzene	7				5.3	mg/kg	7	0.33	0.33		7	
926 Nitrophenol [2-]	7					mg/kg	7	0.33	0.33			
927 Nitrophenol [4-]	7					mg/kg	7	0.33	0.33			7
928 Nitrosodi-n-propylamine [N-]	7				0.1	mg/kg	7	0.33	0.33			
929 Nitrosodimethylamine [N-]	7				140	mg/kg	7	0.33	0.33		7	
930 Nitrosodiphenylamine [N-]	7				5.8	mg/kg	7	0.33	0.33		7	
931 Pentachlorophenol	7					mg/kg	3	1	1			
932 Petroleum Hydrocarbons, Total Recoverable	7	4	6	40		mg/kg	7	0.33	0.33			
933 Phenanthrene	7				48,000	mg/kg	7	0.33	0.33		7	
934 Phenol	7					mg/kg	7	0.005	0.005			
935 Propylbenzene	7				2,400	mg/kg	7	0.33	0.33		7	
936 Pyrene	7				16,000	mg/kg	7	0.005	0.005		7	
937 Styrene	7					mg/kg	7	0.005	0.005			
938 Tetrachloroethane [1,1,1,2-]	7				3.9	mg/kg	7	0.005	0.005		7	
939 Tetrachloroethane [1,1,2,2-]	7				5.9	mg/kg	7	0.005	0.005		7	
940 Tetrachloroethylene	7				890	mg/kg	7	0.005	0.005		7	
941 Toluene	7					mg/kg	7	0.005	0.005			
942 Trichloro-1,2,2-trifluoroethane [1,1,2-]	7				160	mg/kg	7	0.33	0.33		7	
943 Trichlorobenzene [1,2,4-]	7				1,000	mg/kg	7	0.005	0.005		7	
944 Trichloroethane [1,1,1-]	7				6.3	mg/kg	7	0.005	0.005		7	
945 Trichloroethane [1,1,2-]	7				3.2	mg/kg	7	0.005	0.005		7	
946 Trichloroethene	7					mg/kg	7	0.005	0.005			
947 Trichlorofluoromethane	7				8,000	mg/kg	7	0.33	0.33		7	
948 Trichlorophenol [2,4,5-]	7				64	mg/kg	7	0.33	0.33		7	
949 Trichlorophenol [2,4,6-]	7					mg/kg	7	0.005	0.005			
950 Trichloropropane [1,2,3-]	7					mg/kg	7	0.005	0.005			
951 Trimethylbenzene [1,2,4-]	7					mg/kg	7	0.005	0.005			
952 Trimethylbenzene [1,3,5-]	7				0.012	mg/kg	7	0.01	0.01		7	
953 Vinyl chloride	7				160,000	mg/kg	7	0.005	0.005		7	
954 Xylenes (o + m + p) [Mixed-]	7											
00-032 JUNCTION BOX 5S												
955 Acenaphthene	5				4,800	mg/kg	5	0.33	0.33		5	
956 Acenaphthylene	5					mg/kg	5	0.33	0.33			

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
957 Acetone	5	4	0.09	0.18	8,000	mg/kg	1	0.02	0.02		5	
958 Aniline	5					mg/kg	5	0.33	0.33			
959 Anthracene	5				24,000	mg/kg	5	0.33	0.33		5	
960 Azobenzene	5					mg/kg	5	0.33	0.33			
961 Benzene	5				0.67	mg/kg	5	0.005	0.005		5	
962 Benzidine [m-]	5					mg/kg	5	0.33	0.33			
963 Benzo[a]anthracene	5				0.64	mg/kg	5	0.33	0.33		5	
964 Benzo[a]pyrene	5				0.1	mg/kg	5	0.33	0.33			5
965 Benzo[b]fluoranthene	5				0.7	mg/kg	5	0.33	0.33		5	
966 Benzo[g,h,i]perylene	5				44	mg/kg	5	0.33	0.33		5	
967 Benzo[k]fluoranthene	5				1.5	mg/kg	5	0.33	0.33		5	
968 Benzoic acid	5				320,000	mg/kg	5	0.33	0.33		5	
969 Benzyl alcohol	5					mg/kg	5	0.33	0.33			
970 Bis(2-chloroethoxy)methane	5					mg/kg	5	0.33	0.33			5
971 Bis(2-chloroethyl)ether	5				0.12	mg/kg	5	0.33	0.33		5	
972 Bis(2-chloroisopropyl)ether	5				100	mg/kg	5	0.33	0.33		5	
973 Bis(2-ethylhexyl)phthalate	5				50	mg/kg	5	0.33	0.33			
974 Bromobenzene	5					mg/kg	5	0.005	0.005			
975 Bromochloromethane	5					mg/kg	5	0.005	0.005		5	
976 Bromodichloromethane	5				11	mg/kg	5	0.005	0.005		5	
977 Bromoform	5				89	mg/kg	5	0.01	0.01		5	
978 Bromomethane	5				0.43	mg/kg	5	0.33	0.33			
979 Bromophenylphenyl ether [4-]	5					mg/kg	5	0.02	0.052		5	
980 Butanone [2-]	5				4,000	mg/kg	5	0.33	0.33		5	
981 Butyl benzyl phthalate	5				16,000	mg/kg	5	0.005	0.005			
982 Butylbenzene [n-]	5					mg/kg	5	0.005	0.005			
983 Butylbenzene [sec-]	5					mg/kg	5	0.005	0.005			
984 Butylbenzene [tert-]	5					mg/kg	5	0.005	0.005			
985 Carbon disulfide	5				7.4	mg/kg	5	0.005	0.005		5	
986 Carbon tetrachloride	5				0.21	mg/kg	5	0.005	0.005		5	
987 Chloro-3-methylphenol [4-]	5				16,000	mg/kg	5	0.33	0.33		5	
988 Chloroaniline [4-]	5				320	mg/kg	5	0.33	0.33		5	
989 Chlorobenzene	5				67	mg/kg	5	0.005	0.005		5	
990 Chlorodibromomethane	5				83	mg/kg	5	0.005	0.005		5	
991 Chloroethane	5				3,300	mg/kg	5	0.01	0.01		5	
992 Chloroform	5				0.21	mg/kg	5	0.005	0.005		5	
993 Chloromethane	5				6.4	mg/kg	5	0.01	0.01		5	
994 Chloronaphthalene [2-]	5				6,400	mg/kg	5	0.33	0.33		5	

TABLE 2-1

SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
995 Chlorophenol [o-]	5				400	mg/kg	5	0.33	0.33		5	
996 Chlorophenylphenyl ether [4-]	5					mg/kg	5	0.33	0.33			
997 Chlorotoluene [o-]	5					mg/kg	5	0.005	0.005			
998 Chlorotoluene [p-]	5					mg/kg	5	0.005	0.005			
999 Chromium	5	5	10	14	400	mg/kg					5	
1000 Chrysene	5				22	mg/kg	5	0.33	0.33		5	
1001 Di-n-butyl phthalate	5	1	0.63	0.63	8,000	mg/kg	4	0.33	0.33		5	
1002 Di-n-octyl phthalate	5				1,600	mg/kg	5	0.33	0.33		5	
1003 Dibenzo[a,h]anthracene	5				0.086	mg/kg	5	0.33	0.33			5
1004 Dibenzofuran	5					mg/kg	5	0.33	0.33			
1005 Dibromo-3-chloropropane [1,2-]	5					mg/kg	5	0.01	0.01			
1006 Dibromoethane [1,2-]	5					mg/kg	5	0.005	0.005			
1007 Dibromomethane	5					mg/kg	5	0.005	0.005			
1008 Dichlorobenzene (1,2) [o-]	10				1,600	mg/kg	10	0.005	0.33		10	
1009 Dichlorobenzene (1,3) [m-]	10				7,200	mg/kg	10	0.005	0.33		10	
1010 Dichlorobenzene (1,4) [p-]	10				290	mg/kg	10	0.005	0.33		10	
1011 Dichlorobenzidine [3,3'-]	5				1.6	mg/kg	5	0.33	0.33		5	
1012 Dichlorodifluoromethane	5					mg/kg	5	0.01	0.01			
1013 Dichloroethane [1,1-]	5				410	mg/kg	5	0.005	0.005		5	
1014 Dichloroethane [1,2-]	5				0.2	mg/kg	5	0.005	0.005		5	
1015 Dichloroethane [1,1-]	5				0.4	mg/kg	5	0.005	0.005		5	
1016 Dichloroethene [trans-1,2-]	5				1,600	mg/kg	5	0.005	0.005		5	
1017 Dichloroethylene [cis-1,2-]	5				800	mg/kg	5	0.005	0.005		5	
1018 Dichlorophenol [2,4-]	5				240	mg/kg	5	0.33	0.33		5	
1019 Dichloropropane [1,2-]	5				6.5	mg/kg	5	0.005	0.005		5	
1020 Dichloropropane [1,3-]	5					mg/kg	5	0.005	0.005			
1021 Dichloropropane [2,2-]	5					mg/kg	5	0.005	0.005			
1022 Dichloropropane [1,1-]	5					mg/kg	5	0.005	0.005			
1023 Dichloropropene [cis-1,3-]	5				0.17	mg/kg	5	0.005	0.005		5	
1024 Dichloropropene [trans-1,3-]	5				0.17	mg/kg	5	0.005	0.005		5	
1025 Diethyl phthalate	5				64,000	mg/kg	5	0.33	0.33		5	
1026 Dimethyl phthalate	5				800,000	mg/kg	5	0.33	0.33		5	
1027 Dimethylphenol [2,4-]	5				1,600	mg/kg	5	0.33	0.33		5	
1028 Dinitrophenol [2,4-]	5				160	mg/kg	5	0.33	0.33		5	
1029 Dinitrotoluene [2,4-]	5				1	mg/kg	5	0.33	0.33		5	
1030 Dinitrotoluene [2,6-]	5				1	mg/kg	5	0.33	0.33		5	
1031 Ethylbenzene	5				3,100	mg/kg	5	0.005	0.005		5	
1032 Fluoranthene	5				3,200	mg/kg	5	0.33	0.33		5	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1033 Fluorene	5				3,200	mg/kg	5	0.33	0.33		5	
1034 Hexachlorobenzene	5				0.44	mg/kg	5	0.33	0.33		5	
1035 Hexachlorobutadiene	5				90	mg/kg	5	0.33	0.33		5	
1036 Hexachlorocyclopentadiene	5				560	mg/kg	5	0.33	0.33		5	
1037 Hexachloroethane	5				80	mg/kg	5	0.33	0.33		5	
1038 Hexanone [2-]	5					mg/kg	5	0.02	0.02			
1039 Indeno[1,2,3-cd]pyrene	5				0.41	mg/kg	5	0.33	0.33		5	
1040 Isophorone	5				7,400	mg/kg	5	0.33	0.33		5	
1041 Isopropylbenzene	5					mg/kg	5	0.005	0.005			
1042 Isopropyltoluene [4-]	5					mg/kg	5	0.005	0.005			
1043 Lead	5	5	15	110	500	mg/kg					5	
1044 Methyl iodide	5					mg/kg	5	0.005	0.005			
1045 Methyl-2-pentanone [4-]	5				510	mg/kg	5	0.02	0.02		5	
1046 Methyl-4,6-dinitrophenol [2-]	5					mg/kg	5	0.33	0.33			
1047 Methylene chloride	5				5.6	mg/kg	5	0.005	0.005		5	
1048 Methylnaphthalene [2-]	5					mg/kg	5	0.33	0.33			
1049 Methylphenol [2-]	5				4,000	mg/kg	5	0.33	0.33		5	
1050 Methylphenol [4-]	5				400	mg/kg	5	0.33	0.33		5	
1051 Naphthalene	5				3,200	mg/kg	5	0.33	0.33		5	
1052 Nitroaniline [2-]	5					mg/kg	5	0.33	0.33			
1053 Nitroaniline [3-]	5					mg/kg	5	0.33	0.33			
1054 Nitroaniline [4-]	5					mg/kg	5	0.33	0.33			
1055 Nitrobenzene	5				5.3	mg/kg	5	0.33	0.33		5	
1056 Nitrophenol [2-]	5					mg/kg	5	0.33	0.33			
1057 Nitrophenol [4-]	5					mg/kg	5	0.33	0.33			
1058 Nitrosodi-n-propylamine [N-]	5				0.1	mg/kg	5	0.33	0.33			5
1059 Nitrosodimethylamine [N-]	5					mg/kg	5	0.33	0.33			
1060 Nitrosodiphenylamine [N-]	5				140	mg/kg	5	0.33	0.33		5	
1061 Pentachlorophenol	5				5.8	mg/kg	5	0.33	0.33		5	
1062 Petroleum Hydrocarbons, Total Recoverable	5	3	8	14		mg/kg	2	1	1			
1063 Phenanthrene	5					mg/kg	5	0.33	0.33			
1064 Phenol	5				48,000	mg/kg	5	0.33	0.33		5	
1065 Propylbenzene	5					mg/kg	5	0.005	0.005			
1066 Pyrene	5				2,400	mg/kg	5	0.33	0.33		5	
1067 Styrene	5				16,000	mg/kg	5	0.005	0.005		5	
1068 Tetrachloroethane [1,1,1,2-]	5					mg/kg	5	0.005	0.005			
1069 Tetrachloroethane [1,1,2,2-]	5				3.9	mg/kg	5	0.005	0.005		5	
1070 Tetrachloroethylene	5				5.9	mg/kg	5	0.005	0.005		5	

TABLE 2-1
SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1071 Toluene	5				890	mg/kg	5	0.005	0.005		5	
1072 Trichloro-1,2,2-trifluoroethane [1,1,2-]	5					mg/kg	5	0.005	0.005			
1073 Trichlorobenzene [1,2,4-]	5				160	mg/kg	5	0.33	0.33		5	
1074 Trichloroethane [1,1,1-]	5				1,000	mg/kg	5	0.005	0.005		5	
1075 Trichloroethane [1,1,2-]	5				6.3	mg/kg	5	0.005	0.005		5	
1076 Trichloroethene	5				3.2	mg/kg	5	0.005	0.005		5	
1077 Trichlorofluoromethane	5					mg/kg	5	0.005	0.005			
1078 Trichlorophenol [2,4,5-]	5				8,000	mg/kg	5	0.33	0.33		5	
1079 Trichlorophenol [2,4,6-]	5				64	mg/kg	5	0.33	0.33		5	
1080 Trichloropropane [1,2,3-]	5					mg/kg	5	0.005	0.005			
1081 Trimethylbenzene [1,2,4-]	5					mg/kg	5	0.005	0.005			
1082 Trimethylbenzene [1,3,5-]	5					mg/kg	5	0.005	0.005			
1083 Vinyl chloride	5				0.012	mg/kg	5	0.01	0.01		5	
1084 Xylenes (o + m + p) [Mixed-]	5				160,000	mg/kg	5	0.005	0.005		5	
00-032 UST-4												
1085 Acenaphthene	3				4,800	mg/kg	3	0.33	0.33		3	
1086 Acenaphthylene	3					mg/kg	3	0.33	0.33			
1087 Acetone	3				8,000	mg/kg	3	0.02	0.028		3	
1088 Aniline	3					mg/kg	3	0.33	0.33			
1089 Anthracene	3				24,000	mg/kg	3	0.33	0.33		3	
1090 Azobenzene	3					mg/kg	3	0.33	0.33			
1091 Benzene	3				0.67	mg/kg	3	0.005	0.007		3	
1092 Benzidine [m-]	3					mg/kg	3	0.33	0.33			
1093 Benzo[a]anthracene	3				0.64	mg/kg	3	0.33	0.33		3	
1094 Benzo[a]pyrene	3				0.1	mg/kg	3	0.33	0.33			3
1095 Benzo[b]fluoranthene	3				0.7	mg/kg	3	0.33	0.33		3	
1096 Benzo[g,h,i]perylene	3				44	mg/kg	3	0.33	0.33		3	
1097 Benzo[k]fluoranthene	3				1.5	mg/kg	3	0.33	0.33		3	
1098 Benzoic acid	3				320,000	mg/kg	3	0.33	0.33		3	
1099 Benzyl alcohol	3					mg/kg	3	0.33	0.33			
1100 Bis(2-chloroethoxy)methane	3					mg/kg	3	0.33	0.33			
1101 Bis(2-chloroethyl)ether	3				0.12	mg/kg	3	0.33	0.33			3
1102 Bis(2-chloroisopropyl)ether	3				100	mg/kg	3	0.33	0.33		3	
1103 Bis(2-ethylhexyl)phthalate	3				50	mg/kg	3	0.33	0.33		3	
1104 Bromobenzene	3					mg/kg	3	0.005	0.007			
1105 Bromochloromethane	3					mg/kg	3	0.005	0.007			

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			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1106 Bromodichloromethane	3				11	mg/kg	3	0.005	0.007		3	
1107 Bromoform	3				89	mg/kg	3	0.005	0.007		3	
1108 Bromomethane	3				0.43	mg/kg	3	0.01	0.014		3	
1109 Bromophenylphenyl ether [4-]	3					mg/kg	3	0.33	0.33			
1110 Butanone [2-]	3				4,000	mg/kg	3	0.02	0.028		3	
1111 Butyl benzyl phthalate	3				16,000	mg/kg	3	0.33	0.33		3	
1112 Butylbenzene [n-]	3					mg/kg	3	0.005	0.007			
1113 Butylbenzene [sec-]	3					mg/kg	3	0.005	0.007			
1114 Butylbenzene [tert-]	3					mg/kg	3	0.005	0.007			
1115 Carbon disulfide	3				7.4	mg/kg	3	0.005	0.007		3	
1116 Carbon tetrachloride	3				0.21	mg/kg	3	0.005	0.007		3	
1117 Chloro-3-methylphenol [4-]	3				16,000	mg/kg	3	0.33	0.33		3	
1118 Chloroaniline [4-]	3				320	mg/kg	3	0.33	0.33		3	
1119 Chlorobenzene	3				67	mg/kg	3	0.005	0.007		3	
1120 Chlorodibromomethane	3				83	mg/kg	3	0.005	0.007		3	
1121 Chloroethane	3				3,300	mg/kg	3	0.01	0.014		3	
1122 Chloroform	3				0.21	mg/kg	3	0.005	0.007		3	
1123 Chloromethane	3				6.4	mg/kg	3	0.01	0.014		3	
1124 Chloronaphthalene [2-]	3				6,400	mg/kg	3	0.33	0.33		3	
1125 Chlorophenol [o-]	3				400	mg/kg	3	0.33	0.33		3	
1126 Chlorophenylphenyl ether [4-]	3					mg/kg	3	0.33	0.33			
1127 Chlorotoluene [o-]	3					mg/kg	3	0.005	0.007			
1128 Chlorotoluene [p-]	3					mg/kg	3	0.005	0.007			
1129 Chromium	4	4	12	14	400	mg/kg					4	
1130 Chrysene	3				22	mg/kg	3	0.33	0.33		3	
1131 Di-n-butyl phthalate	3				8,000	mg/kg	3	0.33	0.33		3	
1132 Di-n-octyl phthalate	3				1,600	mg/kg	3	0.33	0.33		3	
1133 Dibenzo[a,h]anthracene	3				0.086	mg/kg	3	0.33	0.33			3
1134 Dibenzofuran	3					mg/kg	3	0.33	0.33			
1135 Dibromo-3-chloropropane [1,2-]	3					mg/kg	3	0.01	0.014			
1136 Dibromoethane [1,2-]	3					mg/kg	3	0.005	0.007			
1137 Dibromomethane	3					mg/kg	3	0.005	0.007			
1138 Dichlorobenzene (1,2) [o-]	6				1,600	mg/kg	6	0.005	0.33		6	
1139 Dichlorobenzene (1,3) [m-]	6				7,200	mg/kg	6	0.005	0.33		6	
1140 Dichlorobenzene (1,4) [p-]	6				290	mg/kg	6	0.005	0.33		6	
1141 Dichlorobenzidine [3,3'-]	3				1.6	mg/kg	3	0.33	0.33		3	
1142 Dichlorodifluoromethane	3					mg/kg	3	0.01	0.014			
1143 Dichloroethane [1,1-]	3				410	mg/kg	3	0.005	0.007		3	

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SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1144 Dichloroethane [1,2-]	3				0.2	mg/kg	3	0.005	0.007		3	
1145 Dichloroethene [1,1-]	3				0.4	mg/kg	3	0.005	0.007		3	
1146 Dichloroethene [trans-1,2-]	3				1,600	mg/kg	3	0.005	0.007		3	
1147 Dichloroethylene [cis-1,2-]	3				800	mg/kg	3	0.005	0.007		3	
1148 Dichlorophenol [2,4-]	3				240	mg/kg	3	0.33	0.33		3	
1149 Dichloropropane [1,2-]	3				6.5	mg/kg	3	0.005	0.007		3	
1150 Dichloropropane [1,3-]	3					mg/kg	3	0.005	0.007			
1151 Dichloropropane [2,2-]	3					mg/kg	3	0.005	0.007			
1152 Dichloropropene [1,1-]	3					mg/kg	3	0.005	0.007			
1153 Dichloropropene [cis-1,3-]	3				0.17	mg/kg	3	0.005	0.007		3	
1154 Dichloropropene [trans-1,3-]	3				0.17	mg/kg	3	0.005	0.007		3	
1155 Diethyl phthalate	3				64,000	mg/kg	3	0.33	0.33		3	
1156 Dimethyl phthalate	3				800,000	mg/kg	3	0.33	0.33		3	
1157 Dimethylphenol [2,4-]	3				1,600	mg/kg	3	0.33	0.33		3	
1158 Dinitrophenol [2,4-]	3				160	mg/kg	3	0.33	0.33		3	
1159 Dinitrotoluene [2,4-]	3				1	mg/kg	3	0.33	0.33		3	
1160 Dinitrotoluene [2,6-]	3				1	mg/kg	3	0.33	0.33		3	
1161 Ethylbenzene	3				3,100	mg/kg	3	0.005	0.007		3	
1162 Fluoranthene	3				3,200	mg/kg	3	0.33	0.33		3	
1163 Fluorene	3				3,200	mg/kg	3	0.33	0.33		3	
1164 Hexachlorobenzene	3				0.44	mg/kg	3	0.33	0.33		3	
1165 Hexachlorobutadiene	3				90	mg/kg	3	0.33	0.33		3	
1166 Hexachlorocyclopentadiene	3				560	mg/kg	3	0.33	0.33		3	
1167 Hexachloroethane	3				80	mg/kg	3	0.33	0.33		3	
1168 Hexanone [2-]	3					mg/kg	3	0.02	0.028			
1169 Indeno[1,2,3-cd]pyrene	3				0.41	mg/kg	3	0.33	0.33		3	
1170 Isophorone	3				7,400	mg/kg	3	0.33	0.33		3	
1171 Isopropylbenzene	3					mg/kg	3	0.005	0.007			
1172 Isopropyltoluene [4-]	3					mg/kg	3	0.005	0.007			
1173 Lead	4	4	12	15	500	mg/kg					4	
1174 Methyl iodide	3					mg/kg	3	0.005	0.007			
1175 Methyl-2-pentanone [4-]	3				510	mg/kg	3	0.02	0.028		3	
1176 Methyl-4,6-dinitrophenol [2-]	3					mg/kg	3	0.33	0.33			
1177 Methylene chloride	3				5.6	mg/kg	3	0.005	0.007		3	
1178 Methyl-naphthalene [2-]	3					mg/kg	3	0.33	0.33			
1179 Methylphenol [2-]	3				4,000	mg/kg	3	0.33	0.33		3	
1180 Methylphenol [4-]	3				400	mg/kg	3	0.33	0.33		3	
1181 Naphthalene	3				3,200	mg/kg	3	0.33	0.33		3	

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SUMMARY OF OU 1071 SOIL SAMPLES

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1182 Nitroaniline [2-]	3					mg/kg	3	0.33	0.33			
1183 Nitroaniline [3-]	3					mg/kg	3	0.33	0.33			
1184 Nitroaniline [4-]	3					mg/kg	3	0.33	0.33			
1185 Nitrobenzene	3				5.3	mg/kg	3	0.33	0.33		3	
1186 Nitrophenol [2-]	3					mg/kg	3	0.33	0.33			
1187 Nitrophenol [4-]	3					mg/kg	3	0.33	0.33			
1188 Nitrosodi-n-propylamine [N-]	3				0.1	mg/kg	3	0.33	0.33			3
1189 Nitrosodimethylamine [N-]	3					mg/kg	3	0.33	0.33			
1190 Nitrosodiphenylamine [N-]	3				140	mg/kg	3	0.33	0.33		3	
1191 Pentachlorophenol	3				5.8	mg/kg	3	0.33	0.33		3	
1192 Petroleum Hydrocarbons, Total Recoverable	3	2	10	25		mg/kg	1	1	1			
1193 Phenanthrene	3					mg/kg	3	0.33	0.33			
1194 Phenol	3				48,000	mg/kg	3	0.33	0.33		3	
1195 Propylbenzene	3					mg/kg	3	0.005	0.007			
1196 Pyrene	3				2,400	mg/kg	3	0.33	0.33		3	
1197 Styrene	3				16,000	mg/kg	3	0.005	0.007		3	
1198 Tetrachloroethane [1,1,1,2-]	3					mg/kg	3	0.005	0.007			
1199 Tetrachloroethane [1,1,2,2-]	3				3.9	mg/kg	3	0.005	0.007		3	
1200 Tetrachloroethylene	3				5.9	mg/kg	3	0.005	0.007		3	
1201 Toluene	3				890	mg/kg	3	0.005	0.007		3	
1202 Trichloro-1,2,2-trifluoroethane [1,1,2-]	3					mg/kg	3	0.005	0.007			
1203 Trichlorobenzene [1,2,4-]	3				160	mg/kg	3	0.33	0.33		3	
1204 Trichloroethane [1,1,1-]	3				1,000	mg/kg	3	0.005	0.007		3	
1205 Trichloroethane [1,1,2-]	3				6.3	mg/kg	3	0.005	0.007		3	
1206 Trichloroethene	3				3.2	mg/kg	3	0.005	0.007		3	
1207 Trichlorofluoromethane	3					mg/kg	3	0.005	0.007			
1208 Trichlorophenol [2,4,5-]	3				8,000	mg/kg	3	0.33	0.33		3	
1209 Trichlorophenol [2,4,6-]	3				64	mg/kg	3	0.33	0.33		3	
1210 Trichloropropane [1,2,3-]	3					mg/kg	3	0.005	0.007			
1211 Trimethylbenzene [1,2,4-]	3					mg/kg	3	0.005	0.007			
1212 Trimethylbenzene [1,3,5-]	3					mg/kg	3	0.005	0.007			
1213 Vinyl chloride	3				0.012	mg/kg	3	0.01	0.014		2	1
1214 Xylenes (o + m + p) [Mixed-]	3				160,000	mg/kg	3	0.005	0.007		3	
Total Number of Values	9,551						9,061			53	5,827	272

2.3 ADS 1078—TA-1 (Project Leader: Carl Newton)

Western Sanitary Waste Line. In February and March of 1994, an investigation was conducted at potential release sites (PRSs) 1-001 (s and u), the Western Sanitary Waste Line. Drilling was conducted at Locations 1A, 2, 8, and 13. Maps of the sample locations were provided in the "ER Quarterly Technical Report, January–March 1994." The most thorough characterization occurred at Location 1A because the area is undeveloped and provides very easy access (see Figure 2-1). A 25-linear-ft section of the waste line, 8-inch vitrified clay pipe with joints every 3 ft, was exposed at Location 1A. Visual inspection, field and mobile rad-van screening, and sample collection were conducted on sediment and fill materials inside and surrounding the pipe, respectively. All materials, including the inside of the pipe itself, were found to be free of contamination. No contamination was detected in twenty-two boreholes at Locations 2 and 8. Results of the analyses from Borehole 8 at Location 13 near the Los Alamos Inn indicate plutonium-239 at 4.27 pCi/g in fill material at a depth of 5.0 to 6.5 ft. Eleven additional boreholes were drilled at Location 13, but no further contamination was found.

A manhole (MH No. 52) was found at the western end of the waste line (down gradient); fill material in the manhole was removed to expose the base. The manhole has a brick and mortar wall with a concrete base; the inlet and outlet points are plugged with cement. The brick and cement were field-screened and were found not to be contaminated. The concrete base of the manhole has a 2–3-mm-thick reddish (oxidized?) layer, which was analyzed and found to have the following constituents and concentrations:

Lead	5,740	mg/kg
Mercury	241	mg/kg
Plutonium-239	4.39	pCi/g
Total Uranium	1,140	mg/kg
Uranium-234	3.86	pCi/g
Uranium-238	1.44	pCi/g

Very little of the contaminated material was available for sampling, and most of it was removed during the sampling process. All of the sample was submitted for laboratory analyses; therefore, no waste remained that required management.

Hillside 138. Preparation for a voluntary corrective action at Hillside 138 is under way. Quantitative data collected during 1992 and 1993 indicate that the contaminants remain at or near the surface. Figures 2-2 and 2-3 provide summary information on the distribution of the concentration of plutonium and mercury at various depths at Hillside 138. Note that, in general, concentrations of plutonium and mercury decrease dramatically with depth, indicating minimal vertical migration of the contaminants. Site geomorphic conditions and soil chemistry have not been taken into account and may play an important role in the observed distribution.

Figure 2-1. Western Sanitary Waste Line, western portion, OU 1078.

a. Sample location.

b. Average of multiple analyses of samples.

Figure 2-2. Average mercury concentration with depth for Hillside 138, OU 1078^b

- a. Sample location.
b. Average of multiple analysis of sample.
c. Quantification suspect.

Figure 2-3. Plutonium-239 concentration with depth for Hillside 138, OU 1078.

2.4 ADS 1079—TAs-10, -31, -32, -45 (Project Leader: Garry Allen)

The primary focus for ADS 1079 this past quarter has been conducting TA-10 field work and preparing the TA-45 phase report. The TA-10 Readiness Review was completed for three primary field activities: surface sampling, subsurface sampling, and shrapnel removal. Site preparation was completed in early June, and the surface sampling campaign was completed at the end of June. This involved collecting 68 samples from a predetermined sampling grid, ten random samples keyed to this grid, 32 stream transect samples, and various quality control samples. The sample points are shown on Figure 2-4.

TA-10 subsurface sampling began on June 15th with a single rotary auger rig; a second rig was added on June 20th. Twelve boreholes were completed by the end of the quarter, representing a total drilling depth of 602 feet. The completed boreholes are indicated in Figure 2-5. Negotiations with the US Fish and Wildlife Service were required before beginning our drilling operations because an endangered species was located in the vicinity of the field work.

During the field screening of the TA-10 drilling locations, OU personnel discovered several radioactive Chamisa plants. This is presumably the result of radiation uptake by the deep-rooted Chamisa plants growing over the former radioactive waste pits that are being investigated. The field measurements were as high as 14,000 counts per minute of beta near the roots of the plants, with fewer counts near the stems and leaves.

Because data verification problems have slowed the completion of the TA-45 Surface Phase Report and because the TA-45 subsurface data set from samples collected last summer is nearly complete, a single TA-45 Phase Report incorporating both sets of data will be produced.

Figure 2-4. TA-10 surface sampling locations, OU 1079.

Figure 2-5. TA-10 Main Site sampling array locations showing boreholes completed during June, OU 1079.

2.5 ADS 1082—TAs-11, -13, -16, -24, -25, -28, -37 (Project Leader: Brad Martin)

Draft Volume II of the RFI work plan for OU 1082 was reviewed and edited in preparation for delivery to the EPA on schedule July 7, 1994. Work is progressing on Volume III of the RFI work plan for delivery in July 1995. Sampling activities in support of Material Disposal Area (MDA) P are on schedule.

2.6 ADS 1085—TAs-12, -14, -67 (Project Leader: Scott Kinkad)

Comments were incorporated from the formal US Department of Energy (DOE) review of the Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) work plan for OU 1085. The final draft of the work plan was submitted to the DOE and the EPA on May 23, 1994.

2.7 ADS 1086—TA-15 (Project Leader: Scott Kinkad)

Comments have not been received from the EPA on the RFI work plan for OU 1086, which was submitted July 1, 1993.

The readiness review for the FY94 sampling season was held May 10. Final resolution has occurred on action items associated with the waste management plan and the site-specific health and safety plan. The Surv-tek crew surveyed the TA-15 site. Surface and subsurface sampling began at E-F Site in undisturbed areas on June 17; because of remaining unresolved safety questions about drilling in areas with potential subsurface high-explosive contamination, OU 1086 personnel are exploring the option of using a remote-capable vibratory drilling rig.

2.8 ADS 1093—TA-18 (Project Leader: Gene Gould)

The field team members entered the field on June 3. Boreholes, which total approximately 150 ft have been drilled at 25 locations. Over 200 surface and subsurface samples have been collected and are being analyzed for metals, uranium, thorium, high explosives, volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). The data from the 1993 field season are being reviewed.

2.9 ADS 1098—TAs-2, -41 (Project Leader: Patrick Longmire)

The technical team for OU 1098 conducted two readiness reviews for drilling five alluvial characterization boreholes and one intermediate characterization borehole. Sediment and surface-water samples were also collected as part of baseline Phase 1 activities. The intermediate characterization borehole will be drilled to a depth ranging from 230 to 400 ft; the borehole is anticipated to be completed in the Guaje Pumice Bed similar to characterization borehole LADP-3 located 1.5 mi east of TA-2. Water-level data collected during this quarter are summarized in Table 2-2. These new characterization wells are designed and constructed according to EPA specifications to supplement the existing monitor wells installed in Los Alamos Canyon in 1966. Chemical parameters measured in the field are summarized in Table 2-3. Alluvial groundwater in Los Alamos Canyon is characterized by near-neutral pH values and moderately low specific conductance and total-carbonate alkalinity. Water samples will be analyzed for major ions, trace elements, radionuclides, and organic solutes. Data collected by the Laboratory's Environmental Protection Group (ESH-8) suggest that alluvial groundwater ranges from a calcium-sodium-bicarbonate solution to a sodium chloride solution. Road salt is the primary source of sodium and chloride in this low-ionic-strength solution. There are no new results of groundwater chemistry for the quarter.

TABLE 2-2
WATER-LEVEL DATA FOR OU 1098 ALLUVIAL WELLS, SUMMER 1994

Well Identification	Measuring Point	Measuring Point Elevation (ft MSL ^a)	Depth to Groundwater from Measuring Point (ft)				
			(Installation Date)	(Pre-development Date)	6/6/94	(Sample Date)	7/6/94
LAO-B	V notch on north side of PVC ^b riser	7325.03	~8.5 (4/28/94)	8.23 (5/17/94)	8.48	8.61 (6/13/94)	8.6
LAO-0.3	V notch on north side of PVC riser	6970.25	Not recorded (5/27/94)	8.05 (6/1/94)	8.13	8.34 (6/14/94)	9.11
LAO-0.6	V notch on north side of PVC riser	6912.88	~7.5 (5/6/94)	7.13 (5/23/94)	7.14	7.36 (6/14/94)	7.36
LAO-0.8	V notch on north side of PVC riser	6889.71	~12.7 (5/11/94)	~13 (6/24/94)	13.94	14.33 (6/15/94)	15.02
LAO-0.91	V notch on north side of PVC riser	6884.79	Not recorded; log suggests between 8—13 ft (5/13/94)	8.72 (6/1/94)	9.84	10.22 (6/16/94)	15.92
Comments							Los Alamos Canyon Creek dry at LAO-0.3—LAO-0.91
a. MSL = mean sea level. b. PVC = polyvinyl chloride.							

TABLE 2-3**FIELD PARAMETERS DURING GROUNDWATER SAMPLING AT OU 1098:
INITIAL BASELINE SAMPLING (JUNE 13-16, 1994)**

Well Identification	Temperature (°C)	pH (25°C)	Specific Conductance (µmhos/cm at 25°C)	Alkalinity (mg/L CaCO₃)
LAO-B	9.2	6.68	41	31
LAO-0.3	11.1	6.39	310	45.8
LAO-0.6	14.6	6.55	502	62.3
LAO-0.8	14.4	7.04	330	51.9
LAO-0.91	14.5	6.6	321	56

2.10 ADS 1100—TA-53 (Project Leader: Gene Gould)

The final draft of the RFI work plan for OU 1100 was submitted to the EPA on May 23. A meeting with the New Mexico Environment Department (NMED) was held to discuss technical issues related to the TA-53 Surface Impoundments Closure Plan. The document was revised based on comments provided by NMED, but NMED has not issued a schedule for submitting the revised closure plan.

2.11 ADS 1106—TA-21 (Project Leader: Caroline Mason)

The primary focus for OU 1106 during this past quarter has been to prepare the necessary documents for the 1994 field season readiness review, to continue the evaluation of sampling data from the 1993 summer sampling and 1994 late winter sampling, and to continue activities for the preparation of the Phase Report 1B and 1C addendum. A brief summary of activities for the operable unit is presented below:

- The EPA approved Phase Report 1A for Operable Unit 1106, which included information on the geologic investigations conducted at the OU.
- The TA-21 Readiness Review was held June 1, 1994. Documents submitted for the approval process included a health and safety plan, a waste management plan, and a drilling plan.
- Analytical results from the March 1994 streambed sampling in DP Canyon indicated contaminated tritium levels, both from the main canyon and from the old sewage treatment lagoons. The TA-21 Technical Team has reviewed these results. The 1994 summer sampling will include one shallow borehole close to the streambed, in order to define the perched aquifer, and two deeper boreholes close to DP Spring, in order to determine the source of the tritium.
- Analytical results from the 1993 sampling activities at TA-21, which were not received in time for inclusion in Phase Reports 1B and 1C, have undergone analyses and will be incorporated in the Phase Report 1B and 1C addendum. Addendum 1, due March 1995, will include outfalls, MDA runoff, and LADP-3 and LADP-4 cores.

Summary statistics are provided in Tables 2-4 through 2-11 (see Section 1.0 for an explanation of these summary tables). Please note that these tables include all data received to date for each sampling event.

In addition to the analytes listed in the tables for OU 1106, other constituents were tentatively identified. The analyses for MDA T resulted in 20 values for tentatively identified constituents, most of which were believed to be adipic ester. For the hot outfalls, analyses resulted in 57 values for tentatively identified constituents, most of which were saturated hydrocarbons; 1,4-methanazulene, decahydro-4,4,8-trimethyl-9-methylene; and totarol or an isomer. For the national pollutant discharge elimination system (NPDES) outfalls, the analyses resulted in 21 values for tentatively identified constituents, most of which were aromatic hydrocarbons and silicone oligomers. The analyses for the shallow boreholes resulted in 50 values for tentatively identified constituents, most of which were saturated hydrocarbons and silicone oligomers. For LADP-3, analyses resulted in 8 values for tentatively identified constituents, which were believed to be saturated hydrocarbons.

TABLE 2-4

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF GRID EXTENSION, OU 1106

Analyte	Number of Values per Analyte	Number of Values $\geq$ LOD	Concentration Range		SAL	Units	Number of Values $<$ LOD	LOD Range		Number of Values $\geq$ SAL, Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthene	9				4,800	mg/kg	9	0.38	0.7		9	
2 Acenaphthylene	9					mg/kg	9	0.38	0.7			
3 Actinium-227	25					pCi/g	25	2.22	6.48			
4 Aluminum	22	22	3,290	11,500		mg/kg						
5 Americium-241	25	19	0.01	0.039	22	pCi/g	6	0.01	0.01		25	
6 Anthracene	9				24,000	mg/kg	9	0.38	0.7		9	
7 Antimony	22	8	0.27	0.65	32	mg/kg	14	0.23	0.3		22	
8 Arsenic	22	18	1	3.2	0.4	mg/kg	4	0.97	1.2	18		4
9 Barium	22	22	42	207	5,600	mg/kg					22	
10 Benzo[a]anthracene	9	1	0.82	0.82	0.64	mg/kg	8	0.38	0.45	1	8	
11 Benzo[a]pyrene	9	1	0.85	0.85	0.1	mg/kg	8	0.38	0.45	1		8
12 Benzo[b]fluoranthene	9	1	1.4	1.4	0.7	mg/kg	8	0.38	0.45	1	8	
13 Benzo[g,h,i]perylene	9				44	mg/kg	9	0.38	0.7		9	
14 Benzo[k]fluoranthene	9	1	1.1	1.1	1.5	mg/kg	8	0.38	0.45		9	
15 Benzoic acid	9				320,000	mg/kg	9	1.9	3.5		9	
16 Benzyl alcohol	9					mg/kg	9	0.38	0.7			
17 Beryllium	22	22	0.34	0.81	0.16	mg/kg				22		
18 Bis(2-chloroethoxy)methane	9					mg/kg	9	0.38	0.7			
19 Bis(2-chloroethyl)ether	9				0.12	mg/kg	9	0.38	0.7			9
20 Bis(2-chloroisopropyl)ether	9				100	mg/kg	9	0.38	0.7		9	
21 Bis(2-ethylhexyl)phthalate	9				50	mg/kg	9	0.38	0.7		9	
22 Bromophenylphenyl ether [4-]	9					mg/kg	9	0.38	0.7			
23 Butyl benzyl phthalate	9				16,000	mg/kg	9	0.38	0.7		9	
24 Cadmium	22	8	0.72	1.3	80	mg/kg	14	0.7	0.88		22	
25 Calcium	22	22	1,160	6,870		mg/kg						
26 Cesium-137	25	10	0.73	1.81	4	pCi/g	15	0.38	1.23		25	
27 Chloro-3-methylphenol [4-]	9				16,000	mg/kg	9	0.38	0.7		9	
28 Chloroaniline [4-]	9				320	mg/kg	9	0.38	0.7		9	
29 Chloronaphthalene [2-]	9				6,400	mg/kg	9	0.38	0.7		9	
30 Chlorophenol [o-]	9				400	mg/kg	9	0.38	0.7		9	
31 Chlorophenylphenyl ether [4-]	9					mg/kg	9	0.38	0.7			
32 Chromium	22	22	2.3	9.7	400	mg/kg					22	
33 Chrysene	9	2	0.41	1	22	mg/kg	7	0.38	0.45		9	
34 Cobalt	22	14	2.4	7.7		mg/kg	8	2.1	2.6			
35 Copper	22	22	1.8	26.3	3,000	mg/kg					22	
36 Di-n-butyl phthalate	9				8,000	mg/kg	9	0.38	0.7		9	
37 Di-n-octyl phthalate	9				1,600	mg/kg	9	0.38	0.7		9	

TABLE 2-4

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF GRID EXTENSION, OU 1106

Analyte	Number of Values per Analyte	Number of Values $\geq$ LOD	Concentration Range		SAL	Units	Number of Values $<$ LOD	LOD Range		Number of Values $\geq$ SAL, Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL
			Minimum	Maximum				Minimum	Maximum			
38 Dibenzo[a,h]anthracene	9				0.086	mg/kg	9	0.38	0.7			9
39 Dibenzofuran	9					mg/kg	9	0.38	0.7			
40 Dichlorobenzene (1,2) [o-]	9				1,600	mg/kg	9	0.38	0.7		9	
41 Dichlorobenzene (1,3) [m-]	9				7,200	mg/kg	9	0.38	0.7		9	
42 Dichlorobenzene (1,4) [p-]	9				290	mg/kg	9	0.38	0.7		9	
43 Dichlorobenzidine [3,3'-]	9				1.6	mg/kg	9	0.76	1.4		9	
44 Dichlorophenol [2,4-]	9				240	mg/kg	9	0.38	0.7		9	
45 Diethyl phthalate	9				64,000	mg/kg	9	0.38	0.7		9	
46 Dimethyl phthalate	9				800,000	mg/kg	9	0.38	0.7		9	
47 Dimethylphenol [2,4-]	9				1,600	mg/kg	9	0.38	0.7		9	
48 Dinitrophenol [2,4-]	9				160	mg/kg	9	1.9	3.5		9	
49 Dinitrotoluene [2,4-]	9				1	mg/kg	9	0.38	0.7		9	
50 Dinitrotoluene [2,6-]	9				1	mg/kg	9	0.38	0.7		9	
51 Fluoranthene	9	2	1.1	2.1	3,200	mg/kg	7	0.38	0.45		9	
52 Fluorene	9				3,200	mg/kg	9	0.38	0.7		9	
53 Hexachlorobenzene	9				0.44	mg/kg	9	0.38	0.7		6	3
54 Hexachlorobutadiene	9				90	mg/kg	9	0.38	0.7		9	
55 Hexachlorocyclopentadiene	9				560	mg/kg	9	0.38	0.7		9	
56 Hexachloroethane	9				80	mg/kg	9	0.38	0.7		9	
57 Indeno[1,2,3-cd]pyrene	9				0.41	mg/kg	9	0.38	0.7		5	4
58 Iron	22	22	4,500	12,100		mg/kg						
59 Isophorone	9				7,400	mg/kg	9	0.38	0.7		9	
60 Lead	22	22	9.9	47	500	mg/kg					22	
61 Lithium	22	22	2.3	8.8		mg/kg						
62 Magnesium	22	22	602	2,470		mg/kg					22	
63 Manganese	22	22	205	652	8,000	mg/kg						
64 Methyl-4,6-dinitrophenol [2-]	9					mg/kg	9	1.9	3.5			
65 Methyl-naphthalene [2-]	9					mg/kg	9	0.38	0.7			
66 Methylphenol [2-]	9				4,000	mg/kg	9	0.38	0.7		9	
67 Methylphenol [4-]	9				400	mg/kg	9	0.38	0.7		9	
68 Molybdenum	22				400	mg/kg	22	6.8	8.6		22	
69 Naphthalene	9				3,200	mg/kg	9	0.38	0.7		9	
70 Nickel	22	11	3.4	6.8	1,600	mg/kg	11	2.6	3.3		22	
71 Nitroaniline [2-]	9					mg/kg	9	1.9	3.5			
72 Nitroaniline [3-]	9					mg/kg	9	1.9	3.5			
73 Nitroaniline [4-]	9					mg/kg	9	1.9	3.5			
74 Nitrobenzene	9				5.3	mg/kg	9	0.38	0.7		9	

TABLE 2-4
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF GRID EXTENSION, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD > SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
75 Nitrophenol [2-]	9					mg/kg	9	0.38	0.7			
76 Nitrophenol [4-]	9					mg/kg	9	1.9	3.5			
77 Nitrosodi-n-propylamine [N-]	9				0.1	mg/kg	9	0.38	0.7			9
78 Nitrosodiphenylamine [N-]	9				140	mg/kg	9	0.38	0.7		9	
79 Pentachlorophenol	9				5.8	mg/kg	9	1.9	3.5		9	
80 Phenanthrene	9	2	1	1.2		mg/kg	7	0.38	0.45			
81 Phenol	9				48,000	mg/kg	9	0.38	0.7		9	
82 Plutonium-238	25	25	0.001	0.015	27	pCi/g					25	
83 Plutonium-239	25	25	0.007	1.487	24	pCi/g					25	
84 Potassium	22	22	419	2,430		mg/kg						
85 Pyrene	9	2	0.94	1.3	2,400	mg/kg	7	0.38	0.45		9	
86 Selenium	22	2	0.53	0.64	400	mg/kg	20	0.47	0.6		22	
87 Silver	22	2	2	2.1	400	mg/kg	20	1.2	1.5		22	
88 Strontium	22	22	8.7	39.8		mg/kg						
89 Strontium-90	25				8.9	pCi/g	25	1.0	1.0		25	
90 Thallium	22				6.4	mg/kg	22	0.23	0.3		22	
91 Trichlorobenzene [1,2,4-]	9				160	mg/kg	9	0.38	0.7		9	
92 Trichlorophenol [2,4,5-]	9				8,000	mg/kg	9	1.9	3.5		9	
93 Trichlorophenol [2,4,6-]	9				64	mg/kg	9	0.38	0.7		9	
94 Tritium	25				15,000,000	pCi/g	25	2.0	2.0		25	
95 Uranium-234	25	25	1.09	2.809	86	pCi/g					25	
96 Uranium-235	25	25	0.04	0.31	18	pCi/g					25	
97 Uranium-238	25	25	1.1	2.958	59	pCi/g					25	
98 Vanadium	22	22	5.2	22.5	560	mg/kg					22	
99 Zinc	22	22	21.5	78.9	24,000	mg/kg					22	
Total Number of Values	1,363	559					804			43	947	46

TABLE 2-5

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT MDA T, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, including ≥ LOD	Number of Values < SAL, including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1 Acenaphthene	53				4,800	mg/kg	53	0.34	0.72		53	
2 Acenaphthylene	53					mg/kg	53	0.34	0.72			
3 Actinium-227	31					pCi/g	31	1.83	5.39			
4 Aluminum	43	43	1,350	18,700		mg/kg						
5 Americium-241	31	30	0.011	12.333	22	pCi/g	1	0.01	0.01		31	
6 Anthracene	53				24,000	mg/kg	53	0.34	0.72		53	
7 Antimony	43	3	0.25	0.27	32	mg/kg	40	0.21	0.25		43	
8 Arsenic	43	42	1	4.5	0.4	mg/kg	1	0.93	0.93	42		1
9 Barium	43	43	0.9	261	5,600	mg/kg					43	
10 Benzo[a]anthracene	53				0.64	mg/kg	53	0.34	0.72		51	2
11 Benzo[a]pyrene	53				0.1	mg/kg	53	0.34	0.72			53
12 Benzo[b]fluoranthene	53				0.7	mg/kg	53	0.34	0.72		51	2
13 Benzo[g,h,i]perylene	53				44	mg/kg	53	0.34	0.72		53	
14 Benzo[k]fluoranthene	53				1.5	mg/kg	53	0.34	0.72		53	
15 Benzoic acid	53				320,000	mg/kg	53	1.7	3.6		53	
16 Benzyl alcohol	53					mg/kg	53	0.34	0.72			
17 Beryllium	43	41	0.25	124	0.16	mg/kg	2	0.21	0.21	41		2
18 Bis(2-chloroethoxy)methane	53					mg/kg	53	0.34	0.72			
19 Bis(2-chloroethyl)ether	53				0.12	mg/kg	53	0.34	0.72			53
20 Bis(2-chloroisopropyl)ether	53				100	mg/kg	53	0.34	0.72		53	
21 Bis(2-ethylhexyl)phthalate	53	1	0.44	0.44	50	mg/kg	52	0.34	0.72		53	
22 Bromophenylphenyl ether [4-]	53					mg/kg	53	0.34	0.72			
23 Butyl benzyl phthalate	53				16,000	mg/kg	53	0.34	0.72		53	
24 Cadmium	43	35	0.69	2.2	80	mg/kg	8	0.62	0.72		43	
25 Calcium	43	43	1,320	7,900		mg/kg						
26 Cesium-137	31	16	0.9	431.42	4	pCi/g	15	0.29	1.12	7	24	
27 Chloro-3-methylphenol [4-]	53				16,000	mg/kg	53	0.34	0.72		53	
28 Chloroaniline [4-]	53				320	mg/kg	53	0.34	0.72		53	
29 Chloronaphthalene [2-]	53				6,400	mg/kg	53	0.34	0.72		53	
30 Chlorophenol [o-]	53				400	mg/kg	53	0.34	0.72		53	
31 Chlorophenylphenyl ether [4-]	53					mg/kg	53	0.34	0.72			
32 Chromium	43	43	1.8	11.6	400	mg/kg					43	
33 Chrysene	53				22	mg/kg	53	0.34	0.72		53	
34 Cobalt	43	38	2.1	8		mg/kg	5	1.9	2.1			
35 Copper	43	43	2.6	21.8	3,000	mg/kg					43	
36 Di-n-butyl phthalate	53				8,000	mg/kg	53	0.34	0.72		53	
37 Di-n-octyl phthalate	53				1,600	mg/kg	53	0.34	0.72		53	
38 Dibenzo[a,h]anthracene	53				0.086	mg/kg	53	0.34	0.72			53

TABLE 2-5
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT MDA T, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
39	Dibenzofuran	53				mg/kg	53	0.34	0.72			
40	Dichlorobenzene (1,2) [o-]	53			1,600	mg/kg	53	0.34	0.72		53	
41	Dichlorobenzene (1,3) [m-]	53			7,200	mg/kg	53	0.34	0.72		53	
42	Dichlorobenzene (1,4) [p-]	53			290	mg/kg	53	0.34	0.72		53	
43	Dichlorobenzidine [3,3'-]	53			1.6	mg/kg	53	0.44	1.4		53	
44	Dichlorophenol [2,4-]	53			240	mg/kg	53	0.34	0.72		53	
45	Diethyl phthalate	53			64,000	mg/kg	53	0.34	0.72		53	
46	Dimethyl phthalate	53			800,000	mg/kg	53	0.34	0.72		53	
47	Dimethylphenol [2,4-]	53			1,600	mg/kg	53	0.34	0.72		53	
48	Dinitrophenol [2,4-]	53			160	mg/kg	53	1.7	3.6		53	
49	Dinitrotoluene [2,4-]	53			1	mg/kg	53	0.34	0.72		53	
50	Dinitrotoluene [2,6-]	53			1	mg/kg	53	0.34	0.72		53	
51	Fluoranthene	53			3,200	mg/kg	53	0.34	0.72		53	
52	Fluorene	53			3,200	mg/kg	53	0.34	0.72		53	
53	Hexachlorobenzene	53			0.44	mg/kg	53	0.34	0.72		51	2
54	Hexachlorobutadiene	53			90	mg/kg	53	0.34	0.72		53	
55	Hexachlorocyclopentadiene	53			560	mg/kg	53	0.34	0.72		53	
56	Hexachloroethane	53			80	mg/kg	53	0.34	0.72		53	
57	Indeno[1,2,3-cd]pyrene	53			0.41	mg/kg	53	0.34	0.72		50	3
58	Iron	43	43	4,010	15,700	mg/kg						
59	Isophorone	53			7,400	mg/kg	53	0.34	0.72		53	
60	Lead	43	43	6.1	22.1	mg/kg					43	
61	Lithium	43	43	2	14.8	mg/kg						
62	Magnesium	43	43	665	2,690	mg/kg						
63	Manganese	43	43	118	479	mg/kg					43	
64	Methyl-4,6-dinitrophenol [2-]	53				mg/kg	53	1.7	3.6			
65	Methylnaphthalene [2-]	53				mg/kg	53	0.34	0.72			
66	Methylphenol [2-]	53			4,000	mg/kg	53	0.34	0.72		53	
67	Methylphenol [4-]	53			400	mg/kg	53	0.34	0.72		53	
68	Molybdenum	43			400	mg/kg	43	6	7.4		43	
69	Naphthalene	53			3,200	mg/kg	53	0.34	0.72		53	
70	Nickel	43	40	3.1	10.8	mg/kg	3	2.4	2.6		43	
71	Nitroaniline [2-]	53				mg/kg	53	1.7	3.6			
72	Nitroaniline [3-]	53				mg/kg	53	1.7	3.6			
73	Nitroaniline [4-]	53				mg/kg	53	1.7	3.6			
74	Nitrobenzene	53			5.3	mg/kg	53	0.34	0.72		53	
75	Nitrophenol [2-]	53				mg/kg	53	0.34	0.72			
76	Nitrophenol [4-]	53				mg/kg	53	1.7	3.6			

TABLE 2-5

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT MDA T, OU 1106

Analyte	Number of Values per Analyte	Number of Values $\geq$ LOD	Concentration Range		SAL	Units	Number of Values $<$ LOD	LOD Range		Number of Values $\geq$ SAL, Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
77 Nitrosodi-n-propylamine [N-]	53				0.1	mg/kg	53	0.34	0.72			53
78 Nitrosodiphenylamine [N-]	53				140	mg/kg	53	0.34	0.72		53	
79 Pentachlorophenol	53				5.8	mg/kg	53	1.7	3.6		53	
80 Phenanthrene	53					mg/kg	53	0.34	0.72			
81 Phenol	53				48,000	mg/kg	53	0.34	0.72		53	
82 Plutonium-238	31	28	0.015	1.82	27	pCi/g	3	0.01	0.01		31	
83 Plutonium-239	31	30	0.025	47.935	24	pCi/g	1	0.01	0.01	2	29	
84 Potassium	43	43	589	2,350		mg/kg						
85 Pyrene	53				2,400	mg/kg	53	0.34	0.72		53	
86 Selenium	43	1	0.7	0.7	400	mg/kg	42	0.41	0.51		43	
87 Silver	43	2	1.3	1.3	400	mg/kg	41	1	1.3		43	
88 Strontium	43	43	5.3	32.6		mg/kg						
89 Strontium-90	31	7	1.96	239.7	8.9	pCi/g	24	1.0	1.0	3	28	
90 Thallium	43	1	0.24	0.24	6.4	mg/kg	42	0.21	0.25		43	
91 Trichlorobenzene [1,2,4-]	53				160	mg/kg	53	0.34	0.72		53	
92 Trichlorophenol [2,4,5-]	53				8,000	mg/kg	53	1.7	3.6		53	
93 Trichlorophenol [2,4,6-]	53				64	mg/kg	53	0.34	0.72		53	
94 Tritium	31				15,000,000	pCi/g	31	2	2		31	
95 Uranium-234	31	31	0.868	2.738	86	pCi/g					31	
96 Uranium-235	31	31	0.043	0.38	18	pCi/g					31	
97 Uranium-238	31	31	0.872	2.03	59	pCi/g					31	
98 Vanadium	43	43	5.6	26	560	mg/kg					43	
99 Zinc	43	43	17.9	132	24,000	mg/kg					43	
Total Number of Values	4,787	1,010					3,777			95	3,351	224

TABLE 2-6

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT HOT OUTFALLS, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥SAL, Including ≥LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD ≥SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1 Acenaphthene	15				4,800	mg/kg	15	0.66	0.66		15	
2 Acenaphthylene	15					mg/kg	15	0.66	0.66			
3 Anthracene	15				24,000	mg/kg	15	0.66	0.66		15	
4 Benzo[a]anthracene	15				0.64	mg/kg	15	0.66	0.66			15
5 Benzo[a]pyrene	15				0.1	mg/kg	15	0.66	0.66			15
6 Benzo[b]fluoranthene	15				0.7	mg/kg	15	0.66	0.66		15	
7 Benzo[g,h,i]perylene	15				44	mg/kg	15	0.66	0.66		15	
8 Benzo[k]fluoranthene	15				1.5	mg/kg	15	0.66	0.66		15	
9 Benzoic acid	15				320,000	mg/kg	15	3.3	3.3		15	
10 Benzyl alcohol	15					mg/kg	15	0.66	0.66			
11 Bis(2-chloroethoxy)methane	15					mg/kg	15	0.66	0.66			
12 Bis(2-chloroethyl)ether	15				0.12	mg/kg	15	0.66	0.66			15
13 Bis(2-chloroisopropyl)ether	15				100	mg/kg	15	0.66	0.66		15	
14 Bis(2-ethylhexyl)phthalate	15	2	1.9	9.2	50	mg/kg	13	0.66	0.66		15	
15 Bromophenylphenyl ether [4-]	15					mg/kg	15	0.66	0.66			
16 Butyl benzyl phthalate	15				16,000	mg/kg	15	0.66	0.66		15	
17 Chloro-3-methylphenol [4-]	15				16,000	mg/kg	15	0.66	0.66		15	
18 Chloroaniline [4-]	15				320	mg/kg	15	0.66	0.66		15	
19 Chloronaphthalene [2-]	15				6,400	mg/kg	15	0.66	0.66		15	
20 Chlorophenol [o-]	15				400	mg/kg	15	0.66	0.66		15	
21 Chlorophenylphenyl ether [4-]	15					mg/kg	15	0.66	0.66			
22 Chrysene	15				22	mg/kg	15	0.66	0.66		15	
23 Di-n-butyl phthalate	15				8,000	mg/kg	15	0.66	0.66		15	
24 Di-n-octyl phthalate	15				1,600	mg/kg	15	0.66	0.66		15	
25 Dibenzo[a,h]anthracene	15				0.066	mg/kg	15	0.66	0.66			15
26 Dibenzofuran	15					mg/kg	15	0.66	0.66			
27 Dichlorobenzene (1,2) [o-]	15				1,600	mg/kg	15	0.66	0.66		15	
28 Dichlorobenzene (1,3) [m-]	15				7,200	mg/kg	15	0.66	0.66		15	
29 Dichlorobenzene (1,4) [p-]	15				290	mg/kg	15	0.66	0.66		15	
30 Dichlorobenzidine [3,3'-]	15				1.6	mg/kg	15	0.66	0.66		15	
31 Dichlorophenol [2,4-]	15				240	mg/kg	15	0.66	0.66		15	
32 Diethyl phthalate	15				64,000	mg/kg	15	0.66	0.66		15	
33 Dimethyl phthalate	15				800,000	mg/kg	15	0.66	0.66		15	
34 Dimethylphenol [2,4-]	15				1,600	mg/kg	15	0.66	0.66		15	
35 Dinitrophenol [2,4-]	15				160	mg/kg	15	3.3	3.3		15	
36 Dinitrotoluene [2,4-]	15				1	mg/kg	15	0.66	0.66		15	
37 Dinitrotoluene [2,6-]	15				1	mg/kg	15	0.66	0.66		15	
38 Fluoranthene	15				3,200	mg/kg	15	0.66	0.66		15	

TABLE 2-6
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT HOT OUTFALLS, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
39 Fluorene	15				3,200	mg/kg	15	0.66	0.66		15	
40 Hexachlorobenzene	15				0.44	mg/kg	15	0.66	0.66			15
41 Hexachlorobutadiene	15				90	mg/kg	15	0.66	0.66		15	
42 Hexachlorocyclopentadiene	15				560	mg/kg	15	0.66	0.66		15	
43 Hexachloroethane	15				80	mg/kg	15	0.66	0.66			15
44 Indeno[1,2,3-cd]pyrene	15				0.41	mg/kg	15	0.66	0.66			
45 Isophorone	15				7,400	mg/kg	15	0.66	0.66		15	
46 Methyl-4,6-dinitrophenol [2-]	15					mg/kg	15	3.3	3.3			
47 Methyl-naphthalene [2-]	15					mg/kg	15	0.66	0.66			
48 Methylphenol [2-]	15				4,000	mg/kg	15	0.66	0.66		15	
49 Methylphenol [4-]	15				400	mg/kg	15	0.66	0.66		15	
50 Naphthalene	15				3,200	mg/kg	15	0.66	0.66		15	
51 Nitroaniline [2-]	15					mg/kg	15	3.3	3.3			
52 Nitroaniline [3-]	15					mg/kg	15	3.3	3.3			
53 Nitroaniline [4-]	15					mg/kg	15	3.3	3.3			
54 Nitrobenzene	15				5.3	mg/kg	15	0.66	0.66		15	
55 Nitrophenol [2-]	15					mg/kg	15	0.66	0.66			
56 Nitrophenol [4-]	15					mg/kg	15	3.3	3.3			
57 Nitrosodi-n-propylamine [N-]	15				0.1	mg/kg	15	0.66	0.66			15
58 Nitrosodiphenylamine [N-]	15				140	mg/kg	15	0.66	0.66		15	
59 Pentachlorophenol	15				5.8	mg/kg	15	3.3	3.3		15	
60 Phenanthrene	15					mg/kg	15	0.66	0.66			
61 Phenol	15				48,000	mg/kg	15	0.66	0.66		15	
62 Pyrene	15				2,400	mg/kg	15	0.66	0.66		15	
63 Trichlorobenzene [1,2,4-]	15				160	mg/kg	15	0.66	0.66		15	
64 Trichlorophenol [2,4,5-]	15				8,000	mg/kg	15	3.3	3.3		15	
65 Trichlorophenol [2,4,6-]	15				64	mg/kg	15	0.66	0.66		15	
Total Number of Values	975	2					973			0	660	105

TABLE 2-7

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT NPDES OUTFALLS, OU 1106

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, including >=SAL	Number of Values <SAL, including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1 Acenaphthene	27	1	11	11	4,800	mg/kg	26	0.33	1.8		27	
2 Acenaphthylene	27					mg/kg	27	0.33	4.7			
3 Acetone	27	6	0.021	0.089	8,000	mg/kg	21	0.02	0.02		27	
4 Aluminum	27	27	346	21,300		mg/kg						
5 Anthracene	27	2	0.46	21	24,000	mg/kg	25	0.33	1.8		27	
6 Antimony	26	1	0.39	0.39	32	mg/kg	25	0.2	0.63		26	
7 Arsenic	27	15	1.1	13	0.4	mg/kg	12	0.93	2.1	15		12
8 Barium	27	19	2.5	242	5,600	mg/kg	8	2.1	47.1		27	
9 Benzene	27				0.67	mg/kg	27	0.005	0.005		27	
10 Benzo[a]anthracene	27	7	0.42	98	0.64	mg/kg	20	0.33	1.8	3	22	2
11 Benzo[a]pyrene	27	5	0.44	74	0.1	mg/kg	22	0.33	1.8	5		22
12 Benzo[b]fluoranthene	27	6	0.37	76	0.7	mg/kg	21	0.33	1.8	3	22	2
13 Benzo[g,h,i]perylene	27	3	1.3	37	44	mg/kg	24	0.33	1.8		27	
14 Benzo[k]fluoranthene	27	4	0.55	66	1.5	mg/kg	23	0.33	1.8	3	23	1
15 Benzoic acid	27				320,000	mg/kg	27	1.6	24		27	
16 Benzyl alcohol	27					mg/kg	27	0.33	4.7			
17 Beryllium	27	10	0.23	1.7	0.16	mg/kg	17	0.22	0.41	10		17
18 Bis(2-chloroethoxy)methane	27					mg/kg	27	0.33	4.7			
19 Bis(2-chloroethyl)ether	27				0.12	mg/kg	27	0.33	4.7			27
20 Bis(2-chloroisopropyl)ether	27				100	mg/kg	27	0.33	4.7		27	
21 Bis(2-ethylhexyl)phthalate	27	6	0.53	10	50	mg/kg	21	0.33	1.8		27	
22 Bromobenzene	27					mg/kg	27	0.005	0.005			
23 Bromochloromethane	27					mg/kg	27	0.005	0.005			
24 Bromodichloromethane	27				11	mg/kg	27	0.005	0.005		27	
25 Bromoform	27				89	mg/kg	27	0.005	0.005		27	
26 Bromomethane	27				0.43	mg/kg	27	0.01	0.01		27	
27 Bromophenylphenyl ether [4-]	27					mg/kg	27	0.33	4.7			
28 Butanone [2-]	27				4,000	mg/kg	27	0.02	0.02		27	
29 Butyl benzyl phthalate	27				16,000	mg/kg	27	0.33	4.7		27	
30 Butylbenzene [n-]	27					mg/kg	27	0.005	0.005			
31 Butylbenzene [sec-]	27					mg/kg	27	0.005	0.005			
32 Butylbenzene [tert-]	27					mg/kg	27	0.005	0.005			
33 Cadmium	27	12	0.73	12.4	80	mg/kg	15	0.6	0.86		27	
34 Calcium	27	22	207	15,000		mg/kg	5	180	1,240			
35 Carbon disulfide	27	4	0.0092	0.035	7.4	mg/kg	23	0.005	0.005		27	
36 Carbon tetrachloride	27				0.21	mg/kg	27	0.005	0.005		27	
37 Chloro-3-methylphenol [4-]	27				16,000	mg/kg	27	0.33	4.7		27	
38 Chloroaniline [4-]	27				320	mg/kg	27	0.33	4.7		27	
39 Chlorobenzene	27				67	mg/kg	27	0.005	0.005		27	

TABLE 2-7
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT NPDES OUTFALLS, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ SAL	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
40 Chlorodibromomethane	27				83	mg/kg	27	0.005	0.005		27	
41 Chloroethane	27				3,300	mg/kg	27	0.01	0.01		27	
42 Chloroform	27				0.21	mg/kg	27	0.005	0.005		27	
43 Chloromethane	27				6.4	mg/kg	27	0.01	0.01		27	
44 Chloronaphthalene [2-]	27				6,400	mg/kg	27	0.33	4.7		27	
45 Chlorophenol [o-]	27				400	mg/kg	27	0.33	4.7		27	
46 Chlorophenylphenyl ether [4-]	27					mg/kg	27	0.33	4.7		27	
47 Chlorotoluene [o-]	27					mg/kg	27	0.005	0.005		27	
48 Chlorotoluene [p-]	27					mg/kg	27	0.005	0.005		27	
49 Chromium	27	24	1.1	184	400	mg/kg	3	0.98	0.98		27	
50 Chrysene	27	7	0.49	110	22	mg/kg	20	0.33	1.8	1	26	
51 Cobalt	27	8	2.3	4.3		mg/kg	19	1.8	4.6		27	
52 Copper	27	23	0.81	1,900	3,000	mg/kg	4	0.74	2.8		27	
53 Di-n-butyl phthalate	27	1	0.77	0.77	8,000	mg/kg	26	0.33	4.7		27	
54 Di-n-octyl phthalate	27				1,600	mg/kg	27	0.33	4.7		27	
55 Dibenzo[a,h]anthracene	27	3	0.65	16	0.086	mg/kg	24	0.33	1.8	3		24
56 Dibenzofuran	27	1	5.8	5.8		mg/kg	26	0.33	1.8			
57 Dibromo-3-chloropropane [1,2-]	27					mg/kg	27	0.01	0.01			
58 Dibromoethane [1,2-]	27					mg/kg	27	0.005	0.005			
59 Dibromomethane	27					mg/kg	27	0.005	0.005			
60 Dichlorobenzene (1,2) [o-]	54	1	0.15	0.15	1,600	mg/kg	53	0.005	4.7		54	
61 Dichlorobenzene (1,3) [m-]	54				7,200	mg/kg	54	0.005	4.7		54	
62 Dichlorobenzene (1,4) [p-]	54				290	mg/kg	54	0.005	4.7		54	
63 Dichlorobenzidine [3,3'-]	27				1.6	mg/kg	27	0.66	9.4		25	2
64 Dichlorodifluoromethane	27					mg/kg	27	0.01	0.01		27	
65 Dichloroethane [1,1-]	27				410	mg/kg	27	0.005	0.005		27	
66 Dichloroethane [1,2-]	27				0.2	mg/kg	27	0.005	0.005		27	
67 Dichloroethane [1,1-]	27				0.4	mg/kg	27	0.005	0.005		27	
68 Dichloroethene [trans-1,2-]	27				1,600	mg/kg	27	0.005	0.005		27	
69 Dichloroethylene [cis-1,2-]	27				800	mg/kg	27	0.005	0.005		27	
70 Dichlorophenol [2,4-]	27				240	mg/kg	27	0.33	4.7		27	
71 Dichloropropane [1,2-]	27				6.5	mg/kg	27	0.005	0.005		27	
72 Dichloropropane [1,3-]	27	1	0.18	0.18		mg/kg	26	0.005	0.005			
73 Dichloropropane [2,2-]	27					mg/kg	27	0.005	0.005			
74 Dichloropropene [1,1-]	27					mg/kg	27	0.005	0.005			
75 Dichloropropene [cis-1,3-]	27				0.17	mg/kg	27	0.005	0.005		27	
76 Dichloropropene [trans-1,3-]	27				0.17	mg/kg	27	0.005	0.005		27	
77 Diethyl phthalate	27				64,000	mg/kg	27	0.33	4.7		27	
78 Dimethyl phthalate	27				800,000	mg/kg	27	0.33	4.7		27	

TABLE 2-7

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT NPDES OUTFALLS, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ SAL	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
79 Dimethylphenol [2,4-]	27				1,600	mg/kg	27	0.33	4.7		27	
80 Dinitrophenol [2,4-]	27				160	mg/kg	27	1.6	24		27	
81 Dinitrotoluene [2,4-]	27				1	mg/kg	27	0.33	4.7		25	2
82 Dinitrotoluene [2,6-]	27				1	mg/kg	27	0.33	4.7		25	2
83 Ethylbenzene	27				3,100	mg/kg	27	0.005	0.005		27	
84 Fluoranthene	27	10	0.43	320	3,200	mg/kg	17	0.33	1.8		27	
85 Fluorene	27	1	11	11	3,200	mg/kg	26	0.33	1.8		27	
86 Hexachlorobenzene	27				0.44	mg/kg	27	0.33	4.7		19	8
87 Hexachlorobutadiene	27				90	mg/kg	27	0.33	4.7		27	
88 Hexachlorocyclopentadiene	27				560	mg/kg	27	0.33	4.7		27	
89 Hexachloroethane	27				80	mg/kg	27	0.33	4.7		27	
90 Hexanone [2-]	27					mg/kg	27	0.02	0.02			
91 Indeno[1,2,3-cd]pyrene	27	3	1.3	38	0.41	mg/kg	24	0.33	1.8	3	12	12
92 Iron	27	27	580	20,800		mg/kg						
93 Isophorone	27				7,400	mg/kg	27	0.33	4.7		27	
94 Isopropylbenzene	27					mg/kg	27	0.005	0.005			
95 Isopropyltoluene [4-]	27					mg/kg	27	0.005	0.005			
96 Lead	27	27	1.9	392	500	mg/kg					27	
97 Lithium	27	17	1.7	18.3		mg/kg	10	2.8	7.4			
98 Magnesium	27	18	54.6	3,010		mg/kg	9	117	941			
99 Manganese	27	27	55.2	186	8,000	mg/kg					27	
100 Methyl iodide	27					mg/kg	27	0.005	0.005			
101 Methyl-2-pentanone [4-]	27				510	mg/kg	27	0.02	0.02		27	
102 Methyl-4,6-dinitrophenol [2-]	27					mg/kg	27	1.6	24			
103 Methylene chloride	27				5.6	mg/kg	27	0.005	0.005		27	
104 Methyl-naphthalene [2-]	27					mg/kg	27	0.33	4.7			
105 Methylphenol [2-]	27				4,000	mg/kg	27	0.33	4.7		27	
106 Methylphenol [4-]	27				400	mg/kg	27	0.33	4.7		27	
107 Molybdenum	27	3	7.2	15.7	400	mg/kg	24	5.8	8.5		27	
108 Naphthalene	27				3,200	mg/kg	27	0.33	4.7		27	
109 Nickel	27	17	2.8	21.1	1,600	mg/kg	10	2.2	4.2		27	
110 Nitroaniline [2-]	27					mg/kg	27	1.6	24			
111 Nitroaniline [3-]	27					mg/kg	27	1.6	24			
112 Nitroaniline [4-]	27					mg/kg	27	1.6	24			
113 Nitrobenzene	27				5.3	mg/kg	27	0.33	4.7		27	
114 Nitrophenol [2-]	27					mg/kg	27	0.33	4.7			
115 Nitrophenol [4-]	27					mg/kg	27	1.6	24			
116 Nitrosodi-n-propylamine [N-]	27				0.1	mg/kg	27	0.33	4.7			27
117 Nitrosodiphenylamine [N-]	27				140	mg/kg	27	0.33	4.7		27	

TABLE 2-7
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES AT NPDES OUTFALLS, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, including ≥ SAL	Number of Values < SAL, including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
118 Pentachlorophenol	27				5.8	mg/kg	27	1.6	24		25	2
119 Phenanthrene	27	6	0.42	160		mg/kg	21	0.33	1.8			
120 Phenol	27				48,000	mg/kg	27	0.33	4.7		27	
121 Potassium	27	13	286	2,070		mg/kg	14	225	718			
122 Propylbenzene	27					mg/kg	27	0.005	0.005			
123 Pyrene	27	9	0.47	230	2,400	mg/kg	18	0.33	1.8		27	
124 Selenium	27	3	0.53	0.6	400	mg/kg	24	0.4	0.58		27	
125 Silver	27				400	mg/kg	27	1	1.5		27	
126 Strontium	27	18	0.97	68.2		mg/kg	9	1.6	18.5			
127 Styrene	27				16,000	mg/kg	27	0.005	0.005		27	
128 Tetrachloroethane [1,1,1,2-]	27					mg/kg	27	0.005	0.005			
129 Tetrachloroethane [1,1,2,2-]	27				3.9	mg/kg	27	0.005	0.005		27	
130 Tetrachloroethylene	27				5.9	mg/kg	27	0.005	0.005		27	
131 Thallium	27	3	0.33	0.38	6.4	mg/kg	24	0.2	0.28		27	
132 Toluene	27				890	mg/kg	27	0.005	0.005		27	
133 Trichloro-1,2,2-trifluoroethane [1,1,2-]	27					mg/kg	27	0.33	4.7		27	
134 Trichlorobenzene [1,2,4-]	27				160	mg/kg	27	0.005	0.005		27	
135 Trichloroethane [1,1,1-]	27				1,000	mg/kg	27	0.005	0.005		27	
136 Trichloroethane [1,1,2-]	27				6.3	mg/kg	27	0.005	0.005		27	
137 Trichloroethene	27				3.2	mg/kg	27	0.005	0.005		27	
138 Trichlorofluoromethane	27					mg/kg	27	0.005	0.005			
139 Trichlorophenol [2,4,5-]	27				8,000	mg/kg	27	1.6	24		27	
140 Trichlorophenol [2,4,6-]	27				64	mg/kg	27	0.33	4.7		27	
141 Trichloropropane [1,2,3-]	27					mg/kg	27	0.005	0.005			
142 Trimethylbenzene [1,2,4-]	27					mg/kg	27	0.005	0.005			
143 Trimethylbenzene [1,3,5-]	27					mg/kg	27	0.005	0.005			
144 Vanadium	27	18	3.1	27	560	mg/kg	9	1.2	9.9		27	
145 Vinyl chloride	27				0.012	mg/kg	27	0.01	0.01		27	
146 Xylenes (o + m + p) [Mixed-]	27				160,000	mg/kg	27	0.005	0.005		27	
147 Zinc	27	27	16.2	3,020	24,000	mg/kg					27	
Total Number of Values	4,049	466					3,583			46	2,572	162

TABLE 2-8
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF SHALLOW BOREHOLES, OU 1106

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, With LOD >=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthene	72				4,800	mg/kg	72	0.18	0.66		72	
2 Acenaphthylene	72					mg/kg	72	0.18	0.66			
3 Acetone	73	8	0.021	0.029	8,000	mg/kg	65	0.02	0.02		73	
4 Actinium-227	23					pCi/g	23	2.22	4.58			
5 Aluminum	79	79	188	29,700		mg/kg						
6 Americium-241	23	6	0.016	1.126	22	pCi/g	17	0.01	0.01		23	
7 Aniline	54					mg/kg	54	0.19	0.66			
8 Anthracene	72				24,000	mg/kg	72	0.18	0.66		72	
9 Antimony	78	4	0	0	32	mg/kg	74	0.2	0.57		78	
10 Arsenic	80	33	0.83	9.7	0.4	mg/kg	47	0.81	4	33		47
11 Azobenzene	54					mg/kg	54	0.19	0.66			
12 Barium	80	39	1.4	280	5,600	mg/kg	41	1.1	46.1		80	
13 Benzene	73				0.67	mg/kg	73	0.005	0.005		73	
14 Benzidine [m-]	54					mg/kg	54	0.96	3.3			
15 Benzo[a]anthracene	72	1	1.1	1.1	0.64	mg/kg	71	0.18	0.66	1	24	47
16 Benzo[a]pyrene	72	1	0.87	0.87	0.1	mg/kg	71	0.18	0.66	1		71
17 Benzo[b]fluoranthene	72	1	1.6	1.6	0.7	mg/kg	71	0.18	0.66	1	71	
18 Benzo[g,h,i]perylene	72				44	mg/kg	72	0.18	0.66		72	
19 Benzo[k]fluoranthene	72				1.5	mg/kg	72	0.18	0.66		72	
20 Benzoic acid	72				320,000	mg/kg	72	0.89	3.3		72	
21 Benzyl alcohol	72					mg/kg	72	0.18	1.3			
22 Beryllium	80	15	0.22	3.3	0.16	mg/kg	65	0.2	1.2	15		65
23 Bis(2-chloroethoxy)methane	72					mg/kg	72	0.18	0.66			
24 Bis(2-chloroethyl)ether	72				0.12	mg/kg	72	0.18	0.66			72
25 Bis(2-chloroisopropyl)ether	72				100	mg/kg	72	0.18	0.66		72	
26 Bis(2-ethylhexyl)phthalate	72	3	1.653	5.5	50	mg/kg	69	0.18	0.66		72	
27 Bromobenzene	73					mg/kg	73	0.005	0.005			
28 Bromochloromethane	73					mg/kg	73	0.005	0.005			
29 Bromodichloromethane	73				11	mg/kg	73	0.005	0.005		73	
30 Bromoform	73				89	mg/kg	73	0.005	0.005		73	
31 Bromomethane	73				0.43	mg/kg	73	0.01	0.01		73	
32 Bromophenylphenyl ether [4-]	72					mg/kg	72	0.18	0.66			
33 Butanone [2-]	73				4,000	mg/kg	73	0.02	0.02		73	
34 Butyl benzyl phthalate	72				16,000	mg/kg	72	0.18	0.66		72	
35 Butylbenzene [n-]	73					mg/kg	73	0.005	0.005			
36 Butylbenzene [sec-]	73					mg/kg	73	0.005	0.005			
37 Butylbenzene [tert-]	73					mg/kg	73	0.005	0.005			
38 Cadmium	80	12	0.75	2.2	80	mg/kg	68	0.6	1.2		80	

TABLE 2-8
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF SHALLOW BOREHOLES, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, With LOD ≥ 0.005
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
39 Calcium	80	46	112	123,000		mg/kg	34	93.5	1,050			
40 Carbon disulfide	73	2	0.006	0.011	7.4	mg/kg	71	0.005	0.005		73	
41 Carbon tetrachloride	73				0.21	mg/kg	73	0.005	0.005		73	
42 Cesium-137	23	1	0.79	0.79	4	pCi/g	22	0.24	0.76		23	
43 Chloro-3-methylphenol [4-]	72				16,000	mg/kg	72	0.18	1.3		72	
44 Chloroaniline [4-]	72				320	mg/kg	72	0.18	1.3		72	
45 Chlorobenzene	73				67	mg/kg	73	0.005	0.005		73	
46 Chlorodibromomethane	73				83	mg/kg	73	0.005	0.005		73	
47 Chloroethane	73				3,300	mg/kg	73	0.01	0.01		73	
48 Chloroform	73				0.21	mg/kg	73	0.005	0.005		73	
49 Chloromethane	73				6.4	mg/kg	73	0.01	0.01		73	
50 Chloronaphthalene [2-]	72				6,400	mg/kg	72	0.18	0.66		72	
51 Chlorophenol [o-]	72				400	mg/kg	72	0.18	0.66		72	
52 Chlorophenylphenyl ether [4-]	72					mg/kg	72	0.18	0.66			
53 Chlorotoluene [o-]	73					mg/kg	73	0.005	0.005			
54 Chlorotoluene [p-]	73					mg/kg	73	0.005	0.005			
55 Chromium	79	55	0.87	42.5	400	mg/kg	24	0.81	2		79	
56 Chrysene	72	1	1.1	1.1	22	mg/kg	71	0.18	0.66		72	
57 Cobalt	80					mg/kg	80	1.8	5.7			
58 Copper	79	32	0.65	73	3,000	mg/kg	47	0.6	6.3		79	
59 Di-n-butyl phthalate	72				8,000	mg/kg	72	0.18	0.66		72	
60 Di-n-octyl phthalate	72				1,600	mg/kg	72	0.18	0.66		72	
61 Dibenzo[a,h]anthracene	72				0.066	mg/kg	72	0.18	0.66			72
62 Dibenzofuran	72					mg/kg	72	0.18	0.66			
63 Dibromo-3-chloropropane [1,2-]	73					mg/kg	73	0.01	0.01			
64 Dibromoethane [1,2-]	73					mg/kg	73	0.005	0.005			
65 Dibromomethane	73					mg/kg	73	0.005	0.005			
66 Dichlorobenzene (1,2) [o-]	145				1,600	mg/kg	145	0.005	0.66		145	
67 Dichlorobenzene (1,3) [m-]	145				7,200	mg/kg	145	0.005	0.66		145	
68 Dichlorobenzene (1,4) [p-]	145				290	mg/kg	145	0.005	0.66		145	
69 Dichlorobenzidine [3,3'-]	72				1.6	mg/kg	72	0.36	1.3		72	
70 Dichlorodifluoromethane	73					mg/kg	73	0.01	0.01			
71 Dichloroethane [1,1-]	73				410	mg/kg	73	0.005	0.005		73	
72 Dichloroethane [1,2-]	73				0.2	mg/kg	73	0.005	0.005		73	
73 Dichloroethane [1,1-]	73				0.4	mg/kg	73	0.005	0.005		73	
74 Dichloroethane [trans-1,2-]	73				1,600	mg/kg	73	0.005	0.005		73	
75 Dichloroethylene [cis-1,2-]	73				800	mg/kg	73	0.005	0.005		73	
76 Dichlorophenol [2,4-]	72				240	mg/kg	72	0.18	0.66		72	

TABLE 2-8

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF SHALLOW BOREHOLES, OU 1106

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD/With LOD>=0.01%
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
77 Dichloropropane [1,2-]	73				6.5	mg/kg	73	0.005	0.005		73	
78 Dichloropropane [1,3-]	73					mg/kg	73	0.005	0.005			
79 Dichloropropane [2,2-]	73					mg/kg	73	0.005	0.005			
80 Dichloropropane [1,1-]	73					mg/kg	73	0.005	0.005			
81 Dichloropropane [cis-1,3-]	73				0.17	mg/kg	73	0.005	0.005		73	
82 Dichloropropane [trans-1,3-]	73				0.17	mg/kg	73	0.005	0.005		73	
83 Diethyl phthalate	72				64,000	mg/kg	72	0.18	0.66		72	
84 Dimethyl phthalate	72				800,000	mg/kg	72	0.18	0.66		72	
85 Dimethylphenol [2,4-]	72				1,600	mg/kg	72	0.18	0.66		72	
86 Dinitrophenol [2,4-]	72				160	mg/kg	72	0.89	3.3		72	
87 Dinitrotoluene [2,4-]	72				1	mg/kg	72	0.18	0.66		72	
88 Dinitrotoluene [2,6-]	72				1	mg/kg	72	0.18	0.66		72	
89 Ethylbenzene	73				3,100	mg/kg	73	0.005	0.005		73	
90 Fluoranthene	72	1	2.9	2.9	3,200	mg/kg	71	0.18	0.66		72	
91 Fluorene	72				3,200	mg/kg	72	0.18	0.66		72	
92 Hexachlorobenzene	72				0.44	mg/kg	72	0.18	0.66		24	48
93 Hexachlorobutadiene	72				90	mg/kg	72	0.18	0.66		72	
94 Hexachlorocyclopentadiene	72				560	mg/kg	72	0.18	0.66		72	
95 Hexachloroethane	72				80	mg/kg	72	0.18	0.66		72	
96 Hexanone [2-]	73					mg/kg	73	0.02	0.02			
97 Indeno[1,2,3-cd]pyrene	72	1	0.46	0.46	0.41	mg/kg	71	0.18	0.66	1	22	49
98 Iron	79	79	864	21,700		mg/kg						
99 Isophorone	72				7,400	mg/kg	72	0.18	0.66		72	
100 Isopropylbenzene	73					mg/kg	73	0.005	0.005			
101 Isopropyltoluene [4-]	73	1	0.012	0.012		mg/kg	72	0.005	0.005			
102 Lead	78	78	0.67	84	500	mg/kg					78	
103 Lithium	78	26	1.3	22.5		mg/kg	52	1.2	8.8			
104 Magnesium	77	37	71.4	8,840		mg/kg	40	59.9	918			
105 Manganese	78	78	27.7	373	8,000	mg/kg					78	
106 Methyl iodide	73					mg/kg	73	0.005	0.005			
107 Methyl-2-pentanone [4-]	73				510	mg/kg	73	0.02	0.02		73	
108 Methyl-4,6-dinitrophenol [2-]	72					mg/kg	72	0.89	3.3			
109 Methylene chloride	73				5.6	mg/kg	73	0.005	0.005		73	
110 Methylnaphthalene [2-]	72					mg/kg	72	0.18	0.96			
111 Methylphenol [2-]	72				4,000	mg/kg	72	0.18	0.66		72	
112 Methylphenol [4-]	72				400	mg/kg	72	0.18	0.66		72	
113 Molybdenum	78				400	mg/kg	78	5.8	8.4		78	
114 Naphthalene	72				3,200	mg/kg	72	0.18	0.66		72	

TABLE 2-1

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF SHALLOW BOREHOLES, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥SAL, Including ≥LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, Min LOD < 0.01
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
115 Nickel	78	10	2.8	20.2	1,600	mg/kg	68	2.2	9.6		78	
116 Nitroaniline [2-]	72					mg/kg	72	0.89	3.3			
117 Nitroaniline [3-]	72					mg/kg	72	0.89	3.3			
118 Nitroaniline [4-]	72					mg/kg	72	0.89	3.3			
119 Nitrobenzene	72				5.3	mg/kg	72	0.18	0.66		72	
120 Nitrophenol [2-]	72					mg/kg	72	0.18	0.66			
121 Nitrophenol [4-]	72					mg/kg	72	0.89	3.3			
122 Nitrosodi-n-propylamine [N-]	72				0.1	mg/kg	72	0.18	0.66			72
123 Nitrosodimethylamine [N-]	54					mg/kg	54	0.19	0.66			
124 Nitrosodiphenylamine [N-]	72				140	mg/kg	72	0.18	0.66		72	
125 Pentachlorophenol	72				5.8	mg/kg	72	0.89	3.3		72	
126 Phenanthrene	72	1	1.7	1.7		mg/kg	71	0.18	0.66			
127 Phenol	72				48,000	mg/kg	72	0.18	0.66		72	
128 Plutonium-238	23	4	0.067	0.269	27	pCi/g	19	0.01	0.01	1	23	
129 Plutonium-239	23	8	0.023	33.901	24	pCi/g	15	0.01	0.01		22	
130 Potassium	78	15	259	2,730		mg/kg	63	215	1,210			
131 Propylbenzene	73					mg/kg	73	0.005	0.005			
132 Pyrene	72	1	2	2	2,400	mg/kg	71	0.18	0.66		72	
133 Selenium	77	7	0.41	0.71	400	mg/kg	70	0.4	0.71		77	
134 Silver	80	2	5	5.2	400	mg/kg	78	1	2.1		80	
135 Strontium	77	33	0.49	415		mg/kg	44	0.4	23.2			
136 Strontium-90	23				8.9	pCi/g	23	1.0	1.0		23	
137 Styrene	73				16,000	mg/kg	73	0.005	0.005		73	
138 Tetrachloroethane [1,1,1,2-]	73					mg/kg	73	0.005	0.005			
139 Tetrachloroethane [1,1,2,2-]	73				3.9	mg/kg	73	0.005	0.005		73	
140 Tetrachloroethylene	73				5.9	mg/kg	73	0.005	0.005		73	
141 Thallium	78				6.4	mg/kg	78	0.2	0.31		78	
142 Thorium-228	19	19	1.41	1.78		pCi/g					19	
143 Thorium-230	19	19	1.22	1.43	10	pCi/g				19		
144 Thorium-232	19	19	1.43	1.78	0.88	pCi/g						
145 Toluene	73				890	mg/kg	73	0.005	0.005		73	
146 Trichloro-1,2,2-trifluoroethane [1,1,2-]	73					mg/kg	73	0.005	0.005			
147 Trichlorobenzene [1,2,4-]	72				160	mg/kg	72	0.18	0.88		72	
148 Trichloroethane [1,1,1-]	73				1,000	mg/kg	73	0.005	0.005		73	
149 Trichloroethane [1,1,2-]	73				6.3	mg/kg	73	0.005	0.005		73	
150 Trichloroethene	73				3.2	mg/kg	73	0.005	0.005		73	
151 Trichlorofluoromethane	73					mg/kg	73	0.005	0.005			
152 Trichlorophenol [2,4,5-]	72				8,000	mg/kg	72	0.66	2.1		72	

TABLE 2-3
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF SHALLOW BOREHOLES, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, With LOD ≥ 0.001
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
153 Trichlorophenol [2,4,6-]	72				64	mg/kg	72	0.18	0.66		72	
154 Trichloropropane [1,2,3-]	73					mg/kg	73	0.005	0.005			
155 Trimethylbenzene [1,2,4-]	73					mg/kg	73	0.005	0.005			
156 Trimethylbenzene [1,3,5-]	73					mg/kg	73	0.005	0.005			
157 Tritium	23				15,000,000	pCi/g	23	2.0	2.0		23	
158 Uranium-234	19	19	1.19	21.37	86	pCi/g					19	
159 Uranium-235	19	19	0.03	0.87	18	pCi/g					19	
160 Uranium-238	19	19	1.15	2.22	59	pCi/g					19	
161 Vanadium	77	28	1.1	58	560	mg/kg	49	1	10.1		77	
162 Vinyl chloride	73				0.012	mg/kg	73	0.01	0.01		73	
163 Xylenes (o + m + p) [Mixed-]	73				160,000	mg/kg	73	0.005	0.005		73	
164 Zinc	77	77	6.5	160	24,000	mg/kg					77	
Total Number of Values	11,509	940					10,569			72	7,175	543

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1 Acenaphthene	Soil	4				4,800	mg/kg	4	0.36	0.4		4	
2 Acenaphthene	Water	2				2,100	µg/l	2	10	10		2	
3 Acenaphthylene	Soil	4					mg/kg	4	0.36	0.4			
4 Acenaphthylene	Water	2					µg/l	2	10	10			
5 Acetone	Soil	5	1	0.026	0.026	8,000	mg/kg	4	0.02	0.024		5	
6 Acetone	Water	2				3,500	µg/l	2	20	53		2	
7 Actinium-227	Soil	3					pCi/g	3	0.7788	1.176			
8 Aluminum	Soil	5	5	2,100	3,330		mg/kg						
9 Aluminum	Water	2	2	30	30		mg/l					2	
10 Americium-241	Soil	2	1	0.291	0.291	22	pCi/g	1	0.01	0.01			
11 Aniline	Soil	3					mg/kg	3	0.36	0.4			
12 Aniline	Water	2					µg/l	2	10	10			
13 Anthracene	Soil	4				24,000	mg/kg	4	0.36	0.4		4	
14 Anthracene	Water	2				10,000	µg/l	2	10	10		2	
15 Antimony	Soil	5	2	0.3	0.3	32	mg/kg	3	0.12	0.24		5	
16 Antimony	Water	2				6	µg/l	2	2	2		2	
17 Arsenic	Soil	5	4	0.4	0.5	0.4	mg/kg	1	0.95	0.95	4		1
18 Arsenic	Water	2				50	µg/l	2	2	2		2	
19 Azobenzene	Water	2					µg/l	2	10	10			
20 Azobenzene	Soil	4					mg/kg	4	0.36	0.4			
21 Barium	Water	2	2	0.57	0.57	2,000	mg/l					2	
22 Barium	Soil	5	4	27	38	5,600	mg/kg	1	28.4	28.4		5	
23 Benzene	Water	2				5	µg/l	2	5	5			2
24 Benzene	Soil	5				0.67	mg/kg	5	0.005	0.008		5	
25 Benidine [m-]	Water	2					µg/l	2	10	10			
26 Benzo[a]anthracene	Soil	4				0.64	mg/kg	4	0.36	0.4		4	
27 Benzo[a]anthracene	Water	2				0.1	µg/l	2	10	10			2
28 Benzo[a]pyrene	Soil	4				0.1	mg/kg	4	0.36	0.4			4
29 Benzo[a]pyrene	Water	2				0.2	µg/l	2	10	10			2
30 Benzo[b]fluoranthene	Water	2				0.2	µg/l	2	10	10			
31 Benzo[b]fluoranthene	Soil	4				0.7	mg/kg	4	0.36	0.4		4	
32 Benzo[g,h,i]perylene	Water	2					µg/l	2	10	10			
33 Benzo[g,h,i]perylene	Soil	4				44	mg/kg	4	0.36	0.4		4	
34 Benzo[k]fluoranthene	Soil	4				1.5	mg/kg	4	0.36	0.4		4	
35 Benzo[k]fluoranthene	Water	2				0.2	µg/l	2	10	10			2
36 Benzoic acid	Soil	4				320,000	mg/kg	4	1.7	1.9		4	
37 Benzoic acid	Water	2				140,000	µg/l	2	10	10		2	
38 Benzyl alcohol	Soil	4					mg/kg	4	0.36	0.4			
39 Benzyl alcohol	Water	2					µg/l	2	10	10			
40 Beryllium	Soil	5	4	0.43	0.8	0.16	mg/kg	1	0.24	0.24	4		1

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
41 Beryllium	Water	2	2	0.007	0.007	4	mg/l					2	
42 Bis(2-chloroethoxy)methane	Soil	4					mg/kg	4	0.36	0.4			
43 Bis(2-chloroethoxy)methane	Water	2				0.12	μg/l	2	10	10			
44 Bis(2-chloroethyl)ether	Soil	4				0.032	mg/kg	4	0.71	0.79			4
45 Bis(2-chloroethyl)ether	Water	2					μg/l	2	10	10			2
46 Bis(2-chloroisopropyl)ether	Water	2				0.5	μg/l	2	10	10			2
47 Bis(2-chloroisopropyl)ether	Water	2				100	mg/kg	4	0.36	0.4		4	
48 Bis(2-ethylhexyl)phthalate	Soil	4				50	mg/kg	4	0.36	0.4		4	
49 Bis(2-ethylhexyl)phthalate	Soil	4				4	μg/l	2	10	10			2
50 Bromobenzene	Water	2					mg/kg	5	0.005	0.006			
51 Bromobenzene	Soil	5					μg/l	2	5	5			
52 Bromochloromethane	Water	2					mg/kg	5	0.005	0.006			
53 Bromochloromethane	Soil	5					μg/l	2	5	5			
54 Bromodichloromethane	Water	2				11	mg/kg	5	0.005	0.006		5	
55 Bromodichloromethane	Soil	5				0.56	μg/l	2	5	5			2
56 Bromoform	Water	2				89	mg/kg	5	0.005	0.006		5	
57 Bromoform	Soil	5				4.4	μg/l	2	5	5			2
58 Bromomethane	Water	2				0.43	mg/kg	5	0.01	0.012		5	
59 Bromomethane	Soil	5				49	μg/l	2	10	10		2	
60 Bromophenylphenyl ether [4-]	Water	2					mg/kg	4	0.36	0.4			
61 Bromophenylphenyl ether [4-]	Soil	4					μg/l	2	10	10			
62 Butanone [2-]	Water	2				4,000	mg/kg	4	0.022	0.024		5	
63 Butanone [2-]	Soil	5	1	0.11	0.11	1,700	μg/l	2	20	20		2	
64 Butyl benzyl phthalate	Water	2				16,000	mg/kg	4	0.36	0.4		4	
65 Butyl benzyl phthalate	Soil	4				100	μg/l	2	10	10		2	
66 Butylbenzene [n-]	Water	2					mg/l	2	5	5			
67 Butylbenzene [n-]	Soil	5					mg/kg	5	0.005	0.006			
68 Butylbenzene [sec-]	Water	2					μg/l	2	5	5			
69 Butylbenzene [sec-]	Soil	5					mg/kg	5	0.005	0.006			
70 Butylbenzene [tert-]	Water	2					μg/l	2	5	5			
71 Butylbenzene [tert-]	Soil	5					mg/kg	5	0.005	0.006			
72 Cadmium	Soil	5				80	mg/kg	5	0.4	1		5	
73 Cadmium	Water	2				5	mg/l	2	0.003	0.003		2	
74 Calcium	Soil	5	5	850	1,700		mg/kg						
75 Calcium	Water	2	2	24	24		mg/l						
76 Carbon disulfide	Soil	5				3,500	μg/l	2	5	5		2	
77 Carbon disulfide	Water	2				7.4	mg/kg	5	0.005	0.006		5	
78 Carbon tetrachloride	Soil	5				0.21	mg/kg	5	0.005	0.006		5	
79 Carbon tetrachloride	Water	2				5	μg/l	2	5	5			2
80 Cesium-137	Soil	5				4	pCi/g	5	0.144	0.3214		5	

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
81 Chloro-3-methylphenol [4-]	Water	2				7,000	µg/l	2	10	10		2	
82 Chloro-3-methylphenol [4-]	Soil	4				16,000	mg/kg	4	0.36	0.4		4	
83 Chloroaniline [4-]	Soil	4				320	mg/kg	4	0.36	0.4		4	
84 Chloroaniline [4-]	Water	2				140	µg/l	2	10	10		2	
85 Chlorobenzene	Soil	5				67	mg/kg	5	0.005	0.006		5	
86 Chlorobenzene	Water	2				100	µg/l	2	5	5		2	
87 Chlorodibromomethane	Water	2				4.2	µg/l	2	5	5			2
88 Chlorodibromomethane	Soil	5				83	mg/kg	5	0.005	0.006		5	
89 Chloroethane	Water	2					µg/l	2	10	10			
90 Chloroethane	Soil	5				3,300	mg/kg	5	0.01	0.012		5	
91 Chloroform	Water	2				100	µg/l	2	5	5		2	
92 Chloroform	Soil	5				0.21	mg/kg	5	0.005	0.006		5	
93 Chloromethane	Water	2				27	µg/l	2	10	10		2	
94 Chloromethane	Soil	5				6.4	mg/kg	5	0.01	0.012		5	
95 Chloronaphthalene [2-]	Soil	4				6,400	mg/kg	4	0.36	0.4		4	
96 Chloronaphthalene [2-]	Water	2				2,800	µg/l	2	10	10		2	
97 Chlorophenol [o-]	Soil	4				400	mg/kg	4	0.36	0.4		4	
98 Chlorophenol [o-]	Water	2				170	µg/l	2	10	10		2	
99 Chlorophenylphenyl ether [4-]	Soil	4					mg/kg	4	0.36	0.4			
100 Chlorophenylphenyl ether [4-]	Water	2					µg/l	2	10	10			
101 Chlorotoluene [o-]	Soil	5					mg/kg	5	0.005	0.006			
102 Chlorotoluene [o-]	Water	2					µg/l	2	5	5			
103 Chlorotoluene [p-]	Soil	5					mg/kg	5	0.005	0.006			
104 Chlorotoluene [p-]	Water	2					µg/l	2	5	5			
105 Chromium	Water	2	2	0.021	0.021	100	mg/l					2	
106 Chromium	Soil	5	5	1.8	4.2	400	mg/kg					5	
107 Chrysene	Water	2				0.2	µg/l	2	10	10			2
108 Chrysene	Soil	4				22	mg/kg	4	0.36	0.4		4	
109 Cobalt	Soil	5	4	1.8	3.8		mg/kg	1	2.1	2.1			
110 Cobalt	Water	2					mg/l	2	0.004	0.004			
111 Copper	Soil	5	4	0.7	2.8	3,000	mg/kg	1	3.1	3.1		5	
112 Copper	Water	2	2	0.016	0.016	1,300	mg/l					2	
113 Di-n-butyl phthalate	Soil	4				8,000	mg/kg	4	0.36	0.4		4	
114 Di-n-butyl phthalate	Water	2				3,500	µg/l	2	10	10		2	
115 Di-n-octyl phthalate	Soil	4				1,600	mg/kg	4	0.36	0.4		4	
116 Di-n-octyl phthalate	Water	2				700	µg/l	2	10	10		2	
117 Dibenzo[a,h]anthracene	Soil	4				0.086	mg/kg	4	0.36	0.4			4
118 Dibenzo[a,h]anthracene	Water	2				0.3	µg/l	2	10	10			2
119 Dibenzofuran	Water	2					µg/l	2	10	10			
120 Dibenzofuran	Soil	4					mg/kg	4	0.36	0.4			

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
121 Dibromo-3-chloropropane [1,2-]	Water	2					µg/l	2	10	10			
122 Dibromo-3-chloropropane [1,2-]	Soil	5					mg/kg	5	0.01	0.012			
123 Dibromoethane [1,2-]	Soil	5					mg/kg	5	0.005	0.006			
124 Dibromoethane [1,2-]	Water	2					µg/l	2	5	5			
125 Dibromomethane	Soil	5					mg/kg	5	0.005	0.006			
126 Dibromomethane	Water	2					µg/l	2	5	5			
127 Dichlorobenzene (1,2) [o-]	Soil	9				1,600	mg/kg	9	0.005	0.4		9	
128 Dichlorobenzene (1,2) [o-]	Water	4				600	µg/l	4	5	10		4	
129 Dichlorobenzene (1,3) [m-]	Soil	9				7,200	mg/kg	9	0.005	0.4		9	
130 Dichlorobenzene (1,3) [m-]	Water	4				600	µg/l	4	5	10		4	
131 Dichlorobenzene (1,4) [p-]	Water	4				75	µg/l	4	5	10		4	
132 Dichlorobenzene (1,4) [p-]	Soil	9				290	mg/kg	9	0.005	0.4		9	
133 Dichlorobenzidine [3,3'-]	Soil	4				1.6	mg/kg	4	0.36	0.79		4	
134 Dichlorobenzidine [3,3'-]	Water	2				0.078	µg/l	2	10	10			2
135 Dichlorodifluoromethane	Soil	5					mg/kg	5	0.01	0.012			
136 Dichlorodifluoromethane	Water	2					µg/l	2	10	10			
137 Dichloroethane [1,1-]	Soil	5				410	mg/kg	5	0.005	0.006		5	
138 Dichloroethane [1,1-]	Water	2				3,500	µg/l	2	5	5		2	
139 Dichloroethane [1,1-]	Soil	5				0.2	mg/kg	5	0.005	0.006		5	
140 Dichloroethane [1,2-]	Water	2				5	µg/l	2	5	5			2
141 Dichloroethane [1,2-]	Soil	5				0.4	mg/kg	5	0.005	0.006		5	
142 Dichloroethane [1,1-]	Water	2				7	µg/l	2	5	5		2	
143 Dichloroethane [trans-1,2-]	Soil	5				1,600	mg/kg	5	0.005	0.006		5	
144 Dichloroethane [trans-1,2-]	Water	2				100	µg/l	2	5	5		2	
145 Dichloroethylene [cis-1,2-]	Soil	5				800	mg/kg	5	0.005	0.006		5	
146 Dichloroethylene [cis-1,2-]	Water	2				70	µg/l	2	5	5		2	
147 Dichlorophenol [2,4-]	Soil	4				240	mg/kg	4	0.36	0.4		4	
148 Dichlorophenol [2,4-]	Water	2				100	µg/l	2	10	10		2	
149 Dichloropropane [1,2-]	Water	2				5	µg/l	2	5	5			2
150 Dichloropropane [1,2-]	Soil	5				6.5	mg/kg	5	0.005	0.006		5	
151 Dichloropropane [1,3-]	Soil	5					mg/kg	5	0.005	0.006			
152 Dichloropropane [1,3-]	Water	2					µg/l	2	5	5			
153 Dichloropropane [2,2-]	Soil	5					mg/kg	5	0.005	0.006			
154 Dichloropropane [2,2-]	Water	2					µg/l	2	5	5			
155 Dichloropropene [1,1-]	Water	2					mg/kg	5	0.005	0.006			
156 Dichloropropene [1,1-]	Soil	5					µg/l	5	5	5			2
157 Dichloropropene [cis-1,3-]	Water	2				0.19	µg/l	2	5	5		5	
158 Dichloropropene [cis-1,3-]	Soil	5				0.17	mg/kg	5	0.005	0.006		5	
159 Dichloropropene [trans-1,3-]	Soil	5				0.17	mg/kg	5	0.005	0.006			2
160 Dichloropropene [trans-1,3-]	Water	2				0.19	µg/l	2	5	5			

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
161 Diethyl phthalate	Soil	4				64,000	mg/kg	4	0.36	0.4		4	
162 Diethyl phthalate	Water	2				5,000	µg/l	2	10	10		2	
163 Dimethyl phthalate	Water	2				350,000	µg/l	2	10	10		2	
164 Dimethyl phthalate	Soil	4				800,000	mg/kg	4	0.36	0.4		4	
165 Dimethylphenol [2,4-]	Water	2				700	µg/l	2	10	10		2	
166 Dimethylphenol [2,4-]	Soil	4				1,600	mg/kg	4	0.36	0.4		4	
167 Dinitrophenol [2,4-]	Soil	4				160	mg/kg	4	0.86	0.96		4	
168 Dinitrophenol [2,4-]	Water	2				70	µg/l	2	10	10		2	
169 Dinitrotoluene [2,4-]	Soil	4				1	mg/kg	4	0.36	0.4		4	
170 Dinitrotoluene [2,4-]	Water	2				0.05	µg/l	2	10	10			2
171 Dinitrotoluene [2,6-]	Soil	4				1	mg/kg	4	0.36	0.4		4	
172 Dinitrotoluene [2,6-]	Water	2				0.05	µg/l	2	10	10			2
173 Ethylbenzene	Water	2				700	µg/l	2	5	5		2	
174 Ethylbenzene	Soil	5				3,100	mg/kg	5	0.005	0.006		5	
175 Fluoranthene	Soil	4				3,200	mg/kg	4	0.36	0.4		4	
176 Fluoranthene	Water	2				1,400	µg/l	2	10	10		2	
177 Fluorene	Soil	4				3,200	mg/kg	4	0.36	0.4		4	
178 Fluorene	Water	2				1,400	µg/l	2	10	10		2	
179 Hexachlorobenzene	Soil	4				0.44	mg/kg	4	0.36	0.4		4	
180 Hexachlorobenzene	Water	2				1	µg/l	2	10	10			2
181 Hexachlorobutadiene	Soil	4				90	mg/kg	4	0.36	0.4		4	
182 Hexachlorobutadiene	Water	2				4.5	µg/l	2	10	10			2
183 Hexachlorocyclopentadiene	Soil	4				560	mg/kg	4	0.36	0.4		4	
184 Hexachlorocyclopentadiene	Water	2				50	µg/l	2	10	10		2	
185 Hexachloroethane	Soil	4				80	mg/kg	4	0.36	0.4		4	
186 Hexachloroethane	Water	2				25	µg/l	2	10	10		2	
187 Hexanone [2-]	Soil	5					mg/kg	5	0.02	0.024			
188 Hexanone [2-]	Water	2					µg/l	2	20	20			
189 Indeno[1,2,3-cd]pyrene	Soil	4				0.41	mg/kg	4	0.36	0.4		4	
190 Indeno[1,2,3-cd]pyrene	Water	2				0.4	µg/l	2	10	10			2
191 Iron	Soil	5	5	3,200	7,000		mg/kg						
192 Iron	Water	2	2	7.8	7.8		mg/l						
193 Isophorone	Soil	4				7,400	mg/kg	4	0.36	0.4		4	
194 Isophorone	Water	2				370	µg/l	2	10	10		2	
195 Isopropylbenzene	Soil	5					mg/kg	5	0.005	0.006			
196 Isopropylbenzene	Water	2					µg/l	2	5	5			
197 Isopropyltoluene [4-]	Soil	5					mg/kg	5	0.005	0.006			
198 Isopropyltoluene [4-]	Water	2					µg/l	2	5	5			
199 Lead	Soil	5	2	5	5.7	500	mg/kg	3	4	4		5	
200 Lead	Water	2	2	23	23	50	µg/l					2	

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1108

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
201 Lead-210	Soil	1	1	2.03	2.03		pCi/g						
202 Lead-212	Soil	2	2	1.71	2.46		pCi/g						
203 Lithium	Soil	5	5	14.7	19		mg/kg						
204 Lithium	Water	2	2	0.025	0.025		mg/l						
205 Magnesium	Water	2	2	7.9	7.9		mg/l						
206 Magnesium	Soil	5	5	480	1,230		mg/kg					2	
207 Manganese	Water	2	2	1.7	1.7	3,500	mg/l					5	
208 Manganese	Soil	5	5	120	290	8,000	mg/kg					2	
209 Mercury	Water	2				2	µg/l	2	0.2	0.2		2	
210 Mercury	Soil	2				24	mg/kg	2	0.1	0.1		2	
211 Methyl iodide	Water	2					µg/l	2	5	5			
212 Methyl iodide	Soil	5					mg/kg	5	0.005	0.006			
213 Methyl-2-pentanone [4-]	Water	2				1,700	µg/l	2	20	20		2	
214 Methyl-2-pentanone [4-]	Soil	5				510	mg/kg	5	0.02	0.024		5	
215 Methyl-4,6-dinitrophenol [2-]	Soil	4					mg/kg	4	0.86	0.96			
216 Methyl-4,6-dinitrophenol [2-]	Water	2					µg/l	2	10	10			
217 Methylene chloride	Soil	5	1	0.008	0.008	5.6	mg/kg	4	0.005	0.014		5	2
218 Methylene chloride	Water	2				5	µg/l	2	5	5			
219 Methyl-naphthalene [2-]	Water	2					µg/l	2	10	10			
220 Methyl-naphthalene [2-]	Soil	4					mg/kg	4	0.36	0.4		2	
221 Methylphenol [2-]	Water	2				1,700	µg/l	2	10	10		4	
222 Methylphenol [2-]	Soil	4				4,000	mg/kg	4	0.36	0.4		4	
223 Methylphenol [4-]	Soil	4				400	mg/kg	4	0.36	0.4		2	
224 Methylphenol [4-]	Water	2				175	µg/l	2	10	10		5	
225 Molybdenum	Soil	5	2	2.4	2.4	400	mg/kg	3	1	6.9		2	
226 Molybdenum	Water	2				180	mg/l	2	0.008	0.008		4	
227 Naphthalene	Soil	4				3,200	mg/kg	4	0.36	0.4		2	
228 Naphthalene	Water	2				1,400	µg/l	2	10	10		5	
229 Nickel	Soil	5				1,600	mg/kg	5	2	3		2	
230 Nickel	Water	2				100	µg/l	2	0.01	0.01			
231 Nitroaniline [2-]	Soil	4					mg/kg	4	0.86	0.96			
232 Nitroaniline [2-]	Water	2					µg/l	2	10	10			
233 Nitroaniline [3-]	Soil	4					mg/kg	4	0.86	0.96			
234 Nitroaniline [3-]	Water	2					µg/l	2	10	10			
235 Nitroaniline [4-]	Soil	4					mg/kg	4	0.77	0.96			
236 Nitroaniline [4-]	Water	2					µg/l	2	10	10			
237 Nitrobenzene	Soil	4				5.3	mg/kg	4	0.36	0.4		4	
238 Nitrobenzene	Water	2				18	µg/l	2	10	10		2	
239 Nitrophenol [2-]	Water	2					µg/l	2	10	10			
240 Nitrophenol [2-]	Soil	4					mg/kg	4	0.36	0.4			

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
241 Nitrophenol [4-]	Water	2					µg/l	2	10	10			
242 Nitrophenol [4-]	Soil	4					mg/kg	4	0.86	0.96			
243 Nitrosodi-n-propylamine [N-]	Water	2				0.005	µg/l	2	10	10			2
244 Nitrosodi-n-propylamine [N-]	Soil	4				0.1	mg/kg	4	0.36	0.4			4
245 Nitrosodimethylamine [N-]	Soil	4					mg/kg	4	0.36	0.4			
246 Nitrosodimethylamine [N-]	Water	2					µg/l	2	10	10			
247 Nitrosodiphenylamine [N-]	Soil	4				140	mg/kg	4	0.36	0.4		4	
248 Nitrosodiphenylamine [N-]	Water	2	1	120	120	7.1	µg/l	1	10	10	1		1
249 Pentachlorophenol	Soil	4				5.8	mg/kg	4	0.86	0.96		4	
250 Pentachlorophenol	Water	2				1	µg/l	2	10	10			2
251 Phenanthrene	Soil	4					mg/kg	4	0.36	0.4			
252 Phenanthrene	Water	2					µg/l	2	10	10			
253 Phenol	Soil	4				48,000	mg/kg	4	0.36	0.4		4	
254 Phenol	Water	2				21,000	µg/l	2	10	10		2	
255 Plutonium-238	Water	1				15	pCi/l	1	0.04	0.04		1	
256 Plutonium-238	Soil	5	2	0.0352	0.132	27	pCi/g	3	0.01	0.01		5	
257 Plutonium-239	Water	1				15	pCi/l	1	0.04	0.04		1	
258 Plutonium-239	Soil	5	1	0.0317	0.0317	24	pCi/g	4	0.01	0.01		5	
259 Potassium	Water	2	2	9.7	9.7		mg/l						
260 Potassium	Soil	5	4	760	840		mg/kg	1	792	792			
261 Potassium-40	Soil	2	2	29.6	40.9		pCi/g						
262 Propylbenzene	Soil	5					mg/kg	5	0.005	0.006			
263 Propylbenzene	Water	2					µg/l	2	5	5			
264 Pyrene	Soil	4				2,400	mg/kg	4	0.36	0.4		4	
265 Pyrene	Water	2				1,000	µg/l	2	10	10		2	
266 Radium-226	Soil	2	2	1.28	1.94	0.73	pCi/g				2		
267 Selenium	Soil	5	4	0.3	0.4	400	mg/kg	1	0.48	0.48		5	
268 Selenium	Water	2				50	µg/l	2	2	2		2	
269 Silver	Soil	5				400	mg/kg	5	1	1.2		5	
270 Silver	Water	2				170	mg/l	2	0.01	0.01		2	
271 Sodium	Soil	1					mg/kg	1	266	266			
272 Sodium	Water	2	2	38	38		mg/l						
273 Strontium	Soil	5	4	6.8	7.5		mg/kg	1	16.2	16.2			
274 Strontium	Water	2	2	0.19	0.19		mg/l						
275 Strontium-90	Soil	5				8.9	pCi/g	5	1.0	1.0		5	
276 Strontium-90	Water	2				8	pCi/l	2	3.0	3.0		2	
277 Styrene	Soil	5				16,000	mg/kg	5	0.005	0.006		5	
278 Styrene	Water	2				100	µg/l	2	5	5		2	
279 Tetrachloroethane [1,1,1,2-]	Soil	5					mg/kg	5	0.005	0.006			
280 Tetrachloroethane [1,1,1,2-]	Water	2					µg/l	2	5	5			

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
281 Tetrachloroethane [1,1,2,2-]	Soil	5				3.9	mg/kg	5	0.005	0.006		5	2
282 Tetrachloroethane [1,1,2,2-]	Water	2				1.8	µg/l	2	5	5			2
283 Tetrachloroethylene	Water	2				5	µg/l	2	5	5			
284 Tetrachloroethylene	Soil	5				5.9	mg/kg	5	0.005	0.006		5	2
285 Thallium	Water	2				2	µg/l	2	2	2		5	
286 Thallium	Soil	5	2	1	1	6.4	mg/kg	3	0.12	0.24			
287 Thallium-208	Soil	1	1	0.427	0.427		pCi/g						
288 Thorium-228	Soil	5	5	1.55	4.28		pCi/g					5	
289 Thorium-230	Soil	5	5	1.25	4.88	10	pCi/g				5		
290 Thorium-232	Soil	5	5	1.5	2.53	0.88	pCi/g						
291 Thorium-234	Soil	2	2	2.07	2.71		pCi/g						
292 Toluene	Soil	5				890	mg/kg	5	0.005	0.006		5	
293 Toluene	Water	2				1,000	µg/l	2	5	5		2	
294 Trichloro-1,2,2-trifluoroethane [1,1,2-]	Soil	5					mg/kg	5	0.005	0.006			
295 Trichloro-1,2,2-trifluoroethane [1,1,2-]	Water	2					µg/l	2	5	5			
296 Trichlorobenzene [1,2,4-]	Soil	4				160	mg/kg	4	0.36	0.4		4	
297 Trichlorobenzene [1,2,4-]	Water	2				70	µg/l	2	10	10		2	
298 Trichloroethane [1,1,1-]	Soil	5				1,000	mg/kg	5	0.005	0.006		5	
299 Trichloroethane [1,1,1-]	Water	2				200	µg/l	2	5	5		2	
300 Trichloroethane [1,1,2-]	Soil	5				6.3	mg/kg	5	0.005	0.006		5	
301 Trichloroethane [1,1,2-]	Water	2				5	µg/l	2	5	5			2
302 Trichloroethene	Water	2				5	µg/l	2	5	5			2
303 Trichloroethene	Soil	5				3.2	mg/kg	5	0.005	0.006		5	
304 Trichlorofluoromethane	Water	2					µg/l	2	5	10			
305 Trichlorofluoromethane	Soil	5					mg/kg	5	0.005	0.012			
306 Trichlorophenol [2,4,5-]	Soil	4				8,000	mg/kg	4	0.86	0.96		4	
307 Trichlorophenol [2,4,5-]	Water	2				3,500	µg/l	2	10	10		2	
308 Trichlorophenol [2,4,6-]	Soil	4				64	mg/kg	4	0.36	0.4		4	
309 Trichlorophenol [2,4,6-]	Water	2				3.2	µg/l	2	10	10			2
310 Trichloropropane [1,2,3-]	Soil	5					mg/kg	5	0.005	0.006			
311 Trichloropropane [1,2,3-]	Water	2					µg/l	2	5	5			
312 Trimethylbenzene [1,2,4-]	Soil	5					mg/kg	5	0.005	0.006			
313 Trimethylbenzene [1,2,4-]	Water	2					µg/l	2	5	5			
314 Trimethylbenzene [1,3,5-]	Soil	5					mg/kg	5	0.005	0.006			
315 Trimethylbenzene [1,3,5-]	Water	2					µg/l	2	5	5			
316 Tritium	Soil	5	5	40.19	1,620	15,000,000	pCi/g					5	
317 Tritium	Water	1	1	5,500	5,500	20,000	pCi/l					1	
318 Uranium-234	Soil	5	5	2.1	3.54	86	pCi/g					5	
319 Uranium-234	Water	1	1	0.19	0.19	19	pCi/l					1	
320 Uranium-235	Soil	5	4	0.0588	0.171	18	pCi/g	1	0.02	0.02		5	

TABLE 2-9

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES OF LADP-3, OU 1106

Analyte	Matrix	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
				Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
321 Uranium-235	Water	1				21	pCi/l	1	0.07	0.07		1	
322 Uranium-238	Water	1	1	0.205	0.205	6.7	pCi/l					1	
323 Uranium-238	Soil	5	5	2.02	4.24	59	pCi/g					5	
324 Vanadium	Water	2				240	µg/l	2	4	4		2	
325 Vanadium	Soil	5	4	3.1	3.7	560	mg/kg	1	3	3		5	
326 Vinyl chloride	Water	2				2	µg/l	2	10	10			2
327 Vinyl chloride	Soil	5				0.012	mg/kg	5	0.01	0.012			3
328 Xylenes (o + m + p) [Mixed-]	Soil	5				160,000	mg/kg	5	0.005	0.006		5	
329 Xylenes (o + m + p) [Mixed-]	Water	2				10,000	µg/l	2	5	5		2	
330 Zinc	Soil	5	5	14	19	24,000	mg/kg					5	
331 Zinc	Water	2	2	0.25	0.25	10,000	mg/l					2	
Total Number of Values		1,089	169					920			16	624	90

TABLE 2-10
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF LADP-4, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1 Acenaphthene	8				4,800	mg/kg	8	0.33	0.37		8	
2 Acenaphthylene	8					mg/kg	8	0.33	0.37			
3 Acetone	8	2	0.035	0.041	8,000	mg/kg	6	0.02	0.06		8	
4 Actinium-227	1					pCi/g	1	1.166	1.166			
5 Aluminum	8	8	628	14,000		mg/kg						
6 Americium-241	1				22	pCi/g	1	0.01	0.01		1	
7 Aniline	7					mg/kg	7	0.33	0.37			
8 Anthracene	8				24,000	mg/kg	8	0.33	0.37		8	
9 Antimony	8	1	3	3	32	mg/kg	7	0.098	5		8	
10 Arsenic	8	3	0.6	2.1	0.4	mg/kg	5	0.29	0.86	3	1	4
11 Azobenzene	8					mg/kg	8	0.33	0.37			
12 Barium	8	2	54	120	5,600	mg/kg	6	10.5	29.7		8	
13 Benzene	8				0.67	mg/kg	8	0.005	0.006		8	
14 Benzdine [m-]	7					mg/kg	7	0.33	1.8			
15 Benzo[a]anthracene	8				0.64	mg/kg	8	0.33	0.37		8	
16 Benzo[a]pyrene	8				0.1	mg/kg	8	0.33	0.37			8
17 Benzo[b]fluoranthene	8				0.7	mg/kg	8	0.33	0.37		8	
18 Benzo[g,h,i]perylene	8				44	mg/kg	8	0.33	0.37		8	
19 Benzo[k]fluoranthene	8				1.5	mg/kg	8	0.33	0.37		8	
20 Benzoic acid	8				320,000	mg/kg	8	0.33	3.7		8	
21 Benzyl alcohol	8					mg/kg	8	0.33	1.4			
22 Beryllium	8	2	0.32	2.6	0.16	mg/kg	6	0.45	1.1	2		6
23 Bis(2-chloroethoxy)methane	8					mg/kg	8	0.33	0.37			
24 Bis(2-chloroethyl)ether	8				0.12	mg/kg	8	0.33	0.68		8	
25 Bis(2-chloroisopropyl)ether	8				100	mg/kg	8	0.33	0.37		8	
26 Bis(2-ethylhexyl)phthalate	8				50	mg/kg	8	0.33	0.37			
27 Bromobenzene	8					mg/kg	8	0.005	0.006			
28 Bromochloromethane	8				11	mg/kg	8	0.005	0.006		8	
29 Bromodichloromethane	8				89	mg/kg	8	0.005	0.006		8	
30 Bromoform	8				0.43	mg/kg	8	0.01	0.011		8	
31 Bromomethane	8					mg/kg	8	0.33	0.37			
32 Bromophenylphenyl ether [4-]	8				4,000	mg/kg	8	0.02	0.022		8	
33 Butanone [2-]	8				16,000	mg/kg	8	0.33	0.37		8	
34 Butyl benzyl phthalate	8					mg/kg	8	0.005	0.006			
35 Butylbenzene [n-]	8					mg/kg	8	0.005	0.006			
36 Butylbenzene [sec-]	8					mg/kg	8	0.005	0.006			
37 Butylbenzene [tert-]	8					mg/kg	8	0.4	0.82		8	
38 Cadmium	8				80	mg/kg	8	201	571			
39 Calcium	8	3	330	2,550		mg/kg	5	0.005	0.006		8	
40 Carbon disulfide	8				7.4	mg/kg	8					

TABLE 2-10
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF LADP-4, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, including ≥ LOD	Number of Values < SAL, including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
41 Carbon tetrachloride	8				0.21	mg/kg	8	0.005	0.006		8	
42 Cesium-137	3	1	0.0243	0.0243	4	pCi/g	2	0.145	0.2845		3	
43 Chloro-3-methylphenol [4-]	8				16,000	mg/kg	8	0.33	0.73		8	
44 Chloroaniline [4-]	8				320	mg/kg	8	0.33	1.4		8	
45 Chlorobenzene	8				67	mg/kg	8	0.005	0.006		8	
46 Chlorodibromomethane	8				83	mg/kg	8	0.005	0.006		8	
47 Chloroethane	8				3,300	mg/kg	8	0.01	0.011		8	
48 Chloroform	8				0.21	mg/kg	8	0.005	0.006		8	
49 Chloromethane	8				6.4	mg/kg	8	0.01	0.011		8	
50 Chloronaphthalene [2-]	8				6,400	mg/kg	8	0.33	0.37		8	
51 Chlorophenol [o-]	8				400	mg/kg	8	0.33	0.37		8	
52 Chlorophenylphenyl ether [4-]	8					mg/kg	8	0.33	0.37			
53 Chlorotoluene [o-]	8					mg/kg	8	0.005	0.006			
54 Chlorotoluene [p-]	8					mg/kg	8	0.005	0.006			
55 Chromium	8	3	0.8	8.8	400	mg/kg	5	1	1.6		8	
56 Chrysene	8				22	mg/kg	8	0.33	0.37		8	
57 Cobalt	8					mg/kg	7	0.5	2.6			
58 Copper	8	1	5.4	5.4		mg/kg	6	0.69	5.2		8	
59 Di-n-butyl phthalate	8	2	3.7	13	3,000	mg/kg	8	0.33	0.37		8	
60 Di-n-octyl phthalate	8				8,000	mg/kg	8	0.33	0.37		8	
61 Dibenzo[a,h]anthracene	8				1,600	mg/kg	8	0.33	0.37			8
62 Dibenzofuran	8				0.086	mg/kg	8	0.33	0.37			
63 Dibromo-3-chloropropane [1,2-]	8					mg/kg	8	0.01	0.011			
64 Dibromomethane [1,2-]	8					mg/kg	8	0.005	0.006			
65 Dibromomethane	8					mg/kg	8	0.005	0.006			
66 Dichlorobenzene (1,2) [o-]	16				1,600	mg/kg	16	0.005	0.37		16	
67 Dichlorobenzene (1,3) [m-]	16				7,200	mg/kg	16	0.005	0.37		16	
68 Dichlorobenzene (1,4) [p-]	16				290	mg/kg	16	0.005	0.37		16	
69 Dichlorobenzidine [3,3'-]	8				1.6	mg/kg	8	0.33	0.73		8	
70 Dichlorodifluoromethane	8					mg/kg	8	0.01	0.011			
71 Dichloroethane [1,1-]	8				410	mg/kg	8	0.005	0.006		8	
72 Dichloroethane [1,2-]	8				0.2	mg/kg	8	0.005	0.006		8	
73 Dichloroethene [1,1-]	8				0.4	mg/kg	8	0.005	0.006		8	
74 Dichloroethene [trans-1,2-]	8				1,800	mg/kg	8	0.005	0.006		8	
75 Dichloroethylene [cis-1,2-]	8				800	mg/kg	8	0.005	0.006		8	
76 Dichlorophenol [2,4-]	8				240	mg/kg	8	0.33	0.37		8	
77 Dichloropropane [1,2-]	8				6.5	mg/kg	8	0.005	0.006		8	
78 Dichloropropane [1,3-]	8					mg/kg	8	0.005	0.006			
79 Dichloropropane [2,2-]	8					mg/kg	8	0.005	0.006			
80 Dichloropropene [1,1-]	8					mg/kg	8	0.005	0.006			

TABLE 2-10
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF LADP-4, OU 1108

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
81 Dichloropropene [cis-1,3-]	8				0.17	mg/kg	8	0.005	0.006		8	
82 Dichloropropene [trans-1,3-]	6				0.17	mg/kg	8	0.005	0.006		8	
83 Diethyl phthalate	8				64,000	mg/kg	8	0.33	0.37		8	
84 Dimethyl phthalate	8				800,000	mg/kg	8	0.33	0.37		8	
85 Dimethylphenol [2,4-]	8				1,600	mg/kg	8	0.33	0.37		8	
86 Dinitrophenol [2,4-]	8				160	mg/kg	8	0.33	1.8		8	
87 Dinitrotoluene [2,4-]	8				1	mg/kg	8	0.33	0.37		8	
88 Dinitrotoluene [2,6-]	8				1	mg/kg	8	0.33	0.37		8	
89 Ethylbenzene	8				3,100	mg/kg	8	0.005	0.006		8	
90 Fluoranthene	8				3,200	mg/kg	8	0.33	0.37		8	
91 Fluorene	8				3,200	mg/kg	8	0.33	0.37		8	
92 Hexachlorobenzene	8				0.44	mg/kg	8	0.33	0.37		8	
93 Hexachlorobutadiene	8				90	mg/kg	8	0.33	0.37		8	
94 Hexachlorocyclopentadiene	8				560	mg/kg	8	0.33	0.37		8	
95 Hexachloroethane	8				80	mg/kg	8	0.33	0.37		8	
96 Hexanone [2-]	8					mg/kg	8	0.02	0.022			
97 Indeno[1,2,3-cd]pyrene	8				0.41	mg/kg	8	0.33	0.37		8	
98 Iron	8	8	1,890	9,400		mg/kg						
99 Isophorone	8				7,400	mg/kg	8	0.33	0.37		8	
100 Isopropylbenzene	8					mg/kg	8	0.005	0.006			
101 Isopropyltoluene [4-]	8					mg/kg	8	0.005	0.006			
102 Lead	8	7	1.5	16	500	mg/kg	1	4	4		8	
103 Lead-210	1	1	2.28	2.28		pCi/g						
104 Lead-212	1	1	1.98	1.98		pCi/g						
105 Lithium	8	3	7.2	23		mg/kg	5	1.1	8.5			
106 Magnesium	8	3	210	1,830		mg/kg	5	138	331			
107 Manganese	8	8	94.3	394	8,000	mg/kg					8	
108 Methyl iodide	8					mg/kg	8	0.005	0.006			
109 Methyl-2-pentanone [4-]	8				510	mg/kg	8	0.02	0.022		8	
110 Methyl-4,6-dinitrophenol [2-]	8					mg/kg	8	0.33	1.8			
111 Methylene chloride	8				5.6	mg/kg	8	0.005	0.006		8	
112 Methylnaphthalene [2-]	8					mg/kg	8	0.33	0.37			
113 Methylphenol [2-]	8				4,000	mg/kg	8	0.33	0.37		8	
114 Methylphenol [4-]	8				400	mg/kg	8	0.33	0.37		8	
115 Molybdenum	8	1	1	1	400	mg/kg	7	1	6.9		8	
116 Naphthalene	8				3,200	mg/kg	8	0.33	0.37		8	
117 Nickel	8	1	13	13	1,600	mg/kg	7	1.9	6.2		8	
118 Nitroaniline [2-]	8					mg/kg	8	0.33	1.8			
119 Nitroaniline [3-]	8					mg/kg	8	0.33	1.8			
120 Nitroaniline [4-]	8					mg/kg	8	0.33	0.83			

TABLE 2-10
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF LADP-4, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
121 Nitrobenzene	8				5.3	mg/kg	8	0.33	0.37		8	
122 Nitrophenol [2-]	8					mg/kg	8	0.33	0.37			
123 Nitrophenol [4-]	8					mg/kg	8	0.33	1.8			
124 Nitrosodi-n-propylamine [N-]	8				0.1	mg/kg	8	0.33	0.37			8
125 Nitrosodimethylamine [N-]	8					mg/kg	8	0.33	0.37			
126 Nitrosodiphenylamine [N-]	8				140	mg/kg	8	0.33	0.37		8	
127 Pentachlorophenol	8				5.8	mg/kg	8	0.33	1.8		8	
128 Phenanthrene	8					mg/kg	8	0.33	0.37			
129 Phenol	8				48,000	mg/kg	8	0.33	0.37		8	
130 Plutonium-238	2				27	pCi/g	2	0.01	0.01		2	
131 Plutonium-239	2	1	0.01	0.01	24	pCi/g	1	0.01	0.01		2	
132 Potassium	8	2	430	820		mg/kg	6	283	673			
133 Potassium-40	1	1	28.5	28.5		pCi/g						
134 Propylbenzene	8					mg/kg	8	0.005	0.006			
135 Pyrene	8				2,400	mg/kg	8	0.33	0.37		8	
136 Radium-226	1	1	1.3	1.3	0.73	pCi/g				1		
137 Radium-228	1	1	1.44	1.44	1.6	pCi/g					1	
138 Selenium	8	1	0.5	0.5	400	mg/kg	7	0.2	0.48		8	
139 Silver	8	1	1.1	1.1	400	mg/kg	7	0.63	1		8	
140 Strontium	8	2	5.9	8.8		mg/kg	6	1.3	17			
141 Strontium-90	2				8.9	pCi/g	2	1.0	1.0		2	
142 Styrene	8				16,000	mg/kg	8	0.005	0.006		8	
143 Tetrachloroethane [1,1,1,2-]	8					mg/kg	8	0.005	0.006			
144 Tetrachloroethane [1,1,2,2-]	8				3.9	mg/kg	8	0.005	0.006		8	
145 Tetrachloroethylene	8				5.9	mg/kg	8	0.005	0.006		8	
146 Thallium	8	2	2.1	3	6.4	mg/kg	6	0.21	0.24		8	
147 Thallium-208	1	1	0.466	0.466		pCi/g						
148 Thorium-228	2	2	0.831	2.42		pCi/g						
149 Thorium-230	2	2	1.21	2.97	10	pCi/g					2	
150 Thorium-232	2	2	0.806	2.25	0.88	pCi/g				1	1	
151 Thorium-234	1	1	1.55	1.55		pCi/g						
152 Toluene	8				890	mg/kg	8	0.005	0.006		8	
153 Trichloro-1,2,2-trifluoroethane [1,1,2-]	8					mg/kg	8	0.005	0.006			
154 Trichlorobenzene [1,2,4-]	8				160	mg/kg	8	0.33	0.37		8	
155 Trichloroethane [1,1,1-]	8				1,000	mg/kg	8	0.005	0.006		8	
156 Trichloroethane [1,1,2-]	8				6.3	mg/kg	8	0.005	0.006		8	
157 Trichloroethene	8				3.2	mg/kg	8	0.005	0.006		8	
158 Trichlorofluoromethane	8					mg/kg	8	0.005	0.011			
159 Trichlorophenol [2,4,5-]	8				8,000	mg/kg	8	0.33	1.8		8	
160 Trichlorophenol [2,4,6-]	8				64	mg/kg	8	0.33	0.37		8	

TABLE 2-10
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES OF LADP-4, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
161 Trichloropropane [1,2,3-]	8					mg/kg	8	0.005	0.006			
162 Trimethylbenzene [1,2,4-]	8					mg/kg	8	0.005	0.006			
163 Trimethylbenzene [1,3,5-]	8					mg/kg	8	0.005	0.006			
164 Tritium	3	1	13,200	13,200	15,000,000	pCi/g	2	1.0	1.0		3	
165 Uranium-234	2	2	1.7	3.45	86	pCi/g					2	
166 Uranium-235	2	2	0.0248	0.14	18	pCi/g					2	
167 Uranium-238	2	2	1.87	3.66	59	pCi/g					2	
168 Vanadium	8	2	1.4	16	560	mg/kg	6	1.4	3.8		8	
169 Vinyl chloride	8				0.012	mg/kg	8	0.01	0.011		8	
170 Xylenes (o + m + p) [Mixed-]	8				160,000	mg/kg	8	0.005	0.006		8	
171 Zinc	8	8	9.6	41.5	24,000	mg/kg					8	
Total Number of Values	1,263	98					1,165			7	800	42

TABLE 2-11

SUMMARY OF ANALYTICAL RESULTS FOR WATER SAMPLES OF DP SPRING, OU 1106

Analyte	Number of Values per Analyte	Number of Values $\geq$ LOD	Concentration Range		SAL	Units	Number of Values $<$ LOD	LOD Range		Number of Values $\geq$ SAL, Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthene	5				2,100	$\mu\text{g/l}$	5	10	10		5	
2 Acenaphthylene	5					$\mu\text{g/l}$	5	10	10			
3 Acetone	5				3,500	$\mu\text{g/l}$	5	20	20		5	
4 Alpha	2	1	7	7	15	pCi/l	1	2	2		2	
5 Aluminum	4	4	0.78	2.3		mg/l						
6 Aniline	5					$\mu\text{g/l}$	5	10	10			
7 Anthracene	5				10,000	$\mu\text{g/l}$	5	10	10		5	
8 Antimony	4				6	$\mu\text{g/l}$	4	1	1		4	
9 Arsenic	4	2	2	3	50	$\mu\text{g/l}$	2	2	2		4	
10 Azobenzene	5					$\mu\text{g/l}$	5	10	10			
11 Barium	4	4	0.035	0.07	2,000	mg/l					4	
12 Benzene	5				5	$\mu\text{g/l}$	5	5	5			5
13 Benzidine [m-]	5					$\mu\text{g/l}$	5	10	10			
14 Benzo[a]anthracene	5				0.1	$\mu\text{g/l}$	5	10	10			5
15 Benzo[a]pyrene	5				0.2	$\mu\text{g/l}$	5	10	10			5
16 Benzo[b]fluoranthene	5				0.2	$\mu\text{g/l}$	5	10	10			5
17 Benzo[g,h,i]perylene	5					$\mu\text{g/l}$	5	10	10			
18 Benzo[k]fluoranthene	5				0.2	$\mu\text{g/l}$	5	10	10			5
19 Benzoic acid	5				140,000	$\mu\text{g/l}$	5	10	10		5	
20 Benzyl alcohol	5					$\mu\text{g/l}$	5	10	10			
21 Beryllium	4				4	mg/l	4	0.001	0.001		4	
22 Beta	2	2	140	160		pCi/l						
23 Bis(2-chloroethoxy)methane	5					$\mu\text{g/l}$	5	10	10			
24 Bis(2-chloroethyl)ether	5				0.032	$\mu\text{g/l}$	5	10	10			5
25 Bis(2-chloroisopropyl)ether	5				0.5	$\mu\text{g/l}$	5	10	10			5
26 Bis(2-ethylhexyl)phthalate	5				4	$\mu\text{g/l}$	5	10	10			5
27 Boron	3	3	0.058	0.23		mg/l						
28 Bromine	4					$\mu\text{g/l}$	4	1	1			
29 Bromobenzene	5					$\mu\text{g/l}$	5	5	5			
30 Bromochloromethane	5					$\mu\text{g/l}$	5	5	5			5
31 Bromodichloromethane	5				0.56	$\mu\text{g/l}$	5	5	5			5
32 Bromoform	5				4.4	$\mu\text{g/l}$	5	5	5			
33 Bromomethane	5				49	$\mu\text{g/l}$	5	10	10		5	
34 Bromophenylphenyl ether [4-]	5					$\mu\text{g/l}$	5	10	10			
35 Butanone [2-]	5				1,700	$\mu\text{g/l}$	5	20	20		5	
36 Butyl benzyl phthalate	5				100	$\mu\text{g/l}$	5	10	10		5	
37 Butylbenzene [n-]	5					$\mu\text{g/l}$	5	5	5			
38 Butylbenzene [sec-]	5					$\mu\text{g/l}$	5	5	5			

TABLE 2-11
SUMMARY OF ANALYTICAL RESULTS FOR WATER SAMPLES OF DP SPRING, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
39 Butylbenzene [tert-]	5					µg/l	5	5	5			
40 Cadmium	4				5	mg/l	4	0.003	0.003		4	
41 Calcium	1	1	15	15		mg/l						
42 Carbon disulfide	5				3,500	µg/l	5	5	5		5	
43 Carbon tetrachloride	5				5	µg/l	5	5	5			5
44 Cesium-137	1	1	1.93	1.93	110	pCi/l					1	
45 Chloro-3-methylphenol [4-]	5				7,000	µg/l	5	10	10		5	
46 Chloroaniline [4-]	5				140	µg/l	5	10	10		5	
47 Chlorobenzene	5				100	µg/l	5	5	5		5	
48 Chlorodibromomethane	5				4	µg/l	5	5	5			5
49 Chloroethane	5					µg/l	5	10	10			
50 Chloroform	5				100	µg/l	5	5	5		5	
51 Chloromethane	5				27	µg/l	5	10	10		5	
52 Chloronaphthalene [2-]	5				2,800	µg/l	5	10	10		5	
53 Chlorophenol [o-]	5				170	µg/l	5	10	10		5	
54 Chlorophenylphenyl ether [4-]	5					µg/l	5	10	10			
55 Chlorotoluene [o-]	5					µg/l	5	5	5			
56 Chlorotoluene [p-]	5					µg/l	5	5	5			
57 Chromium	4	1	0.019	0.019	100	mg/l	3	0.004	0.004		4	
58 Chrysene	5				0.2	µg/l	5	10	10			5
59 Cobalt	3					mg/l	3	0.004	0.004			
60 Copper	4	1	0.049	0.049	1,300	mg/l	3	0.004	0.004		4	
61 Cyanide	4				200	mg/l	4	0.01	0.01		4	
62 Di-n-butyl phthalate	5				3,500	µg/l	5	10	10		5	
63 Di-n-octyl phthalate	5				700	µg/l	5	10	10		5	
64 Dibenzo[a,h]anthracene	5				0.3	µg/l	5	10	10			5
65 Dibenzofuran	5					µg/l	5	10	10			
66 Dibromo-3-chloropropane [1,2-]	5					µg/l	5	10	10			
67 Dibromoethane [1,2-]	5					µg/l	5	5	5			
68 Dibromomethane	5					µg/l	5	5	5			
69 Dichlorobenzene (1,2) [o-]	10				600	µg/l	10	5	10		10	
70 Dichlorobenzene (1,3) [m-]	10				600	µg/l	10	5	10		10	
71 Dichlorobenzene (1,4) [p-]	10				75	µg/l	10	5	10		10	
72 Dichlorobenzidine [3,3'-]	5				0.078	µg/l	5	10	10			5
73 Dichlorodifluoromethane	5					µg/l	5	10	10			
74 Dichloroethane [1,1-]	5				3,500	µg/l	5	5	5		5	
75 Dichloroethane [1,2-]	5				5	µg/l	5	5	5			5
76 Dichloroethene [1,1-]	5				7	µg/l	5	5	5		5	

TABLE 2-11

SUMMARY OF ANALYTICAL RESULTS FOR WATER SAMPLES OF DP SPRING, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
77 Dichloroethene [trans-1,2-]	5				100	µg/l	5	5	5		5	
78 Dichloroethylene [cis-1,2-]	5				70	µg/l	5	5	5		5	
79 Dichlorophenol [2,4-]	5				100	µg/l	5	10	10		5	
80 Dichloropropane [1,2-]	5				5	µg/l	5	5	5			5
81 Dichloropropane [1,3-]	5					µg/l	5	5	5			
82 Dichloropropane [2,2-]	5					µg/l	5	5	5			
83 Dichloropropene [1,1-]	5					µg/l	5	5	5			
84 Dichloropropene [cis-1,3-]	5				0.19	µg/l	5	5	5			5
85 Dichloropropene [trans-1,3-]	5				0.19	µg/l	5	5	5			5
86 Diethyl phthalate	5				5,000	µg/l	5	10	10		5	
87 Dimethyl phthalate	5				350,000	µg/l	5	10	10		5	
88 Dimethylphenol [2,4-]	5				700	µg/l	5	10	10		5	
89 Dinitrophenol [2,4-]	5				70	µg/l	5	10	10		5	
90 Dinitrotoluene [2,4-]	5				0.05	µg/l	5	10	10			5
91 Dinitrotoluene [2,6-]	5				0.05	µg/l	5	10	10			5
92 Ethylbenzene	5				700	µg/l	5	5	5		5	
93 Fluoranthene	5				1,400	µg/l	5	10	10		5	
94 Fluorene	5				1,400	µg/l	5	10	10		5	
95 Hexachlorobenzene	5				1	µg/l	5	10	10			5
96 Hexachlorobutadiene	5				4.5	µg/l	5	10	10			5
97 Hexachlorocyclopentadiene	5				50	µg/l	5	10	10		5	
98 Hexachloroethane	5				25	µg/l	5	20	20			
99 Hexanone [2-]	5					µg/l	5	10	10			5
100 Indeno[1,2,3-cd]pyrene	5				0.4	µg/l	5	10	10			
101 Iron	4	4	0.51	0.69		mg/l						
102 Isophorone	5				370	µg/l	5	10	10		5	
103 Isopropylbenzene	5					µg/l	5	5	5			
104 Isopropyltoluene [4-]	5					µg/l	5	5	5			
105 Lead	4	2	1.4	3	50	µg/l	2	1	2		4	
106 Lithium	4	4	0.016	0.026		mg/l						
107 Magnesium	1	1	1.9	1.9		mg/l						
108 Manganese	4	4	0.002	0.063	3,500	mg/l					4	
109 Mercury	3				2	µg/l		0.2	0.2		3	
110 Methyl iodide	5					µg/l	5	5	5			
111 Methyl-2-pentanone [4-]	5				1,700	µg/l	5	20	20		5	
112 Methyl-4,6-dinitrophenol [2-]	5					µg/l	5	10	10			
113 Methylene chloride	5				5	µg/l	5	5	5			5
114 Methylnaphthalene [2-]	5					µg/l	5	10	10			

TABLE 2-11
SUMMARY OF ANALYTICAL RESULTS FOR WATER SAMPLES OF DP SPRING, OU 1106

Analyte	Number of Values per Analyte	Number of Values >=LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
115 Methylphenol [2-]	5				1,700	µg/l	5	10	10		5	
116 Methylphenol [4-]	5				175	µg/l	5	10	10		5	
117 Molybdenum	4	2	0.01	0.01	180	mg/l	2	0.008	0.008		4	
118 Naphthalene	5				1,400	µg/l	5	10	10		5	
119 Nickel	4	1	0.04	0.04	100	mg/l	3	0.01	0.01		4	
120 Nitroaniline [2-]	5					µg/l	5	10	10			
121 Nitroaniline [3-]	5					µg/l	5	10	10			
122 Nitroaniline [4-]	5					µg/l	5	10	10			
123 Nitrobenzene	5				18	µg/l	5	10	10		5	
124 Nitrophenol [2-]	5					µg/l	5	10	10			
125 Nitrophenol [4-]	5					µg/l	5	10	10			
126 Nitrosodi-n-propylamine [N-]	5				0.005	µg/l	5	10	10			5
127 Nitrosodimethylamine [N-]	5					µg/l	5	10	10			
128 Nitrosodiphenylamine [N-]	5				7.1	µg/l	5	10	10			5
129 Pentachlorophenol	5				1	µg/l	5	10	10			5
130 Phenanthrene	5					µg/l	5	10	10			
131 Phenol	5				21,000	µg/l	5	10	10		5	
132 Plutonium-238	1				15	pCi/l	1	0.04	0.04		1	
133 Plutonium-239	1	1	0.051	0.051	15	pCi/l					1	
134 Potassium	1	1	10	10		mg/l						
135 Propylbenzene	5					µg/l	5	5	5			
136 Pyrene	5				1,000	µg/l	5	10	10		5	
137 Radium-226	7	7	0.89	4.3	20	pCi/l					7	
138 Selenium	4	1	2	2	50	µg/l	3	2	2		4	
139 Silicon Dioxide	4	4	18	25		mg/l						
140 Silver	4	1	0.03	0.03	170	mg/l	3	0.01	0.02		4	
141 Sodium	1	1	47	47		mg/l						
142 Strontium	4		4	0.088	0.15	mg/l						
143 Strontium-90	3	3	48.4	97.5	8	pCi/l				3		
144 Styrene	5				100	µg/l	5	5	5		5	
145 Tetrachloroethane [1,1,1,2-]	5					µg/l	5	5	5			
146 Tetrachloroethane [1,1,2,2-]	5				1.8	µg/l	5	5	5			5
147 Tetrachloroethylene	5				5	µg/l	5	5	5			5
148 Thallium	4				2	µg/l	4	1	1		4	
149 Toluene	5				1,000	µg/l	5	5	5		5	
150 Trichloro-1,2,2-trifluoroethane [1,1,2-]	5					µg/l	5	5	5			
151 Trichlorobenzene [1,2,4-]	5				70	µg/l	5	10	10		5	
152 Trichloroethane [1,1,1-]	5				200	µg/l	5	5	5		5	

TABLE 2-11

SUMMARY OF ANALYTICAL RESULTS FOR WATER SAMPLES OF DP SPRING, OU 1106

Analyte	Number of Values per Analyte	Number of Values ≥ LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values ≥ SAL, Including ≥ LOD	Number of Values < SAL, Including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
152 Trichloroethane [1,1,2-]	5				5	µg/l	5	5	5			
154 Trichloroethene	5				5	µg/l	5	5	5			
155 Trichlorofluoromethane	5											
156 Trichlorophenol [2,4,5-]	5				3,500	µg/l	5	10	10		5	
157 Trichlorophenol [2,4,6-]	5				3.2	µg/l	5	10	10			5
158 Trichloropropene [1,2,3-]	5					µg/l	5	5	5			
159 Trimethylbenzene [1,2,4-]	5					µg/l	5	5	5			
160 Trimethylbenzene [1,3,5-]	5					µg/l	5	5	5			
161 Uranium-234	4	4	0.395	0.725	19	pCi/l					4	
162 Uranium-235	4				21	pCi/l	4	0.07	0.07		4	
163 Uranium-238	4	3	0.098	0.442	6.7	pCi/l	1	0.08	0.08		4	
164 Vanadium	4	2	7	23	240	µg/l	2	4	4			
165 Vinyl acetate	2					µg/l	2	10	10			
166 Vinyl chloride	5				2	µg/l	5	10	10			5
167 Xylenes (o + m + p) [Mixed-]	5				10,000	µg/l	5	5	5		5	
168 Zinc	4	2	0.011	0.3	10,000	mg/l	2	0.01	0.02		4	
Total Number of Values	786	68					714			3	350	160

2.12 ADS 1111—TAs-6, -7, -22, -40, -58, -62 (Project Leader: Cheryl K. Rofer)

Location of waste burials in Aggregate 1. The locations of waste burials in Aggregate 1, MDA F and Adjacent Pit [PRSs 6-005 and 6-007(a-e)], are being determined by overlay of data from aerial photo analysis and geophysics. It is necessary to locate burial areas accurately before drilling can take place because reports state that explosives were buried in MDA F.

Historical aerial overhead and oblique photographs have been located and entered into a geographic information system. Computer analysis of these photographs, including transformation of the oblique photographs into overhead views, has produced information on disturbed areas and probable burial locations. This work, "Digital Analysis of Historical Aerial Survey Photographs for Waste Site Characterization at Los Alamos National Lab" by Paul Pope and Edward Van Eckhout, was presented at the Tenth Thematic Conference on Geologic Remote Sensing, San Antonio, Texas, May 9-12.

The parts of Aggregate 1 believed to contain waste burial sites were cleared of brush and fences in preparation for the geophysical surveys. The area was surveyed with an innovative magnetometer developed by EG&G Idaho. This device, the Rapid Geophysical Surveyor, can acquire magnetometric data extremely rapidly, so that a high-resolution map of subsurface magnetic material can be prepared. This surveyor is compact enough to operate in a forested area like Aggregate 1; therefore, tree removal was unnecessary. Nearly 126,000 data points were collected at 1-ft-by-1-ft intervals over a 1.5-hectare area. Data were collected over a period of four days of high winds and snow. An equivalent operation with standard magnetometry equipment would probably have required two months of field work.

EG&G Idaho has submitted a report of the magnetometry survey of Aggregate 1. Figure 2-6 provides a summary of the results of the magnetometry survey (a colored map is available through Cheryl Rofer at 505-667-2988). The Type 1 anomaly corresponds to a feature identified in the aerial photography analysis as a probable waste burial area. The Type 2 anomalies appear to be metal chain, strap, or cable buried at a depth of 2-3 ft. The Type 3 anomalies within the Type 1 area appear to be fence post emplacements around the burial area. The Type 4 anomaly corresponds to the location of PRS 6-005, a timbered pit probably used for explosives tests. This anomaly appears to contain the greatest amount of ferrous metal in the area. The Type 5 anomalies appear to be small objects shallowly buried and may be metal debris or rocks. The Type 6 anomaly appears to be vertical pipes or casings, as do the Type 3 anomalies between the Type 5 and Type 7 anomalies. The Type 7 anomalies correspond to three pipes protruding from the ground, which appear not to be connected to underground storage tanks. Anecdotal historical information suggests that these pipes were part of an experimental setup during the Manhattan Project. The results of the magnetometry survey appear to correspond closely to the results of the analysis of the aerial photos.

Surface soil sampling in Aggregates 2 and 3. Surface soil samples were collected for PRSs 22-014(a,b), 22-015(a-c,e), and 40-005. Liquid and sludge samples were collected from PRSs 22-014(a) and 22-015(a,b). These PRSs include several explosives settling basins, their outfalls, and the runoff area from the plating and etching operations in Building TA-22-52. Samples were screened in the field for radiation, organics, and high explosives. One hundred fifty-seven samples were collected and submitted for chemical analysis. Figures 2-7 through 2-11 indicate the locations of soil samples.

RFI work plan for OU 1111. A notice of deficiency for the RFI work plan was received. A response was prepared and sent to the EPA.

Landfill cover pilot study. The pilot study on landfill covers continues. During the past winter, very little precipitation fell on the test area, resulting in few data about flow; however, soil moisture measurements continue. Upgrading of the system continues. A draft paper on the results from two years of data collection is being circulated for comments. A report on the comparison of water balances in soil under a gravel mulch and in a comparable unmulched plot has been completed and is under review. Gravel mulches appear to have the potential to stabilize soil inexpensively.

Plating and etching bath outflow pilot study. Samples of altered and unaltered tuff from PRS 22-015(c), the plating bath outflow, are being examined for their mineralogical composition to help determine the nature and degree of contamination and possible remediation schemes. During this quarter, the unaltered tuff was examined to determine the background levels and distributions of metals in the weathered tuff. The materials are being examined with the same procedures and techniques used for the tuff altered by the plating bath fluids. Experiments in which unaltered tuff is exposed to metal-containing solutions are being performed. The results of these experiments will contribute to this pilot study.

AREA F VERTICAL GRADIENT MAGNETIC FIELD

Interpretation Summary

Figure 2-6. Area F vertical gradient magnetic field: interpretation summary, OU 1111.

Figure 2-7. Index showing soil sampling locations, OU 1111.

Figure 2-8. Surface soil sampling locations for Aggregate 1, OU 1111.

Figure 2-9. Surface soil sampling locations for Aggregate 2, OU 1111.

Figure 2-10. Surface soil sampling locations for SWMUs...(Aggregate 3), OU 1111.

Figure 2-11. Surface soil sampling locations for SWMUs...(Aggregate 3 and 6), OU 1111.

2.13 ADS 1114—TAs-3, -30, -59, -60, -61, -64 (Project Leader: Garry Allen)

The primary focus for this quarter has been the continued investigation of the remaining 186 PRSs, required for the preparation of Volume II of the RFI work plan for OU 1114.

Three soil lifts were completed at PRS 3-010(a), the mercury spill at TA-30. Analyses of samples to determine whether the total petroleum hydrocarbons associated with this PRS were mineral oils also resulted in the detection of contaminants from solvents. The historical use of these solvents renders them "spent solvents"; therefore, they are classified as listed hazardous waste. The disposal of solvent-contaminated soil in Pit 37 resulted in an "off-normal" occurrence, reported in accord with DOE Order 5000.3b. Waste disposal at Pit 37 was stopped entirely, and criteria for waste acceptance at Area G are being re-evaluated.

In June, samples were collected from the soils excavated at the mercury spill; the samples are currently stored at TA-54, Area L mixed waste dome. Two of the samples were split with the NMED. The samples were shipped to a certified laboratory in Utah as part of the waste acceptance criteria for Envirocare, the mixed waste disposal facility that is targeted to receive this waste stream.

Equipment and supplies are being stocked for the summer sampling operation. The Site-Specific Health and Safety Plan and Waste Management Plan are in the final stages of review. Once the comments are signed, the sampling plans that are detailed in Volume I of the RFI work plan for OU 1114 will be implemented.

2.14 ADS 1122—TAs-33, -70 (Project Leader: Roy Michelotti)

The OU team completed the review of analytical data for 20 of 25 PRSs sampled during the May-June 1993 sampling campaign. (The data set is still incomplete on five MDA K PRSs.) Team members inspected the sample locations for each PRS as part of the decision process. Ten PRSs are being recommended for no further action. Seven PRSs are currently undergoing a preliminary risk assessment evaluation to determine if further action needs to be recommended. Three PRSs must undergo further action, possibly Phase II investigations or a voluntary corrective action. Portions of the Phase I Report for these 20 PRSs are in draft form and are undergoing a review by the OU team.

A readiness review was completed before commencing field work. The contract field team (ICF-Kaiser) completed all surface sampling scheduled at TA-33 for the 1994 sampling campaign and has started excavation sampling. Excavation sampling in the landfills was canceled because of newly discovered archival information. The new information on the landfill will require a new set of decisions. A large capacitor (1' x 2' x 3') was discovered in canyon-side disposal PRS 33-009 at Area 6; it was sampled and removed. The sample analyses indicate that the capacitor oil was polychlorinated biphenyl (PCB)-contaminated but that the surrounding soil was not contaminated.

Radiation data from EG&G overflights were evaluated. Nothing was detected above background; therefore, no changes in the planned sampling approach was needed. Data from geophysical studies of berms and landfills were evaluated; regions with anomalous geophysical signatures will be sampled.

2.15 ADS 1127—TA-35, TSL-125 (Project Leader: David McInroy)

The NMED issued a notice of deficiency May 5, 1994, on the Closure Plan Amendment submitted by the Laboratory in October 1993. A partial response was submitted on schedule by the Laboratory. In June 1994, the NMED granted a 30- and a 60-day extension for specific items in the notice of deficiency. Due dates for the extension items are July 8 and August 8, 1994.

2.16 ADS 1129—TAs-4, -5, -35, -42, -48, -52, -55, -63, -66 (Project Leader: Allyn Pratt)

The field team completed archival research and conducted field surveys for sampling activities at TA-35 Aggregates D [PRS 35-003(r)] (deep hole), E, and G to determine schedule and drilling feasibility. Survey grids were set up at Aggregates D, [PRS 35-003(r)], E, and G for health and safety, radiological, and organic vapor analyzer surveys. The grids covered an area of 1,300 ft² and contain 474 points. OU 1129

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personnel prepared memoranda to document health and safety and engineering surveys and to justify resulting changes to sampling and analysis plans for Aggregates D, E, and G; the memoranda were submitted to the Records Processing Facility.

The field team completed Phase I sampling at Aggregate D on June 16, 1994, except for a 200-ft borehole at PRS 35-003(r), which will be drilled later. The following activities were performed:

- completed 23 boreholes and 8 auger holes,
- collected samples at 6 surface locations,
- submitted a total of 199 samples to the Laboratory's Environmental Chemistry Group (CST-9) for analysis,
- collected 6 core samples for hydrogeologic testing of rock properties, and
- completed the monumenting of sample points.

The field team started Phase I sampling at Aggregate E (PRS 35-008) on June 23, 1994, and completed sampling on June 24, 1994. The following activities were performed:

- conducted health and safety, radiological, organic vapor analyzer, and electromagnetic surveys;
- completed 6 auger holes;
- submitted 24 samples to CST-9 for analysis; and
- completed the monumenting of sample points.

The field team started Phase I sampling at Aggregate G [PRSs 35-010(a-c)] on May 17, 1994, and completed sampling on May 24, 1994. The following activities were performed:

- collected samples at 5 water locations,
- collected samples at 6 sludge locations,
- submitted a total of 53 samples to CST-9 for analysis,
- collected 20 water samples from the OU 1129 waste management area,
- collected one core sample for the Sample Management Facility, and
- completed the monumenting of sample points.

Other activities at OU 1129 included the following: The addendum to the May 1992 RFI work plan for OU 1129 (LANL 1992, 0785) was submitted to the EPA; the addendum contains sampling and analysis plans for an additional 55 PRSs and proposes an additional 24 PRSs for no further action. Planning began for the geophysics surveys that are scheduled for TA-4 and TA-5. The TA-48 database was verified using the hard copy data reports from CST-9. Data analysis began for the TA-48 Phase I report.

2.17 ADS 1130—TAs-36, -68, -71 (Project Leader: Gene Gould)

The field team was delayed in getting into the field because of coordination problems. There was no field activity during this quarter. The team prepared for the readiness review and plans to enter the field in July.

2.18 ADS 1132—TA-39 (Project Leader: Gene Gould)

Field team members entered the field on May 16. Sixty-two surface and subsurface samples were collected, and five auger boreholes were drilled at PRS 39-001(a) (landfill). One monitoring well was drilled. Eighty percent of the data from the 1993 field season have been reviewed.

2.19 ADS 1135—TA-40 (Project Leader: David McInroy)

The NMED approved the Closure Plan amendment strategy for final sampling and clean closure. Field work and sampling are scheduled for August through September 1994.

2.20 ADS 1136—TA-43 (Project Leader: David Bradbury)

The final draft of the RFI work plan for OU 1136 to investigate and characterize three PRSs at TA-43 was submitted to the EPA for review on schedule May 23, 1994.

2.21 ADS 1140—TA-46 (Project Leader: Roy Michelotti)

Planning for the 1994 field work season is complete. The Waste Management Plan has been approved. The excavation permit approval has been received. The Health and Safety Plan is in review, and the Field Implementation Plan is ready for final issue. An OU-specific quality assurance plan is being developed in coordination with CST-9. OU 1140 personnel held the readiness review and performed a sampling dry run in preparation for spring sampling activity. The ER quality assurance audit team observed the dry run and made several valuable suggestions.

An NMED representative toured TA-46, evaluated all PRSs recommended for no further action as listed in the RFI work plan for OU 1140, and gave preliminary approval of those recommendations. The tour included all sample locations planned for calendar year 1994; five additional sample locations were selected, following the NMED recommendation.

OU personnel met with an NMED representative to discuss the NMED comments on the RFI work plan.

2.22 ADS 1144—TA-49 (Project Leader: Ines Trlay)

Emphasis was placed on the following activities at TA-49 during the quarter. Demobilization of drilling equipment from the operations conducted last winter and early spring was completed at Area 2 in April. An ecological assessment of TA-49 by the Laboratory's Environmental Science Group (EES-15) is currently under way. OU 1144 also participated in EG&G's multispectral survey, which took place this past spring. The data are currently being assessed by the Geophysics Group (EES-3).

In May, land surveys of Areas 1 and 11 were completed. At Area 1, the proposed and past (1987) soil sampling locations were surveyed. In Area 11, the proposed soil sampling and borehole locations at the leach field, the interim waste storage area, and the small-scale shot area were surveyed.

A long-range alpha detector survey was completed in Areas 1 and 11. Area 1 was at or below natural background activity levels for the Laboratory mesa tops (see Figure 2-12). The northeast section of the area has sandy soil, which typically shows lower activity, but the rest of the site seemed to be normal mesa soil. Results of the survey indicated that contamination was not a concern, although unexpected small hot spots could exist between the grid points that were monitored. Area 11 showed consistently higher activity levels than Area 1 (see Figure 2-13). A grouping of readings was slightly higher than normal in the north-central part of the grid set up in the leach field. These readings are essentially two standard deviations above mean background level. On the basis of the history of the site, sampling will be done in that area to verify the findings. Remediation may not be required if the activity is just in the high-normal range. OU personnel suspect low-level contamination (twice background levels) in the southeastern corner of Area 11 and plan to conduct additional radiological surveys.

In June, preliminary plans were made with ERM/Golder, using Environmental Restoration Group, Inc. as a subcontractor, to conduct extensive radiological surveys at TA-49 before the end of FY94. The subcontractor intends to use a global positioning system survey, which can survey and evaluate the data in real-time.

A summary of the analytical data residing in the Laboratory's Facility for Information Management, Analysis, and Display on June 30, 1994, from surface soil samples collected at Area 2 is presented in Table 2-12 (see the explanation of this table in Section 1.0). Background values for many trace metal analytes in the Los Alamos area were derived using EPA SW846 procedures. The regional background values for arsenic and beryllium were 4.9 and 1.23 mg/kg, respectively. Baseline values were determined using ten samples collected in noncontaminated areas at TA-49 (see Figure 2-14). As shown on the table, the maximum concentration values of 3.5 mg/kg for arsenic and 0.86 mg/kg for beryllium in Area 2 are below the regional background values. These two metals exceeded SALs but were comparable to

their background levels; therefore, it was concluded that those values exceeding SALs are caused by regional geologic chemical characteristics rather than by contamination from the OU. Two radioactive analytes, radium-226 and thorium-232, also exceeded SALs at Area 2. The maximum concentration values for both of these isotopes exceeded the TA-49 background levels as well. Until Laboratory-wide background levels for these two isotopes are established, OU personnel cannot determine whether the TA-49 values indicate OU contamination or whether the results are caused by regional geologic characteristics. It should also be noted that radium-226 and thorium-232 were not on the AT-49 list of contaminants of concern and that these values may be anomalies rather than contaminant indicators.

TA-49 Area 1

Figure 2-12. TA-49 Area 1, OU 1144.

TA-49 Area 11

Figure 2-13. TA-49 Area 11, OU 1144.

TABLE 2-12

SUMMARY FOR TA-49 AREA 2 SURFACE SOIL SAMPLE ANALYSES, OU 1144

Analyte	Number of Values Per Analyte	Number Of Values $\geq$ LOD	Concentration Range		Baseline Sample Value	SAL	Units	Number Of Values $<$ LOD	LOD Range		Number Of Values $\geq$ SAL, Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL	Analyte Disposition
			Mini-mum	Maxi-mum					Mini-mum	Maxi-mum				
1 Americium-241	40	1	2.995	2.995	<2.50	22	pCi/g	39	1.24	4.45		40		No Concern
2 Antimony	42				<11.2	32	mg/kg	42	11.2	11.2		42		No Concern
3 Arsenic	42	40	0.81	3.5	2.81	0.4	mg/kg	2	0.6	0.6	40		2	Exceeds SAL
4 Barium	42	42	45.4	171	133	5,600	mg/kg					42		No Concern
5 Beryllium	42	42	0.28	0.86	0.693	0.16	mg/kg				42			Exceeds SAL
6 Cadmium	42	21	0.81	1.3	1.05	80	mg/kg	21	0.8	0.8		42		No Concern
7 Cesium-137	40	19	0.119	1.797	0.807	4	pCi/g	21	0.324	0.756		40		No Concern
8 Chromium	42	42	2.6	7.6	7.85	400	mg/kg					42		No Concern
9 Lead	42	42	3.6	21.5	14.2	500	mg/kg					42		No Concern
10 Mercury	42	7	0.02	0.03	<0.02	24	mg/kg	35	0.02	0.02		42		No Concern
11 Nickel	42	41	3.1	8.7	7.7	1,600	mg/kg	1	2.8	2.8		42		No Concern
12 Plutonium-238	43	43	0.002	0.249	0.005	27	pCi/g					43		No Concern
13 Plutonium-239	43	43	0.002	13.723	0.018	24	pCi/g					43		No Concern
14 Potassium-40	40	40	2.963	14.18	23.4		pCi/g						10	Further Eval
15 Radium-226	40	30	1.056	3.463	<2.13	0.73	pCi/g	10	1.27	1.94	30			Exceeds SAL
16 Selenium	42				<0.6	400	mg/kg	42	0.6	0.6		42		No Concern
17 Silver	42				<1.4	400	mg/kg	42	1.4	1.4		42		No Concern
18 Thallium	42				<1	6.4	mg/kg	42	1	1		42		No Concern
19 Thorium-232	40	27	1.557	4.438	<2.81	0.88	pCi/g	13	1.99	3.81	27		13	Exceeds SAL
20 Uranium	40	40	1.4	5.3	4.716	174.6	mg/kg					40		No Concern
Total Number of Values		830	520					310			139	626	25	

Notes:

- "Baseline" values are an average from 10 background samples (see Figure 2-14 for sampling locations).
- Analyte Disposition categories:
 "Exceeds SAL" = one or more values exceeded the SAL for that analyte.
 "Further Evaluation" = one or more analyte values was greater than the LOD, and there is no current SAL for comparison.
 "No Concern" = analyte values are all less than the SAL.
- The SAL for uranium was calculated assuming natural abundance (U-239=0.0057%, U-235=0.7204%, U-238=99.2739%)

Figure 2-14. Surface soil sampling locations for Area 2, OU 1144.

2.23 ADS 1147—TA-50 (Project Leader: Cheryl K. Rofer)

During the 1993 field season, soil samples were collected from Aggregate 5, possible fallout from operations at TA-50 [PRSs 50-006(c), 50-007, and 50-008]; Aggregate 6, Ten Site Canyon, [PRS 50-006(a)] and Mortandad Canyon, [PRS 50-006(d)]; and MDA C, (PRS 50-009); the samples were analyzed as specified in the RFI work plan for OU 1147 (LANL 1992, 0787). Most chemical analysis results for the soil samples have been received and are being reviewed. Sample locations were presented in the "ER Quarterly Technical Report, October–December 1994." Available results are summarized in Tables 2-13 through 2-16 in this report (see Section 1.0 for an explanation of these summary tables).

Arsenic, beryllium, thorium-232, and radium-226 were detected above SALs in most of the analyses; however, these constituents are naturally present in Los Alamos soils near those determined for these samples.

The available results from Aggregate 5 are summarized in Table 2-13. Other constituents detected above SALs are polycyclic aromatic hydrocarbons, PCBs, cadmium, chromium, and silver; a risk analysis is being carried out for these constituents. The analyses also resulted in 218 values for tentatively identified constituents, most of which were saturated hydrocarbons and organic compounds.

The available results from Ten Site Canyon are summarized in Table 2-14. Other constituents detected above SALs are polycyclic aromatic hydrocarbons, PCBs, cobalt-60, and plutonium-238; a risk analysis is being carried out for these constituents. The analyses also resulted in 580 values for tentatively identified constituents, most of which were saturated hydrocarbons and organic compounds.

The available results from Mortandad Canyon are summarized in Table 2-15. Other constituents detected above SALs are PCBs, cesium-137, cobalt-60, plutonium-239, and strontium-90. These results will be provided to the Canyons Operable Unit for further characterization and remediation decisions. The analyses also resulted in 221 values for tentatively identified constituents, most of which were saturated hydrocarbons and organic compounds.

The available results from MDA C are summarized in Table 2-16. The only other constituents that were detected above SALs are PCBs. It appears that no significant migration of the contents of MDA C to the surface soils has occurred since a new cover of crushed tuff and soil was installed in 1984. The analyses also resulted in 290 values for tentatively identified constituents, most of which were saturated hydrocarbons and organic compounds.

A phase report on these results is being prepared.

TABLE 2-13

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT AGGREGATE 5, AREA AROUND BUILDINGS

Analyte	Number of Values Per Analyte	Number of Values >= LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthene	52				4,800	mg/kg	52	0.33	0.39		52	
2 Acenaphthylene	52					mg/kg	52	0.33	0.39			
3 Aniline	52					mg/kg	52	0.33	0.39			
4 Anthracene	52	1	0.41	0.41	24,000	mg/kg	51	0.33	0.39		52	
5 Antimony	8	8	0.06	0.14	32	mg/kg					8	
6 Aroclor 1242	52					mg/kg	52	0.05	1			
7 Aroclor 1254	52	1	1	1		mg/kg	51	0.05	1			
8 Aroclor 1260	52	9	0.07	0.52		mg/kg	43	0.05	1			
9 Aroclor [Mixed-]	52	10	0.07	1	0.09	mg/kg	42	0.05	1	9	36	7
10 Arsenic	8	8	2	3.6	0.4	mg/kg				8		
11 Azobenzene	52					mg/kg	52	0.33	0.39			
12 Barium	8	7	0.54	800	5,600	mg/kg	1	0.1	0.1		8	
13 Benzidine [m-]	52					mg/kg	52	0.33	0.94			
14 Benzo[a]anthracene	52	7	0.45	1.8	0.64	mg/kg	45	0.33	0.39	5	47	
15 Benzo[a]pyrene	52	8	0.36	2.4	0.1	mg/kg	44	0.33	0.39	8		44
16 Benzo[b]fluoranthene	52	7	0.5	2.2	0.7	mg/kg	45	0.33	0.39	4	48	
17 Benzo[g,h,i]perylene	52	6	0.5	1.4	44	mg/kg	46	0.33	0.39		52	
18 Benzo[k]fluoranthene	52	7	0.42	1.4	1.5	mg/kg	45	0.33	0.39		52	
19 Benzoic acid	52				320,000	mg/kg	52	0.33	0.94		52	
20 Benzyl alcohol	52					mg/kg	52	0.33	0.94			
21 Beryllium	8	7	0.41	150	0.16	mg/kg	1	0.08	0.08	7	1	
22 Bis(2-chloroethoxy)methane	52					mg/kg	52	0.33	0.39			
23 Bis(2-chloroethyl)ether	52				0.12	mg/kg	52	0.33	0.39			52
24 Bis(2-chloroisopropyl)ether	52				100	mg/kg	52	0.33	0.39		52	
25 Bis(2-ethylhexyl)phthalate	52	2	0.69	0.7	50	mg/kg	50	0.33	0.39		52	
26 Bromophenylphenyl ether [4-]	52					mg/kg	52	0.33	0.39			
27 Butyl benzyl phthalate	52				16,000	mg/kg	52	0.33	0.39		52	
28 Cadmium	8	4	0.5	170	80	mg/kg	4	0.4	0.4	2	6	
29 Cesium-137	32	2	0.979	2.05	4	pCi/g	30	0.256	0.752		32	
30 Chloro-3-methylphenol [4-]	52				16,000	mg/kg	52	0.33	0.94		52	
31 Chloroaniline [4-]	52				320	mg/kg	52	0.33	0.94		52	
32 Chloronaphthalene [2-]	52				6,400	mg/kg	52	0.33	0.39		52	
33 Chlorophenol [o-]	52				400	mg/kg	52	0.33	0.39		52	
34 Chlorophenylphenyl ether [4-]	52					mg/kg	52	0.33	0.39			
35 Chromium	8	8	1.1	810	400	mg/kg				1	7	
36 Chrysene	52	8	0.37	2.9	22	mg/kg	44	0.33	0.39		52	

TABLE 2-13

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT AGGREGATE 5, AREA AROUND BUILDINGS

Analyte	Number of Values Per Analyte	Number of Values >= LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
37 Cobalt-60	32				0.9	pCi/g	32	0.258	0.773		32	
38 Di-n-butyl phthalate	52	1	1.8	1.8	8,000	mg/kg	51	0.33	0.39		52	
39 Di-n-octyl phthalate	52				1,600	mg/kg	52	0.33	0.39		52	
40 Dibenzo[a,h]anthracene	52	2	0.55	0.69	0.086	mg/kg	50	0.33	0.39	2		50
41 Dibenzofuran	52					mg/kg	52	0.33	0.39			
42 Dichlorobenzene (1,2) [o-]	52				1,600	mg/kg	52	0.33	0.39		52	
43 Dichlorobenzene (1,3) [m-]	52				7,200	mg/kg	52	0.33	0.39		52	
44 Dichlorobenzene (1,4) [p-]	52				290	mg/kg	52	0.33	0.39		52	
45 Dichlorobenzidine [3,3'-]	52				1.6	mg/kg	52	0.33	0.94		52	
46 Dichlorophenol [2,4-]	52				240	mg/kg	52	0.33	0.39		52	
47 Diethyl phthalate	52				64,000	mg/kg	52	0.33	0.39		52	
48 Dimethyl phthalate	52				800,000	mg/kg	52	0.33	0.39		52	
49 Dimethylphenol [2,4-]	52				1,600	mg/kg	52	0.33	0.39		52	
50 Dinitrophenol [2,4-]	52				160	mg/kg	52	0.33	0.94		52	
51 Dinitrotoluene [2,4-]	52				1	mg/kg	52	0.33	0.39		52	
52 Dinitrotoluene [2,6-]	52				1	mg/kg	52	0.33	0.39		52	
53 Fluoranthene	52	10	0.7	4.1	3,200	mg/kg	42	0.33	0.39		52	
54 Fluorene	52				3,200	mg/kg	52	0.33	0.39		52	
55 Hexachlorobenzene	52				0.44	mg/kg	52	0.33	0.39		52	
56 Hexachlorobutadiene	52				90	mg/kg	52	0.33	0.39		52	
57 Hexachlorocyclopentadiene	52				560	mg/kg	52	0.33	0.39		52	
58 Hexachloroethane	52				80	mg/kg	52	0.33	0.39		52	
59 Indeno[1,2,3-cd]pyrene	52	6	0.54	1.6	0.41	mg/kg	46	0.33	0.39	6	46	
60 Isophorone	52				7,400	mg/kg	52	0.33	0.39		52	
61 Lead	8	8	6	35	500	mg/kg					8	
62 Mercury	24				24	mg/kg	24	0.2	0.2		24	
63 Methyl-4,6-dinitrophenol [2-]	52					mg/kg	52	0.33	0.94			
64 Methyl-naphthalene [2-]	52					mg/kg	52	0.33	0.39			
65 Methylphenol [2-]	52				4,000	mg/kg	52	0.33	0.39		52	
66 Methylphenol [4-]	52				400	mg/kg	52	0.33	0.39		52	
67 Naphthalene	52				3,200	mg/kg	52	0.33	0.39		52	
68 Nickel	8	3	9	870	1,600	mg/kg	5	2	2		8	
69 Nitroaniline [2-]	52					mg/kg	52	0.33	0.94			
70 Nitroaniline [3-]	52					mg/kg	52	0.33	0.94			
71 Nitroaniline [4-]	52					mg/kg	52	0.33	0.94			
72 Nitrobenzene	52				5.3	mg/kg	52	0.33	0.39		52	

TABLE 2-13

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT AGGREGATE 5, AREA AROUND BUILDINGS

Analyte	Number of Values Per Analyte	Number of Values >= LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
73 Nitrophenol [2-]	52					mg/kg	52	0.33	0.39			
74 Nitrophenol [4-]	52					mg/kg	52	0.33	0.94			
75 Nitrosodi-n-propylamine [N-]	52				0.1	mg/kg	52	0.33	0.39			52
76 Nitrosodimethylamine [N-]	52					mg/kg	52	0.33	0.39			
77 Nitrosodiphenylamine [N-]	52				140	mg/kg	52	0.33	0.39		52	
78 Pentachlorophenol	52				5.8	mg/kg	52	0.33	0.94		52	
79 Phenanthrene	52	10	0.38	2.1		mg/kg	42	0.33	0.39			
80 Phenol	52				48,000	mg/kg	52	0.33	0.39		52	
81 Plutonium-238	32	32	0.002	0.127	27	pCi/g					32	
82 Plutonium-239	32	32	0.001	1.606	24	pCi/g					32	
83 Potassium-40	32	26	2.69	29.67		pCi/g	6	19.7	27.9			
84 Pyrene	52	10	0.74	4.9	2,400	mg/kg	42	0.33	0.39		52	
85 Radium-226	33	11	1.34	5.22	0.73	pCi/g	22	1.73	3.08	11		22
86 Selenium	8	1	0.2	0.2	400	mg/kg	7	0.2	0.2		8	
87 Silver	8	2	17	410	400	mg/kg	6	1	1	1	7	
88 Strontium-90	33	33	-0.43	0.74	8.9	pCi/g					33	
89 Thallium	8	8	0.09	0.18	5.4	mg/kg					8	
90 Thorium-232	31	8	2.13	4.43	0.88	pCi/g	23	2.58	4.61	8		23
91 Trichlorobenzene [1,2,4-]	52				160	mg/kg	52	0.33	0.39		52	
92 Trichlorophenol [2,4,5-]	52				8,000	mg/kg	52	0.33	0.39		52	
93 Trichlorophenol [2,4,6-]	52				64	mg/kg	52	0.33	0.39		52	
94 Tritium	30	30	0.0088	0.24965	15,000,000	pCi/g					30	
95 Uranium-234	31	31	0.706	1.531	86	pCi/g					31	
96 Uranium-235	32	32	0.013	0.146	18	pCi/g					32	
97 Uranium-238	31	31	0.744	1.634	59	pCi/g					31	
Total Number of Values	4,289	437					3,852			72	2,843	250

TABLE 2-14

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT PRS 50-006(a), TEN SITE CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthene	134	1	0.51	0.51	4,800	mg/kg	133	0.33	12		134	
2 Acenaphthylene	134					mg/kg	134	0.33	12			
3 Acetone	134	22	0.011	0.082	8,000	mg/kg	112	0.01	0.08		134	
4 Americium-241	72	72	0.006	4.172	22	pCi/g					72	
5 Aniline	95					mg/kg	95	0.33	1.2			
6 Anthracene	134	1	0.9	0.9	24,000	mg/kg	133	0.33	12		134	
7 Antimony	144	6	0.08	0.53	32	mg/kg	138	0.04	11.2		144	
8 Aroclor 1016	35					mg/kg	35	0.033	0.074			
9 Aroclor 1221	35					mg/kg	35	0.033	0.136			
10 Aroclor 1232	35					mg/kg	35	0.033	0.074			
11 Aroclor 1242	95					mg/kg	95	0.033	1			
12 Aroclor 1248	35					mg/kg	35	0.033	0.074			
13 Aroclor 1254	95	1	6	6		mg/kg	94	0.033	1			
14 Aroclor 1260	95	18	0.054	1.52		mg/kg	77	0.033	1			
15 Aroclor [Mixed-]	95	19	0.054	6	0.09	mg/kg	76	0.033	1	14	80	1
16 Arsenic	144	144	0.7	4.7	0.4	mg/kg				144		
17 Azobenzene	95					mg/kg	95	0.33	12			
18 Barium	143	143	17	230	5,600	mg/kg					143	
19 Benzene	134				0.67	mg/kg	134	0.005	0.02		134	
20 Benzidine [m-]	95					mg/kg	95	0.33	29			
21 Benzo[a]anthracene	134	8	0.37	1.1	0.64	mg/kg	126	0.33	12	3	127	4
22 Benzo[a]pyrene	134	10	0.37	1.2	0.1	mg/kg	124	0.33	12	10		124
23 Benzo[b]fluoranthene	134	9	0.38	1.5	0.7	mg/kg	125	0.33	12	3	127	4
24 Benzo[g,h,i]perylene	134	4	0.37	0.66	44	mg/kg	130	0.33	12		134	
25 Benzo[k]fluoranthene	134	7	0.36	1.13	1.5	mg/kg	127	0.33	12		131	3
26 Benzoic acid	134				320,000	mg/kg	134	0.33	29		134	
27 Benzyl alcohol	134					mg/kg	134	0.33	29			
28 Beryllium	143	137	0.09	2.8	0.16	mg/kg	6	0.2	0.2	136	1	6
29 Bis(2-chloroethoxy)methane	134					mg/kg	134	0.33	12			
30 Bis(2-chloroethyl)ether	134				0.12	mg/kg	134	0.33	12			134
31 Bis(2-chloroisopropyl)ether	134				100	mg/kg	134	0.33	12		134	
32 Bis(2-ethylhexyl)phthalate	134	4	0.47	1.1	50	mg/kg	130	0.33	12			
33 Bromobenzene	109					mg/kg	109	0.005	0.02			
34 Bromochloromethane	134					mg/kg	134	0.005	0.02		134	
35 Bromodichloromethane	134				11	mg/kg	134	0.005	0.02		109	
36 Bromoform	109				89	mg/kg	109	0.005	0.02			

TABLE 2-14

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT PRS 50-006(a), TEN SITE CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
37 Bromomethane	134				0.43	mg/kg	134	0.01	0.04		134	
38 Bromophenylphenyl ether [4-]	134					mg/kg	134	0.33	12			
39 Butanone [2-]	134				4,000	mg/kg	134	0.01	0.08		134	
40 Butyl benzyl phthalate	134	1	0.51	0.51	16,000	mg/kg	133	0.33	12		134	
41 Butylbenzene [n-]	110					mg/kg	110	0.005	0.02			
42 Butylbenzene [sec-]	110					mg/kg	110	0.005	0.02			
43 Butylbenzene [tert-]	110	1	0.009	0.009		mg/kg	109	0.005	0.02			
44 Cadmium	143	32	0.4	1.7	80	mg/kg	111	0.4	1.2		143	
45 Carbon disulfide	134				7.4	mg/kg	134	0.005	0.02		134	
46 Carbon tetrachloride	134				0.21	mg/kg	134	0.005	0.02		134	
47 Cesium-137	166	57	0.261	3.585	4	pCi/g	109	0.249	0.803		166	
48 Chloro-3-methylphenol [4-]	134				16,000	mg/kg	134	0.33	12		134	
49 Chloroaniline [4-]	134				320	mg/kg	134	0.33	12		134	
50 Chlorobenzene	134				67	mg/kg	134	0.005	0.02		134	
51 Chlorodibromomethane	134				83	mg/kg	134	0.005	0.02		134	
52 Chloroethane	134				3,300	mg/kg	134	0.01	0.04		134	
53 Chloroform	134				0.21	mg/kg	134	0.005	0.02		134	
54 Chloromethane	134				6.4	mg/kg	134	0.01	0.04		134	
55 Chloronaphthalene [2-]	134				6,400	mg/kg	134	0.33	12		134	
56 Chlorophenol [o-]	134				400	mg/kg	134	0.33	12		134	
57 Chlorophenylphenyl ether [4-]	134					mg/kg	134	0.33	12			
58 Chlorotoluene [o-]	110					mg/kg	110	0.005	0.02			
59 Chlorotoluene [p-]	110					mg/kg	110	0.005	0.02			
60 Chromium	143	143	1.1	20	400	mg/kg					143	
61 Chrysene	134	10	0.4	1.4	22	mg/kg	124	0.33	12		134	
62 Cobalt-60	166	10	0.262	1.2991	0.9	pCi/g	156	0.101	0.743	4	162	
63 Di-n-butyl phthalate	134	29	0.4	3	8,000	mg/kg	105	0.33	12		134	
64 Di-n-octyl phthalate	134				1,600	mg/kg	134	0.33	12			134
65 Dibenzo[a,h]anthracene	134				0.086	mg/kg	134	0.33	12			
66 Dibenzofuran	134					mg/kg	109	0.01	0.04			
67 Dibromo-3-chloropropane [1,2-]	109					mg/kg	134	0.005	0.02			
68 Dibromoethane [1,2-]	134					mg/kg	134	0.005	0.02			
69 Dibromomethane	134					mg/kg	134	0.005	0.02			
70 Dichlorobenzene (1,2) [o-]	244				1,600	mg/kg	244	0.005	12		244	
71 Dichlorobenzene (1,3) [m-]	244				7,200	mg/kg	244	0.005	12		244	
72 Dichlorobenzene (1,4) [p-]	244				290	mg/kg	244	0.005	12		244	

TABLE 2-14

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT PRS 50-006(a), TEN SITE CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
73 Dichlorobenzidine [3,3'-]	134				1.6	mg/kg	134	0.33	12		130	4
74 Dichlorodifluoromethane	134				410	mg/kg	134	0.01	0.04		134	
75 Dichloroethane [1,1-]	134				0.2	mg/kg	134	0.005	0.02		134	
76 Dichloroethane [1,2-]	134				0.4	mg/kg	134	0.005	0.02		134	
77 Dichloroethene [1,1-]	134				1,600	mg/kg	134	0.005	0.02		134	
78 Dichloroethene [trans-1,2-]	134				800	mg/kg	134	0.005	0.02		134	
79 Dichloroethylene [cis-1,2-]	134				240	mg/kg	134	0.33	12		134	
80 Dichlorophenol [2,4-]	134				6.5	mg/kg	134	0.005	0.02		134	
81 Dichloropropane [1,2-]	134					mg/kg	134	0.005	0.02			
82 Dichloropropane [1,3-]	134					mg/kg	134	0.005	0.02			
83 Dichloropropane [2,2-]	134					mg/kg	134	0.005	0.02			
84 Dichloropropene [1,1-]	134				0.17	mg/kg	134	0.005	0.02		134	
85 Dichloropropene [cis-1,3-]	134				0.17	mg/kg	134	0.005	0.02		134	
86 Dichloropropene [trans-1,3-]	134				64,000	mg/kg	134	0.33	12		134	
87 Diethyl phthalate	134				800,000	mg/kg	134	0.33	12		134	
88 Dimethyl phthalate	134				1,600	mg/kg	134	0.33	12		134	
89 Dimethylphenol [2,4-]	134				160	mg/kg	134	0.33	29		134	
90 Dinitrophenol [2,4-]	134				1	mg/kg	134	0.33	12		130	4
91 Dinitrotoluene [2,4-]	134				1	mg/kg	134	0.33	12		130	4
92 Dinitrotoluene [2,6-]	134				3,100	mg/kg	134	0.005	0.02		134	
93 Ethylbenzene	134	15	0.37	2.4	3,200	mg/kg	119	0.33	12		134	
94 Fluoranthene	134	1	0.47	0.47	3,200	mg/kg	133	0.33	12		134	
95 Fluorene	134				0.44	mg/kg	134	0.33	12		127	7
96 Hexachlorobenzene	134				90	mg/kg	134	0.33	12		134	
97 Hexachlorobutadiene	134				560	mg/kg	134	0.33	12		134	
98 Hexachlorocyclopentadiene	134				80	mg/kg	134	0.33	12		134	
99 Hexachloroethane	134					mg/kg	133	0.01	0.08			
100 Hexanone [2-]	134	1	0.014	0.014		mg/kg	131	0.33	12	3	106	25
101 Indeno[1,2,3-cd]pyrene	134	3	0.41	0.66	0.41	mg/kg	134	0.33	12		134	
102 Isophorone	134				7,400	mg/kg	109	0.005	0.02			
103 Isopropylbenzene	109					mg/kg	109	0.005	0.02			
104 Isopropyltoluene [4-]	110	1	0.035	0.035		mg/kg	1	4	4		142	
105 Lead	142	141	3.9	44	500	mg/kg	247	0.0001	0.1		269	
106 Mercury	269	22	0.02	2	24	mg/kg	134	0.005	0.02			
107 Methyl iodide	134					mg/kg	134	0.01	0.08		134	
108 Methyl-2-pentanone [4-]	134				510	mg/kg						

TABLE 2-14

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT PRS 50-006(a), TEN SITE CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
109 Methyl-4,6-dinitrophenol [2-]	134					mg/kg	134	0.33	29			
110 Methylene chloride	134	5	0.0068	0.0081	5.6	mg/kg	129	0.005	0.02		134	
111 Methyl-naphthalene [2-]	133				4,000	mg/kg	133	0.33	12			
112 Methylphenol [2-]	134				400	mg/kg	134	0.33	12		134	
113 Methylphenol [4-]	134				3,200	mg/kg	134	0.33	12		134	
114 Naphthalene	134				1,600	mg/kg	25	2	2.8		143	
115 Nickel	143	118	2.6	58.9		mg/kg	134	0.33	29			
116 Nitroaniline [2-]	134					mg/kg	134	0.33	29			
117 Nitroaniline [3-]	134					mg/kg	134	0.33	29			
118 Nitroaniline [4-]	134				5.3	mg/kg	134	0.33	12		132	2
119 Nitrobenzene	134					mg/kg	134	0.33	12			
120 Nitrophenol [2-]	134					mg/kg	134	0.33	29			
121 Nitrophenol [4-]	134				0.1	mg/kg	134	0.33	12			134
122 Nitrosodi-n-propylamine [N-]	134					mg/kg	95	0.33	12			
123 Nitrosodimethylamine [N-]	95				140	mg/kg	134	0.33	12		134	
124 Nitrosodiphenylamine [N-]	134				5.8	mg/kg	134	0.33	29		132	2
125 Pentachlorophenol	134					mg/kg	126	0.33	12			
126 Phenanthrene	134	8	0.39	3.1		mg/kg	134	0.33	12		134	
127 Phenol	134				48,000	mg/kg	134	0.33	12		165	
128 Plutonium-238	171	171	0.002	67.817	27	pCi/g				6	171	
129 Plutonium-239	171	171	0.002	19.51	24	pCi/g						
130 Potassium-40	166	131	13.746	52.505		pCi/g	35	20.4	28			
131 Propylbenzene	110					mg/kg	110	0.005	0.02			
132 Pyrene	134	15	0.39	2.4	2,400	mg/kg	119	0.33	12		134	
133 Radium-226	166	94	1.0857	4.0943	0.73	pCi/g	72	1.25	2.36	94		72
134 Selenium	144	10	0.2	0.62	400	mg/kg	134	0.2	3		144	
135 Silver	143	4	1	33	400	mg/kg	139	1	1.4		143	
136 Strontium-90	166	166	-0.72	3.11	8.9	pCi/g					166	
137 Styrene	134				16,000	mg/kg	134	0.005	0.02		134	
138 Tetrachloroethane [1,1,1,2-]	134					mg/kg	134	0.005	0.02			
139 Tetrachloroethane [1,1,2,2-]	109				3.9	mg/kg	109	0.005	0.02		109	
140 Tetrachloroethylene	134				5.9	mg/kg	134	0.005	0.02		134	
141 Thallium	144	42	0.02	2.3	6.4	mg/kg	102	0.04	1.2		144	
142 Thorium-232	166	76	1.666	6.5209	0.88	pCi/g	90	2.01	3.83	76		90
143 Toluene	134	2	0.016	0.022	890	mg/kg	132	0.005	0.02		134	
144 Trichloro-1,2,2-trifluoroethane [1,1,2-]	134					mg/kg	134	0.005	0.02			

TABLE 2-14

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT PRS 50-006(a), TEN SITE CANYON

Analyte	Number of Values Per Analyte	Number Of Values $\geq$ LOD	Concentration Range		SAL	Units	Number Of Values $<$ LOD	LOD Range		Number Of Values $\geq$ SAL, Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
145 Trichlorobenzene [1,2,4-]	134				160	mg/kg	134	0.33	12		134	
146 Trichloroethane [1,1,1-]	134				1,000	mg/kg	134	0.005	0.02		134	
147 Trichloroethane [1,1,2-]	134				6.3	mg/kg	134	0.005	0.02		134	
148 Trichloroethene	134				3.2	mg/kg	134	0.005	0.02		134	
149 Trichlorofluoromethane	134					mg/kg	134	0.005	0.02			
150 Trichlorophenol [2,4,5-]	134				8,000	mg/kg	134	0.33	29		134	
151 Trichlorophenol [2,4,6-]	134				64	mg/kg	134	0.33	12		134	
152 Trichloropropane [1,2,3-]	109					mg/kg	109	0.005	0.02			
153 Trimethylbenzene [1,2,4-]	110					mg/kg	110	0.005	0.02			
154 Trimethylbenzene [1,3,5-]	110					mg/kg	110	0.005	0.02			
155 Tritium	167	167	-0.0058	1.264	15,000,000	pCi/g					167	
156 Uranium-234	166	166	0.594	3.538	86	pCi/g					166	
157 Uranium-235	166	166	0.013	0.255	18	pCi/g					166	
158 Uranium-238	166	166	0.541	3.049	59	pCi/g					166	
159 Vinyl acetate	91					mg/kg	91	0.01	0.01			
160 Vinyl chloride	134				0.012	mg/kg	134	0.01	0.04		131	3
161 Xylenes (o + m + p) [Mixed-]	134				160,000	mg/kg	134	0.005	0.02		134	
Total Number of Values	21,356	2,751					18,605			493	14,135	757

TABLE 2-15

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT MORTANDAD CANYON

Analyte	Number of Values Per Analyte	Number of Values >= LOD	Concentration Range		SAL	Units	Number of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
1 Acenaphthene	55				4,800	mg/kg	55	0.33	0.66		55	
2 Acenaphthylene	55					mg/kg	55	0.33	0.66			
3 Acetone	39	1	0.027	0.027	8,000	mg/kg	38	0.02	0.02		39	
4 Aniline	55					mg/kg	55	0.33	0.66			
5 Anthracene	55				24,000	mg/kg	55	0.33	0.66		55	
6 Antimony	60	10	0.09	0.15	32	mg/kg	50	0.06	1.2		60	
7 Aroclor 1016	18					mg/kg	18	0.0136	0.043			
8 Aroclor 1221	18					mg/kg	18	0.014	0.043			
9 Aroclor 1232	18					mg/kg	18	0.014	0.043			
10 Aroclor 1242	57					mg/kg	57	0.014	1			
11 Aroclor 1248	18					mg/kg	18	0.014	0.043			
12 Aroclor 1254	57					mg/kg	57	0.014	1			
13 Aroclor 1260	57	5	0.02	0.11		mg/kg	52	0.014	1			
14 Aroclor [Mixed-]	57	5	0.02	0.11	0.09	mg/kg	52	0.0137	1	1	52	4
15 Arsenic	60	60	0.52	5.18	0.4	mg/kg				60		
16 Azobenzene	55					mg/kg	55	0.33	0.66			
17 Barium	60	60	7	160	5,600	mg/kg					60	
18 Benzene	39				0.67	mg/kg	39	0.005	0.005		39	
19 Benzidine [m-]	55					mg/kg	55	0.33	3.3			
20 Benzo[a]anthracene	55				0.64	mg/kg	55	0.33	0.66		24	31
21 Benzo[a]pyrene	55				0.1	mg/kg	55	0.33	0.66			55
22 Benzo[b]fluoranthene	55				0.7	mg/kg	55	0.33	0.66		55	
23 Benzo[g,h,i]perylene	55				44	mg/kg	55	0.33	0.66		55	
24 Benzo[k]fluoranthene	55				1.5	mg/kg	55	0.33	0.66		55	
25 Benzoic acid	55	1	5.7	5.7	320,000	mg/kg	54	0.33	3.3		55	
26 Benzyl alcohol	55					mg/kg	55	0.33	1.3			
27 Beryllium	60	60	0.1	2	0.16	mg/kg				58	2	
28 Bis(2-chloroethoxy)methane	55					mg/kg	55	0.33	0.66			
29 Bis(2-chloroethyl)ether	55				0.12	mg/kg	55	0.33	0.66			55
30 Bis(2-chloroisopropyl)ether	55				100	mg/kg	55	0.33	0.66		55	
31 Bis(2-ethylhexyl)phthalate	55	2	0.36	0.39	50	mg/kg	53	0.34	0.66			
32 Bromobenzene	39					mg/kg	39	0.005	0.005			
33 Bromochloromethane	39					mg/kg	39	0.005	0.005			
34 Bromodichloromethane	39				11	mg/kg	39	0.005	0.005		39	
35 Bromoform	39				89	mg/kg	39	0.005	0.005		39	
36 Bromomethane	39				0.43	mg/kg	39	0.01	0.01		39	
37 Bromophenylphenyl ether [4-]	55					mg/kg	55	0.33	0.66			
38 Butanone [2-]	39				4,000	mg/kg	39	0.02	0.02		39	

TABLE 2-15

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT MORTANDAD CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number Of Values <SAL, Including <LOD	Number Of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
39 Butyl benzyl phthalate	55				16,000	mg/kg	55	0.33	0.66		55	
40 Butylbenzene [n-]	39					mg/kg	39	0.005	0.005			
41 Butylbenzene [sec-]	39					mg/kg	39	0.005	0.005			
42 Butylbenzene [tert-]	39					mg/kg	39	0.005	0.005			
43 Cadmium	60				80	mg/kg	60	0.4	1.2		60	
44 Carbon disulfide	39				7.4	mg/kg	39	0.005	0.005		39	
45 Carbon tetrachloride	39				0.21	mg/kg	39	0.005	0.005		39	
46 Cesium-137	59	50	0.44	373.11	4	pCi/g	9	0.338	0.74	37	22	
47 Chloro-3-methylphenol [4-]	55				16,000	mg/kg	55	0.33	1.3		55	
48 Chloroaniline [4-]	55				320	mg/kg	55	0.33	1.3		55	
49 Chlorobenzene	39				67	mg/kg	39	0.005	0.005		39	
50 Chlorodibromomethane	39				83	mg/kg	39	0.005	0.005		39	
51 Chloroethane	39				3,300	mg/kg	39	0.01	0.01		39	
52 Chloroform	39				0.21	mg/kg	39	0.005	0.005		39	
53 Chloromethane	39				6.4	mg/kg	39	0.01	0.01		39	
54 Chloronaphthalene [2-]	55				6,400	mg/kg	55	0.33	0.66		55	
55 Chlorophenol [o-]	55				400	mg/kg	55	0.33	0.66		55	
56 Chlorophenylphenyl ether [4-]	55					mg/kg	55	0.33	0.66			
57 Chlorotoluene [o-]	39					mg/kg	39	0.005	0.005			
58 Chlorotoluene [p-]	39					mg/kg	39	0.005	0.005			
59 Chromium	60	60	0.9	56	400	mg/kg	55	0.33	0.66		60	
60 Chrysene	55				22	mg/kg	55	0.33	0.66		55	
61 Cobalt-60	59	23	0.56	5.22	0.9	pCi/g	36	0.177	0.714	19	40	
62 Di-n-butyl phthalate	55	1	0.45	0.45	8,000	mg/kg	54	0.33	0.66		55	
63 Di-n-octyl phthalate	55				1,600	mg/kg	55	0.33	0.66			55
64 Dibenzo[a,h]anthracene	55				0.086	mg/kg	55	0.33	0.66			
65 Dibenzofuran	55					mg/kg	55	0.33	0.66			
66 Dibromo-3-chloropropane [1,2-]	39					mg/kg	39	0.01	0.01			
67 Dibromoethane [1,2-]	39					mg/kg	39	0.005	0.005			
68 Dibromomethane	39					mg/kg	39	0.005	0.005			
69 Dichlorobenzene (1,2) [o-]	94				1,600	mg/kg	94	0.005	0.66		94	
70 Dichlorobenzene (1,3) [m-]	94				7,200	mg/kg	94	0.005	0.66		94	
71 Dichlorobenzene (1,4) [p-]	94				290	mg/kg	94	0.005	0.66		94	
72 Dichlorobenzidine [3,3'-]	55				1.6	mg/kg	55	0.33	1.3		55	
73 Dichlorodifluoromethane	39					mg/kg	39	0.01	0.01			
74 Dichloroethane [1,1-]	39				410	mg/kg	39	0.005	0.005		39	
75 Dichloroethane [1,2-]	39				0.2	mg/kg	39	0.005	0.005		39	
76 Dichloroethene [1,1-]	39				0.4	mg/kg	39	0.005	0.005		39	

TABLE 2-15

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT MORTANDAD CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number Of Values <SAL, Including <LOD	Number Of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
77 Dichloroethene [trans-1,2-]	39				1,600	mg/kg	39	0.005	0.005		39	
78 Dichloroethylene [cis-1,2-]	39				800	mg/kg	39	0.005	0.005		39	
79 Dichlorophenol [2,4-]	55				240	mg/kg	55	0.33	0.66		55	
80 Dichloropropane [1,2-]	39				6.5	mg/kg	39	0.005	0.005		39	
81 Dichloropropane [1,3-]	39					mg/kg	39	0.005	0.005			
82 Dichloropropane [2,2-]	39					mg/kg	39	0.005	0.005			
83 Dichloropropene [1,1-]	39					mg/kg	39	0.005	0.005			
84 Dichloropropene [cis-1,3-]	39				0.17	mg/kg	39	0.005	0.005		39	
85 Dichloropropene [trans-1,3-]	39				0.17	mg/kg	39	0.005	0.005		39	
86 Diethyl phthalate	55				64,000	mg/kg	55	0.33	0.66		55	
87 Dimethyl phthalate	55				800,000	mg/kg	55	0.33	0.66		55	
88 Dimethylphenol [2,4-]	55				1,600	mg/kg	55	0.33	0.66		55	
89 Dinitrophenol [2,4-]	55				160	mg/kg	55	0.33	3.3		55	
90 Dinitrotoluene [2,4-]	55				1	mg/kg	55	0.33	0.66		55	
91 Dinitrotoluene [2,6-]	55				1	mg/kg	55	0.33	0.66		55	
92 Ethylbenzene	39				3,100	mg/kg	39	0.005	0.005		39	
93 Fluoranthene	55				3,200	mg/kg	55	0.33	0.66		55	
94 Fluorene	55				3,200	mg/kg	55	0.33	0.66		55	
95 Hexachlorobenzene	55				0.44	mg/kg	55	0.33	0.66		24	31
96 Hexachlorobutadiene	55				90	mg/kg	55	0.33	0.66		55	
97 Hexachlorocyclopentadiene	55				560	mg/kg	55	0.33	0.66		55	
98 Hexachloroethane	55				80	mg/kg	55	0.33	0.66		55	
99 Hexanone [2-]	39					mg/kg	39	0.02	0.02			
100 Indeno[1,2,3-cd]pyrene	55				0.41	mg/kg	55	0.33	0.66		18	37
101 Isophorone	55				7,400	mg/kg	55	0.33	0.66		55	
102 Isopropylbenzene	39					mg/kg	39	0.005	0.005			
103 Isopropyltoluene [4-]	39	2	0.017	0.044		mg/kg	37	0.005	0.005			
104 Lead	58	55	3	70	500	mg/kg	3	4	4		58	
105 Mercury	150	24	0.1	0.2	24	mg/kg	126	0.1	0.1		150	
106 Methyl iodide	39					mg/kg	39	0.005	0.005			
107 Methyl-2-pentanone [4-]	39				510	mg/kg	39	0.02	0.02		39	
108 Methyl-4,6-dinitrophenol [2-]	55					mg/kg	55	0.33	3.3			
109 Methylene chloride	39				5.6	mg/kg	39	0.005	0.005		39	
110 Methyl-naphthalene [2-]	55					mg/kg	55	0.33	0.66			
111 Methylphenol [2-]	55				4,000	mg/kg	55	0.33	0.66		55	
112 Methylphenol [4-]	55				400	mg/kg	55	0.33	0.66		55	
113 Naphthalene	55				3,200	mg/kg	55	0.33	0.66		55	
114 Nickel	60	53	2	48	1,600	mg/kg	7	2	2		60	

TABLE 2-15

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT MORTANDAD CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number Of Values <SAL, Including <LOD	Number Of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
115 Nitroaniline [2-]	55					mg/kg	55	0.33	3.3			
116 Nitroaniline [3-]	55					mg/kg	55	0.33	3.3			
117 Nitroaniline [4-]	55				5.3	mg/kg	55	0.33	0.66		55	
118 Nitrobenzene	55					mg/kg	55	0.33	0.66			
119 Nitrophenol [2-]	55					mg/kg	55	0.33	3.3			
120 Nitrophenol [4-]	55				0.1	mg/kg	55	0.33	0.66			55
121 Nitrosodi-n-propylamine [N-]	55					mg/kg	55	0.33	0.66			
122 Nitrosodimethylamine [N-]	55				140	mg/kg	55	0.33	0.66		55	
123 Nitrosodiphenylamine [N-]	55				5.8	mg/kg	55	0.33	3.3		55	
124 Pentachlorophenol	55					mg/kg	55	0.33	0.66			
125 Phenanthrene	55				48,000	mg/kg	55	0.33	0.66		55	
126 Phenol	55				27	pCi/g					59	
127 Plutonium-238	59	59	0.003	13.804	24	pCi/g				1	58	
128 Plutonium-239	59	59	0.011	47.816		pCi/g	1	20	20			
129 Potassium-40	59	58	21.5	47.8		mg/kg	39	0.005	0.005			
130 Propylbenzene	39				2,400	mg/kg	55	0.33	0.66		55	
131 Pyrene	55				0.73	pCi/g	17	1.43	2.24	42		17
132 Radium-226	59	42	1.09	4.6146	400	mg/kg	54	0.2	0.2		61	
133 Selenium	61	7	0.3	0.41	400	mg/kg	56	1	1		60	
134 Silver	60	4	1	8	8.9	pCi/g				1	56	
135 Strontium-90	57	57	-0.1	18.3	16,000	mg/kg	39	0.005	0.005		39	
136 Styrene	39					mg/kg	39	0.005	0.005			
137 Tetrachloroethane [1,1,1,2-]	39				3.9	mg/kg	39	0.005	0.005		39	
138 Tetrachloroethane [1,1,2,2-]	39				5.9	mg/kg	39	0.005	0.005		39	
139 Tetrachloroethylene	39				6.4	mg/kg	19	0.04	1.2		60	
140 Thallium	60	41	0.03	0.34	0.88	pCi/g	26	2.06	3.5	33		26
141 Thorium-232	59	33	1.8589	4.3764	880	mg/kg	39	0.005	0.005		39	
142 Toluene	39					mg/kg	39	0.005	0.005			
143 Trichloro-1,2,2-trifluoroethane [1,1,2-]	39				160	mg/kg	55	0.33	0.66		55	
144 Trichlorobenzene [1,2,4-]	55				1,000	mg/kg	39	0.005	0.005		39	
145 Trichloroethane [1,1,1-]	39				6.3	mg/kg	39	0.005	0.005		39	
146 Trichloroethane [1,1,2-]	39				3.2	mg/kg	39	0.005	0.005		39	
147 Trichloroethene	39					mg/kg	37	0.005	0.005			
148 Trichlorofluoromethane	39	2	0.019	0.022	8,000	mg/kg	55	0.33	0.66		55	
149 Trichlorophenol [2,4,5-]	55				64	mg/kg	55	0.33	0.66		55	
150 Trichlorophenol [2,4,6-]	55					mg/kg	39	0.005	0.005			
151 Trichloropropane [1,2,3-]	39					mg/kg	38	0.005	0.005			
152 Trimethylbenzene [1,2,4-]	39	1	0.026	0.026		mg/kg						

TABLE 2-15

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES AT MORTANDAD CANYON

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL, Including >=LOD	Number Of Values <SAL, Including <LOD	Number Of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
153 Trimethylbenzene (1,3,5-)	39	1	0.0082	0.0082		mg/kg	38	0.005	0.005		57	
154 Tritium	57	57	0.0523	105.02	15,000,000	pCi/g					60	
155 Uranium-234	60	60	0.68	5.608	86	pCi/g					60	
156 Uranium-235	60	60	0.003	0.315	18	pCi/g					60	
157 Uranium-238	60	60	0.758	7.125	59	pCi/g					39	
158 Vinyl chloride	39				0.012	mg/kg	39	0.01	0.01		39	
159 Xylenes (o + m + p) (Mixed-)	39				160,000	mg/kg	39	0.005	0.005		39	
Total Number of Values	7,990	1,073					6,917			252	5,105	366

TABLE 2-16

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES FOR PRS 50-01a, MDA C

Analyte	Number of Values Per Analyte	Number of Values $\geq$ LOD	Concentration Range		SAL	Units	Number of Values $<$ LOD	LOD Range		Number of Values $\geq$ SAL Including $\geq$ LOD	Number of Values $<$ SAL, Including $<$ LOD	Number of Values $<$ LOD, with LOD $\geq$ SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthene	76	2	0.38	0.96	4,800	mg/kg	74	0.0002	0.36		76	
2 Acenaphthylene	76					mg/kg	76	0.0002	0.36			
3 Acetone	10				8,000	mg/kg	10	0.02	0.02		10	
4 Americium-241	111	111	0.002	1.017	22	pCi/g					111	
5 Aniline	16					mg/kg	16	0.33	0.36			
6 Anthracene	76				24,000	mg/kg	76	0.0002	0.36		76	
7 Antimony	82	6	0.08	0.25	32	mg/kg	76	0.04	0.08		82	
8 Aroclor 1016	66					mg/kg	66	0.03	0.15			
9 Aroclor 1221	66					mg/kg	66	0.03	0.15			
10 Aroclor 1232	66					mg/kg	188	0.03	0.15			
11 Aroclor 1242	188					mg/kg	66	0.03	0.15			
12 Aroclor 1248	66					mg/kg	185	0.03	0.05			
13 Aroclor 1254	188	3	0.07	1		mg/kg	180	0.03	0.15			
14 Aroclor 1260	188	8	0.03	0.11		mg/kg	177	0.03	0.05	5	183	
15 Aroclor [Mixed-]	188	11	0.03	1	0.09	mg/kg	4	0.2	0.2	81	4	
16 Arsenic	85	81	0.9	8	0.4	mg/kg	16	0.33	0.36			
17 Azobenzene	16					mg/kg					81	
18 Barium	81	81	26	250	5,600	mg/kg	10	0.005	0.005		10	
19 Benzene	10				0.67	mg/kg	16	0.33	0.87			
20 Benzidine [m-]	16				0.64	mg/kg	76	0.0002	0.36		76	
21 Benzo[a]anthracene	76				0.1	mg/kg	76	0.0002	0.36		3	73
22 Benzo[a]pyrene	76				0.7	mg/kg	76	0.0002	0.36		76	
23 Benzo[b]fluoranthene	76				44	mg/kg	76	0.0002	0.36		76	
24 Benzo[g,h,i]perylene	76				1.5	mg/kg	76	0.0002	0.36		76	
25 Benzo[k]fluoranthene	76				320,000	mg/kg	76	0.0009	1.8		76	
26 Benzoic acid	76					mg/kg	76	0.0009	1.8			
27 Benzyl alcohol	76					mg/kg				81		
28 Beryllium	81	81	0.32	1.4	0.16	mg/kg	76	0.0002	0.36			
29 Bis(2-chloroethoxy)methane	76				0.12	mg/kg	76	0.0002	0.36		3	73
30 Bis(2-chloroethyl)ether	76				100	mg/kg	76	0.0002	0.36		76	
31 Bis(2-chloroisopropyl)ether	76				50	mg/kg	74	0.0002	0.36		76	
32 Bis(2-ethoxy)phthalate	76	2	1.4	1.4		mg/kg	10	0.005	0.005			
33 Bromobenzene	10					mg/kg	10	0.005	0.005			
34 Bromochloromethane	10				11	mg/kg	10	0.005	0.005		10	
35 Bromodichloromethane	10				89	mg/kg	10	0.005	0.005		10	
36 Bromoform	10				0.43	mg/kg	10	0.01	0.01		10	
37 Bromomethane	10					mg/kg	76	0.0002	0.36			
38 Bromophenylphenyl ether [4-]	76					mg/kg						

TABLE 2-16

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES FOR PRS 50-000, MDA C

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
39 Butanone [2-]	10				4,000	mg/kg	10	0.02	0.02		10	
40 Butyl benzyl phthalate	76				16,000	mg/kg	76	0.0002	0.36		76	
41 Butylbenzene [n-]	10					mg/kg	10	0.005	0.005			
42 Butylbenzene [sec-]	10					mg/kg	10	0.005	0.005			
43 Butylbenzene [tert-]	10					mg/kg	10	0.005	0.005			
44 Cadmium	81				80	mg/kg	81	0.4	0.4		81	
45 Carbon disulfide	10				7.4	mg/kg	10	0.005	0.005		10	
46 Carbon tetrachloride	10				0.21	mg/kg	10	0.005	0.005		10	
47 Cesium-137	103	17	0.4037	1.22	4	pCi/g	86	0.24	0.787		103	
48 Chloro-3-methylphenol [4-]	76				16,000	mg/kg	76	0.0009	1.8		76	
49 Chloroaniline [4-]	76				320	mg/kg	76	0.0009	1.8		76	
50 Chlorobenzene	10				67	mg/kg	10	0.005	0.005		10	
51 Chlorodibromomethane	10				83	mg/kg	10	0.005	0.005		10	
52 Chloroethane	10				3,300	mg/kg	10	0.01	0.01		10	
53 Chloroform	10				0.21	mg/kg	10	0.005	0.005		10	
54 Chloromethane	10				6.4	mg/kg	10	0.01	0.01		10	
55 Chloronaphthalene [2-]	76				6,400	mg/kg	76	0.0002	0.36		76	
56 Chlorophenol [o-]	76				400	mg/kg	76	0.0002	0.36		76	
57 Chlorophenylphenyl ether [4-]	76					mg/kg	76	0.0002	0.36			
58 Chlorotoluene [o-]	10					mg/kg	10	0.005	0.005			
59 Chlorotoluene [p-]	10					mg/kg	10	0.005	0.005			
60 Chromium	81	81	1.3	18	400	mg/kg					81	
61 Chrysene	76				22	mg/kg	76	0.0002	0.36		76	
62 Cobalt-60	103	4	0.4228	0.6745	0.9	pCi/g	99	0.128	0.814		103	
63 Di-n-butyl phthalate	76				8,000	mg/kg	76	0.0002	0.36		76	
64 Di-n-octyl phthalate	76				1,600	mg/kg	76	0.0002	0.36		3	73
65 Dibenzo[a,h]anthracene	76				0.086	mg/kg	76	0.0002	0.36			
66 Dibenzofuran	76					mg/kg	76	0.0002	0.36			
67 Dibromo-3-chloropropane [1,2-]	10					mg/kg	10	0.01	0.01			
68 Dibromoethane [1,2-]	10					mg/kg	10	0.005	0.005			
69 Dibromomethane	10					mg/kg	10	0.005	0.005			
70 Dichlorobenzene (1,2) [o-]	86				1,600	mg/kg	86	0.0002	0.36		86	
71 Dichlorobenzene (1,3) [m-]	86				7,200	mg/kg	86	0.0002	0.36		86	
72 Dichlorobenzene (1,4) [p-]	86				290	mg/kg	86	0.0002	0.36		86	
73 Dichlorobenzidine [3,3'-]	76				1.6	mg/kg	76	0.0009	1.8		71	5
74 Dichlorodifluoromethane	10					mg/kg	10	0.01	0.01			
75 Dichloroethane [1,1-]	10				410	mg/kg	10	0.005	0.005		10	
76 Dichloroethane [1,2-]	10				0.2	mg/kg	10	0.005	0.005		10	

TABLE 2-16

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES FOR PRS 50-009, MDA C

Analyte	Number of Values Per Analyte	Number Of Values ≥ LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values ≥ SAL Including ≥ LOD	Number Of Values < SAL, Including < LOD	Number Of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
77 Dichloroethene [1,1-]	10				0.4	mg/kg	10	0.005	0.005		10	
78 Dichloroethene [trans-1,2-]	10				1,600	mg/kg	10	0.005	0.005		10	
79 Dichloroethylene [cis-1,2-]	10				800	mg/kg	10	0.005	0.005		10	
80 Dichlorophenol [2,4-]	76				240	mg/kg	76	0.0002	0.36		76	
81 Dichloropropane [1,2-]	10				6.5	mg/kg	10	0.005	0.005		10	
82 Dichloropropane [1,3-]	10					mg/kg	10	0.005	0.005			
83 Dichloropropane [2,2-]	10					mg/kg	10	0.005	0.005			
84 Dichloropropane [1,1-]	10					mg/kg	10	0.005	0.005			
85 Dichloropropane [cis-1,3-]	10				0.17	mg/kg	10	0.005	0.005		10	
86 Dichloropropane [trans-1,3-]	10				0.17	mg/kg	10	0.005	0.005		10	
87 Diethyl phthalate	76				64,000	mg/kg	76	0.0002	0.36		76	
88 Dimethyl phthalate	76				800,000	mg/kg	76	0.0002	0.36		76	
89 Dimethylphenol [2,4-]	76				1,600	mg/kg	76	0.0002	0.36		76	
90 Dinitrophenol [2,4-]	76				160	mg/kg	76	0.0009	1.8		76	
91 Dinitrotoluene [2,4-]	76				1	mg/kg	76	0.0002	0.36		76	
92 Dinitrotoluene [2,6-]	76				1	mg/kg	76	0.0002	0.36		76	
93 Ethylbenzene	10				3,100	mg/kg	10	0.005	0.005		10	
94 Fluoranthene	76				3,200	mg/kg	76	0.0002	0.36		76	
95 Fluorene	76				3,200	mg/kg	76	0.0002	0.36		76	
96 Hexachlorobenzene	76				0.44	mg/kg	76	0.0002	0.36		76	
97 Hexachlorobutadiene	76				90	mg/kg	76	0.0002	0.36		76	
98 Hexachlorocyclopentadiene	76				560	mg/kg	76	0.0002	0.36		76	
99 Hexachloroethane	76				80	mg/kg	76	0.0002	0.36		76	
100 Hexanone [2-]	10					mg/kg	10	0.02	0.02			
101 Indeno[1,2,3-cd]pyrene	76				0.41	mg/kg	76	0.0002	0.36		76	
102 Isophorone	76				7,400	mg/kg	76	0.0002	0.36		76	
103 Isopropylbenzene	10					mg/kg	10	0.005	0.005			
104 Isopropyltoluene [4-]	10					mg/kg	10	0.005	0.005			
105 Lead	81	81	7	32	500	mg/kg					81	
106 Mercury	228	2	0.1	0.1	24	mg/kg	226	0.1	0.1		228	
107 Methyl iodide	10					mg/kg	10	0.005	0.005			
108 Methyl-2-pentanone [4-]	10				510	mg/kg	10	0.02	0.02		10	
109 Methyl-4,6-dinitrophenol [2-]	76					mg/kg	76	0.0009	1.8			
110 Methylene chloride	10				5.6	mg/kg	10	0.005	0.005		10	
111 Methylnaphthalene [2-]	76					mg/kg	76	0.0002	0.36			
112 Methylphenol [2-]	76				4,000	mg/kg	76	0.0002	0.36		76	
113 Methylphenol [4-]	76				400	mg/kg	76	0.0002	0.36		76	
114 Naphthalene	76				3,200	mg/kg	76	0.0002	0.36		76	

TABLE 2-18

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES FOR PRS 50-009, MDA C

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number Of Values >=SAL Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
115 Nickel	81	76	2	14	1,600	mg/kg	5	2	2		81	
116 Nitroaniline [2-]	76					mg/kg	76	0.0009	1.8			
117 Nitroaniline [3-]	76					mg/kg	76	0.0009	1.8			
118 Nitroaniline [4-]	76					mg/kg	76	0.0009	1.8			
119 Nitrobenzene	76				5.3	mg/kg	76	0.0002	0.36		76	
120 Nitrophenol [2-]	76					mg/kg	76	0.0002	0.36			
121 Nitrophenol [4-]	76					mg/kg	76	0.0009	1.8			
122 Nitrosodi-n-propylamine [N-]	76				0.1	mg/kg	76	0.0002	0.36		3	73
123 Nitrosodimethylamine [N-]	16					mg/kg	16	0.33	0.36			
124 Nitrosodiphenylamine [N-]	76				140	mg/kg	76	0.0002	0.36		76	
125 Pentachlorophenol	76	1	1.9	1.9	5.8	mg/kg	75	0.0009	1.8		76	
126 Phenanthrene	76					mg/kg	76	0.0002	0.36			
127 Phenol	76				48,000	mg/kg	76	0.0002	0.36		76	
128 Plutonium-238	102	102	0.001	0.429	27	pCi/g					102	
129 Plutonium-239	102	102	0.003	10.687	24	pCi/g					102	
130 Potassium-40	103	100	17.285	44.489		pCi/g	3	18.4	24.2			
131 Propylbenzene	10					mg/kg	10	0.005	0.005			
132 Pyrene	76				2,400	mg/kg	76	0.0002	0.36		76	
133 Radium-226	103	74	1.1441	4.3854	0.73	pCi/g	29	1.47	1.9	74		29
134 Selenium	82	37	0.3	1	400	mg/kg	45	0.2	0.3		82	
135 Silver	81	2	1.1	6	400	mg/kg	79	1	1		81	
136 Strontium-90	108	108	-0.62	0.54	8.9	pCi/g					108	
137 Styrene	10				16,000	mg/kg	10	0.005	0.005		10	
138 Tetrachloroethane [1,1,1,2-]	10					mg/kg	10	0.005	0.005			
139 Tetrachloroethane [1,1,2,2-]	10				3.9	mg/kg	10	0.005	0.005		10	
140 Tetrachloroethylene	10				5.9	mg/kg	10	0.005	0.005		10	
141 Thallium	83	81	0.04	0.21	6.4	mg/kg	2	0.04	0.04		83	
142 Thorium-232	102	45	1.8314	4.7978	0.88	pCi/g	57	2.21	3.71	45		57
143 Toluene	10				890	mg/kg	10	0.005	0.005		10	
144 Trichloro-1,2,2-trifluoroethane [1,1,2-]	10					mg/kg	10	0.005	0.005			
145 Trichlorobenzene [1,2,4-]	76				160	mg/kg	76	0.0002	0.36		76	
146 Trichloroethane [1,1,1-]	10				1,000	mg/kg	10	0.005	0.005		10	
147 Trichloroethane [1,1,2-]	10				6.3	mg/kg	10	0.005	0.005		10	
148 Trichloroethene	10				3.2	mg/kg	10	0.005	0.005		10	
149 Trichlorofluoromethane	10					mg/kg	10	0.005	0.005			
150 Trichlorophenol [2,4,5-]	76				8,000	mg/kg	76	0.0002	0.88		76	
151 Trichlorophenol [2,4,6-]	76				64	mg/kg	76	0.0002	0.36		76	
152 Trichloropropane [1,2,3-]	10					mg/kg	10	0.005	0.005			

SUMMARY OF OU 1147 SOIL SAMPLE ANALYSES FOR PRS 50-009, MDA C

ER Quarterly Report

2.24 ADS 1148—TAs-51, -54 (Project Leader: Don Krier)

The quarterly subsurface vapor sampling required in the HSWA Permit for the Laboratory was completed on June 6–21, 1994, and the results are shown in Figure 2-15. This map shows the well locations sampled for monitoring the subsurface VOC plume in and around MDA L, the source area for the VOC plume, and compares the quarterly maximum concentrations of 1,1,1 trichloroethane for two quarters. Concentrations were obtained by photoacoustic radiometer measurements on 16 wells with monitor ports as deep as 200 ft. The photoacoustic radiometer is configured to measure concentrations of 1,1,1 trichloroethane, trichloroethene, tetrachloroethene, vinyl chloride, carbon dioxide, and water. Vinyl chloride and carbon dioxide are end products of biodegradation. Vinyl chloride was detected with the photoacoustic radiometer, but all samples drawn for analysis by fixed-laboratory thermal desorption gas chromatography/mass spectrometry show vinyl chloride as a nondetected compound. The identification of vinyl chloride is caused by interference in the photoacoustic radiometer of other plume vapors, but personnel continue to look for the presence of vinyl chloride.

Table 2-17 provides a summary of available analytical results from core samples taken from boreholes within TA-54 (see Section 1.0 for an explanation of this table). The table summarizes VOC and inorganic chemical results from boreholes drilled in this OU since the start of site characterization in the summer of 1993. The holes represent samples from in and around MDA L and are associated with the subsurface vapor plume mentioned above. Only arsenic and beryllium are found in concentrations that exceed their respective SALs, and these constituents are known to exist naturally in Los Alamos area soils at levels near their SALs. Four compounds listed as nondetects, but whose detection limits exceeded the SALs, are the SVOCs benzo[a]pyrene, bis(2-chloroethyl)ether, dibenzo[a,h]anthracene, and nitrosodi-n-propylamine[N]. The analyses also resulted in 11 tentatively identified compounds. The samples in Table 2-17 are cored from tuff known, from pore-gas analyses, to host the VOC plume at relatively high concentrations; the table includes data from the three 300-ft cores drilled in the source areas of the plume. The absence of volatiles in analyses of the cores supports our developing hypothesis that these contaminants exist only in the vapor phase and are not strongly sorbed on to the available pore surfaces.

Data analysis of measured barometric pressure effects within the mesa continued this quarter. OU personnel have prepared and tested the frequency domain method and software for analysis of barometric fluctuations and their penetration into the soil. Until this quarter, only Well 54-2022 has been instrumented for pressures. Being an old well, it may not be sealed well enough to indicate subsurface pressures accurately; nevertheless, the results indicate the utility of the method. Figure 2-16 shows the amplitude ratio as a function of depth. This is the ratio of the amplitude of a given frequency (period) component at depth, to the amplitude of that component at the surface. In a uniform, one-dimensional soil, the amplitude ratio would decay exponentially with depth. The pressures at the well do not follow the one-dimensional model. Although the data for depths above 100 ft could be accommodated by a model with varying permeability, the behavior below 100 ft suggests that fracture breathing may occur near this depth.

Figure 2-17 presents the phase of various components versus depth. In the one-dimensional model, phase would decay linearly with depth. Phase is a very sensitive measure of anomalous behavior; the information provided in the figure shows that the phases of both the one-day and half-day components become erratic at depths below 100 ft.

Figure 2-18 presents the amplitudes of the pressure difference across the 20-ft intervals between ports. Between 30 and 100 ft, the pressure differences increase with depth, indicating either decreasing permeability or a source of pressure near 100 ft.

Similar measurements in reliable wells will be correlated with passive air flow in a nearby open well, making it possible to predict the subsurface ventilation that may be achieved with a passive venting system.

Other OU activities included cleaning out fill from Boreholes 54-1001 through 54-1006 (drilled last fall) using a large vacuum system. Five of these boreholes were then inserted with instrumented SEAMIST membranes for measurements of subsurface pressure and contaminant concentration in the area of the subsurface vapor plume at MDA L. This will add to our observations used in understanding the effects of air movement through the mesa.

Two boreholes were drilled and sampled near tritium disposal shafts in MDA G during the quarter. The holes, 100 and 150 ft deep, were drilled by another Laboratory group and then sampled by this ADS, thus saving on drilling costs. Analytical results from samples for moisture, tritium, VOCs, SVOCs, PCB/pesticides, radionuclides, and metals are not yet available.

Sediment sampling from 17 stream channels which drain the mesa were taken, screened, and sent for analyses for radionuclides, metals, and PCB/pesticides. Analytical results are expected during the first quarter FY95.

TABLE 2-17
SUMMARY OF ANALYTICAL RESULTS FOR CORE SAMPLES FROM TA-54 BOREHOLES, OU 1148

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
1 Acenaphthylene	12					mg/kg	12	0.33	0.33			
2 Acetone	114	26	0.021	2.1	8,000	mg/kg	88	0.01	0.06		114	
3 Aluminum	25	25	460	10,000		mg/kg						
4 Aniline	12				24,000	mg/kg	12	0.33	0.33		12	
5 Anthracene	12				32	mg/kg	24	0.1	0.21		25	
6 Antimony	25	1	0.13	0.13	0.4	mg/kg	12	0.2	1.5	11	10	4
7 Arsenic	25	13	0.3	1.2		mg/kg	12	0.33	0.33			
8 Azobenzene	12				5,600	mg/kg	4	3.4	17		25	
9 Barium	25	21	3.5	83	0.67	mg/kg	114	0.005	0.006		114	
10 Benzene	114					mg/kg	12	0.33	0.33			
11 Benzidine [m-]	12				0.64	mg/kg	12	0.33	0.33		12	
12 Benzo[a]anthracene	12				0.1	mg/kg	12	0.33	0.33			12
13 Benzo[a]pyrene	12				0.7	mg/kg	12	0.33	0.33		12	
14 Benzo[b]fluoranthene	12				44	mg/kg	12	0.33	0.33		12	
15 Benzo[g,h,i]perylene	12				1.5	mg/kg	12	0.33	0.33		12	
16 Benzo[k]fluoranthene	12				320,000	mg/kg	12	0.33	0.33		12	
17 Benzoic acid	12					mg/kg	12	0.33	0.33			
18 Benzyl alcohol	12				0.16	mg/kg	5	0.08	0.57	18	3	4
19 Beryllium	25	20	0.094	1.1		mg/kg	12	0.33	0.33			
20 Bis(2-chloroethoxy)methane	12				0.12	mg/kg	12	0.33	0.33			12
21 Bis(2-chloroethyl)ether	12				100	mg/kg	12	0.33	0.33		12	
22 Bis(2-chloroisopropyl)ether	12				50	mg/kg	12	0.33	0.33		12	
23 Bis(2-ethylhexyl)phthalate	12					mg/kg	24	3	4.1			
24 Boron	25	1	4	4		mg/kg	94	0.005	0.006			
25 Bromobenzene	95	1	0.0075	0.0075		mg/kg	95	0.005	0.006			
26 Bromochloromethane	95					mg/kg					114	
27 Bromodichloromethane	114				11	mg/kg	114	0.005	0.006		114	
28 Bromoform	114				89	mg/kg	114	0.01	0.012		114	
29 Bromomethane	114				0.43	mg/kg	12	0.33	0.33			
30 Bromophenylphenyl ether [4-]	12					mg/kg	110	0.01	0.022		114	
31 Butanone [2-]	114	4	0.026	4.8	4,000	mg/kg	12	0.33	0.33		12	
32 Butyl benzyl phthalate	12				16,000	mg/kg	94	0.005	0.006			
33 Butylbenzene [n-]	95	1	0.012	0.012		mg/kg	95	0.005	0.006			
34 Butylbenzene [sec-]	95					mg/kg	95	0.005	0.006			
35 Butylbenzene [tert-]	95					mg/kg	95	0.005	0.006			
36 Cadmium	25				80	mg/kg	25	0.4	0.85		25	
37 Calcium	25	23	370	79,000		mg/kg	2	784	967			
38 Carbon disulfide	114				7.4	mg/kg	114	0.005	0.006		114	

TABLE 2-17
SUMMARY OF ANALYTICAL RESULTS FOR CORE SAMPLES FROM TA-54 BOREHOLES, OU 1148

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
39 Carbon tetrachloride	114				0.21	mg/kg	114	0.005	0.006		114	
40 Chloro-3-methylphenol [4-]	12				16,000	mg/kg	12	0.33	0.33		12	
41 Chloroaniline [4-]	12				320	mg/kg	12	0.33	0.33		12	
42 Chlorobenzene	114				67	mg/kg	114	0.005	0.006		114	
43 Chlorodibromomethane	114				83	mg/kg	114	0.005	0.006		114	
44 Chloroethane	114				3,300	mg/kg	114	0.01	0.012		114	
45 Chloroethylvinyl ether [2-]	19					mg/kg	19	0.01	0.012			
46 Chloroform	114				0.21	mg/kg	114	0.005	0.006		114	
47 Chloromethane	114				6.4	mg/kg	114	0.01	0.012		114	
48 Chloronaphthalene [2-]	12				6,400	mg/kg	12	0.33	0.33		12	
49 Chlorophenol [o-]	12				400	mg/kg	12	0.33	0.33		12	
50 Chlorophenylphenyl ether [4-]	12					mg/kg	12	0.33	0.33			
51 Chlorotoluene [o-]	95					mg/kg	95	0.005	0.006			
52 Chlorotoluene [p-]	95					mg/kg	95	0.005	0.006			
53 Chromium	25	21	1.3	6.8	400	mg/kg	4	0.5	0.9		25	
54 Chrysene	12				22	mg/kg	12	0.33	0.33		12	
55 Cobalt	25	17	0.93	6.1		mg/kg	8	0.5	1.9			
56 Copper	25	24	1.2	370	3,000	mg/kg	1	2.7	2.7		25	
57 Cyanide	25				1,600	mg/kg	25	0.05	0.21		25	
58 Di-n-butyl phthalate	12	4	0.44	1	8,000	mg/kg	8	0.33	0.33		12	
59 Di-n-octyl phthalate	12				1,600	mg/kg	12	0.33	0.33		12	
60 Dibenz[a,h]anthracene	12				0.086	mg/kg	12	0.33	0.33			12
61 Dibenzofuran	12					mg/kg	12	0.33	0.33			
62 Dibromo-3-chloropropane [1,2-]	95					mg/kg	95	0.01	0.011			
63 Dibromoethane [1,2-]	95					mg/kg	95	0.005	0.006			
64 Dibromomethane	95	1	0.0073	0.0073		mg/kg	94	0.005	0.006			
65 Dichlorobenzene (1,2) [o-]	107	1	0.013	0.013	1,600	mg/kg	106	0.005	0.33		107	
66 Dichlorobenzene (1,3) [m-]	107	1	0.011	0.011	7,200	mg/kg	106	0.005	0.33		107	
67 Dichlorobenzene (1,4) [p-]	107				290	mg/kg	107	0.005	0.33		107	
68 Dichlorobenzidine [3,3'-]	12				1.6	mg/kg	12	0.33	0.33		12	
69 Dichlorodifluoromethane	95					mg/kg	95	0.01	0.011			
70 Dichloroethane [1,1-]	114				410	mg/kg	114	0.005	0.006		114	
71 Dichloroethane [1,2-]	114	1	0.0093	0.0093	0.2	mg/kg	113	0.005	0.006		114	
72 Dichloroethane [1,1-]	114				0.4	mg/kg	114	0.005	0.006		114	
73 Dichloroethane [1,2-]	19					mg/kg	19	0.005	0.006			
74 Dichloroethane [trans-1,2-]	95				1,600	mg/kg	95	0.005	0.006		95	
75 Dichloroethylene [cis-1,2-]	95				800	mg/kg	95	0.005	0.006		95	
76 Dichlorophenol [2,4-]	12				240	mg/kg	12	0.33	0.33		12	

TABLE 2-17

SUMMARY OF ANALYTICAL RESULTS FOR CORE SAMPLES FROM TA-54 BOREHOLES, OU 1148

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini-mum	Maxi-mum				Mini-mum	Maxi-mum			
77 Dichloropropane [1,2-]	114				6.5	mg/kg	114	0.005	0.006		114	
78 Dichloropropane [1,3-]	95	1	0.0068	0.0068		mg/kg	94	0.005	0.006			
79 Dichloropropane [2,2-]	95					mg/kg	95	0.005	0.006			
80 Dichloropropane [1,1-]	95					mg/kg	95	0.005	0.006			
81 Dichloropropane [cis-1,3-]	114				0.17	mg/kg	114	0.005	0.006		114	
82 Dichloropropane [trans-1,3-]	114				0.17	mg/kg	114	0.005	0.006		114	
83 Diethyl phthalate	12				64,000	mg/kg	12	0.33	0.33		12	
84 Dimethyl phthalate	12				800,000	mg/kg	12	0.33	0.33		12	
85 Dimethylphenol [2,4-]	12				1,600	mg/kg	12	0.33	0.33		12	
86 Dinitrophenol [2,4-]	12				160	mg/kg	12	0.33	0.33		12	
87 Dinitrotoluene [2,4-]	12				1	mg/kg	12	0.33	0.33		12	
88 Dinitrotoluene [2,6-]	12				1	mg/kg	12	0.33	0.33		12	
89 Ethylbenzene	114				3,100	mg/kg	114	0.005	0.006		114	
90 Fluoranthene	12				3,200	mg/kg	12	0.33	0.33		12	
91 Fluorene	12				3,200	mg/kg	12	0.33	0.33		12	
92 Hexachlorobenzene	12				0.44	mg/kg	12	0.33	0.33		12	
93 Hexachlorobutadiene	12				90	mg/kg	12	0.33	0.33		12	
94 Hexachlorocyclopentadiene	12				560	mg/kg	12	0.33	0.33		12	
95 Hexachloroethane	12				80	mg/kg	12	0.33	0.33		12	
96 Hexanone [2-]	114	2	0.02	0.021		mg/kg	112	0.01	0.022		12	
97 Indeno[1,2,3-cd]pyrene	12				0.41	mg/kg	12	0.33	0.33		12	
98 Iron	25	25	1,450	10,000		mg/kg	12	0.33	0.33		12	
99 Isophorone	12				7,400	mg/kg	12	0.33	0.33		12	
100 Isopropylbenzene	95					mg/kg	95	0.005	0.006			
101 Isopropyltoluene [4-]	95	2	0.0052	0.006		mg/kg	93	0.005	0.006			
102 Lead	25	18	3.4	14	500	mg/kg	7	4	5		25	
103 Magnesium	25	21	52	1,300		mg/kg	4	48.5	309		25	
104 Manganese	25	25	79	770	8,000	mg/kg	25	0.02	0.1		25	
105 Mercury	25				24	mg/kg	25	0.005	0.006			
106 Methyl iodide	95					mg/kg	95	0.005	0.006			
107 Methyl-2-pentanone [4-]	114	2	0.034	0.078	510	mg/kg	112	0.01	0.022		114	
108 Methyl-4,6-dinitrophenol [2-]	12					mg/kg	12	0.33	0.33			
109 Methylene chloride	114				5.6	mg/kg	114	0.005	0.028		114	
110 Methyl-naphthalene [2-]	12					mg/kg	12	0.33	0.33		12	
111 Methylphenol [2-]	12				4,000	mg/kg	12	0.33	0.33		12	
112 Methylphenol [4-]	12				400	mg/kg	12	0.33	0.33		12	
113 Molybdenum	25	1	3.4	3.4	400	mg/kg	24	2	6.2		25	
114 Naphthalene	12				3,200	mg/kg	12	0.33	0.33		12	

TABLE 2-17
SUMMARY OF ANALYTICAL RESULTS FOR CORE SAMPLES FROM TA-54 BOREHOLES, OU 1148

Analyte	Number of Values Per Analyte	Number Of Values >= LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number of Values >=SAL, Including >=LOD	Number of Values <SAL, Including <LOD	Number of Values <LOD, with LOD>=SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
115 Nickel	25	2	2.3	4.6	1,600	mg/kg	23	2	2.4		25	
116 Nitroaniline [2-]	12					mg/kg	12	0.33	0.33			
117 Nitroaniline [3-]	12					mg/kg	12	0.33	0.33			
118 Nitroaniline [4-]	12					mg/kg	12	0.33	0.33			
119 Nitrobenzene	12				5.3	mg/kg	12	0.33	0.33		12	
120 Nitrophenol [2-]	12					mg/kg	12	0.33	0.33			
121 Nitrophenol [4-]	12					mg/kg	12	0.33	0.33			12
122 Nitrosodi-n-propylamine [N-]	12				0.1	mg/kg	12	0.33	0.33			
123 Nitrosodimethylamine [N-]	12					mg/kg	12	0.33	0.33			
124 Nitrosodiphenylamine [N-]	12				140	mg/kg	12	0.33	0.33		12	
125 Pentachlorophenol	12				5.8	mg/kg	12	0.33	0.33		12	
126 Phenanthrene	12					mg/kg	12	0.33	0.33			
127 Phenol	12				48,000	mg/kg	12	0.33	0.33			
128 Potassium	25	21	180	1,000		mg/kg	4	220	777			
129 Propylbenzene	95					mg/kg	95	0.005	0.006			
130 Pyrene	12				2,400	mg/kg	12	0.33	0.33		12	
131 Selenium	25	4	0.3	1	400	mg/kg	21	0.2	0.43		25	
132 Silver	25				400	mg/kg	25	1	1.1		25	
133 Sodium	25	21	150	640		mg/kg	4	256	538			
134 Styrene	114				16,000	mg/kg	114	0.005	0.006		114	
135 Tetrachloroethane [1,1,1,2-]	95					mg/kg	95	0.005	0.006			
136 Tetrachloroethane [1,1,2,2-]	114				3.9	mg/kg	114	0.005	0.006		114	
137 Tetrachloroethylene	114				5.9	mg/kg	114	0.005	0.006		114	
138 Thallium	25	1	0.3	0.3	6.4	mg/kg	24	0.1	0.21		25	
139 Toluene	114				890	mg/kg	114	0.005	0.006		114	
140 Trichlorobenzene [1,2,4-]	12				160	mg/kg	12	0.33	0.33		12	
141 Trichloroethane [1,1,1-]	114				1,000	mg/kg	114	0.005	0.006		114	
142 Trichloroethane [1,1,2-]	114				6.3	mg/kg	114	0.005	0.006		114	
143 Trichloroethene	114				3.2	mg/kg	114	0.005	0.006		114	
144 Trichlorofluoromethane	114					mg/kg	114	0.005	0.015			
145 Trichlorophenol [2,4,5-]	12				8,000	mg/kg	12	0.33	0.33		12	
146 Trichlorophenol [2,4,6-]	12				64	mg/kg	12	0.33	0.33		12	
147 Trichloropropene [1,2,3-]	95	1	0.014	0.014		mg/kg	94	0.005	0.006			
148 Trimethylbenzene [1,2,4-]	95					mg/kg	95	0.005	0.006			
149 Trimethylbenzene [1,3,5-]	95					mg/kg	95	0.005	0.006			
150 Vanadium	25	18	1.2	9.5	560	mg/kg	7	0.8	2		25	
151 Vinyl acetate	31					mg/kg	31	0.01	0.012			
152 Vinyl chloride	114				0.012	mg/kg	114	0.01	0.012	1	113	

TABLE 2-17
SUMMARY OF ANALYTICAL RESULTS FOR CORE SAMPLES FROM TA-54 BOREHOLES, OU 1148

Analyte	Number of Values Per Analyte	Number Of Values ≥ LOD	Concentration Range		SAL	Units	Number Of Values < LOD	LOD Range		Number of Values ≥ SAL, including ≥ LOD	Number of Values < SAL, including < LOD	Number of Values < LOD, with LOD ≥ SAL
			Mini- mum	Maxi- mum				Mini- mum	Maxi- mum			
153 Xylenes (o + m + p) [Mixed-]	114				160,000	mg/kg	114	0.005	0.006		114	
154 Zinc	25	25	12	240	24,000	mg/kg					25	
Total Number of Values	7,862	396					7,466			30	4,973	56

Figure 2-16. Amplitude ratio as a function of depth for Well 54-0022, OU 1148. (J day = Julian day.)

Figure 2-17. Phase of absolute pressure at depth for Well 54-0022, OU 1148.

Figure 2-18. Pressure amplitude across 20-ft increment of depth for Well 54-0022, OU 1148.

2.25 ADS 1154—TA-57 (Project Leader: Tracy Glatzmaier)

The final draft of the RFI work plan for OU 1154 was submitted to the EPA on May 23, 1994.

Phase I RFI sampling will begin as soon as the requirements for the National Environmental Policy Act have been completed to the satisfaction of the DOE and the United States Forest Service. The DOE Environmental Checklist for OU 1154 was combined with OUs 1085, 1100, and 1136 and was submitted on June 24, 1994.

Other preparations for the RFI sampling included the following activities. The biological survey for the sludge pit, which is outside of the TA-57 boundary, has been completed. It was determined that the Jemez Mountains salamander will not be a cause for concern because sampling will not occur on canyon slopes. The site-specific health and safety plan for Phase I RFI sampling was started on May 25, 1994, and is near completion. Coordination of notifications and preparation for RFI field work is in process, and the tentative date for the readiness review is July 22, depending upon the DOE Environmental Checklist and the United States Forest Service approval.

The Baseline Change proposal was submitted on May 1, 1994.

2.26 ADS 1157—TAs-8, -9, -23, -69 (Project Leader: Tracy Glatzmaier)

Phase I RFI sampling began on April 7 when the first round of water sampling in Pajarito Creek and its tributaries occurred. Water samples were taken at Homestead Spring, which is located in Pajarito Canyon north of MDA M, at Starmer's and Charlie's Springs, which are located in a tributary to Pajarito Canyon east of MDA M, and at a point on Pajarito Creek, which is located upstream from TA-8 and MDA M. Analyses were performed for extended analyte-list volatile and semivolatile organics, inorganic compounds, organochlorine, pesticides, PCBs, major ions, nitrate, sulfate, silicate, total dissolved solids, high explosives, fecal coliform, fecal streptococcus, gross gamma, and tritium. This sampling will continue to occur on a quarterly basis through fall of 1994.

Phase I RFI surface soil sampling, outfall sampling, and tank and drain sampling began on April 19 and were completed June 9. Two hundred eighty-four samples were taken for a range of analytes dependent on historical information. Analyses were performed for extended analyte-list volatile and semivolatile organics, extended analyte-list inorganic compounds, barium, beryllium, cadmium, chromium, lead, mercury, copper, silver, cyanide, nitrate, acetone, benzene, carbon tetrachloride, chloroform, pentachlorophenol, methylethylketone, toluene, organochlorine, pesticides, PCBs, high explosives, gross alpha, gross beta, gross radiation, and strontium 90. The high-explosives spot test was used for field screening and resulted in one positive test in ducts at MDA M. "Yellow cake" or uranium oxide was discovered in one of the grid cells at MDA M after obtaining a field monitoring measurement for radiation that was high. No analyses have been validated.

The EPA notice of deficiency on the RFI work plan for OU 1157 was received this quarter. The response was submitted on May 23, 1994.

EG&G took additional radiation reflection measurements at one location at PRS 9-012 (the TA-9 bald spots) on June 23. The measurements were taken at the same location where readings were taken last year, in order to obtain more refined data. TA-8 and TA-9 were also covered in EG&G's multispectral flyover in June.

The Baseline Change proposal was submitted on May 1, 1994.

3.0 REFERENCES

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1129," Los Alamos National Laboratory Report LA-UR-92-800, Los Alamos, New Mexico. (LANL 1992, 0785)

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1147," Los Alamos National Laboratory Report LA-UR-92-969, Los Alamos, New Mexico. (LANL 1992, 0787)

LANL (Los Alamos National Laboratory), November 1993. "Installation Work Plan for Environmental Restoration," Revision 3, Los Alamos National Laboratory Report LA-UR-93-3987, Los Alamos, New Mexico. (LANL 1993, 1017)

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