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ENVIRONMENTAL LABORATORIES
an Analytica Group company

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URS Operating Services, Inc.
1099 18th Street #710
Denver CO 80202-1908

Attn: Randy Perlis

Order #: 98-10-026
Date: 10/13/98 11:27
Work ID: 75-71203 N. DENVER SOILS
Date Received: 10/02/98
Date Completed: 10/13/98

SAMPLE IDENTIFICATION

Sample Number	Client Description
01	UB-DISP-1

Sample Number	Client Description

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Claire K. Toon

Claire K. Toon
Project Manager

Samples were prepared and analyzed according to methods outlined in the following references:

- Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, January 1996.

All analyses meet quality assurance objectives.

Sample: 01A UB-DISP-1 Collected: 08/12/98 Matrix: SOIL

Test Description	Method	Result	Q	Limit	Units	Analyzed
Ignitability	EPA 1010	150		47	Deg F/1atm	10/07/98
Paint Filter Test	SW 9095	ND		0.10	% Free liq	10/08/98

THE FOLLOWING CODES APPLY TO THE ANALYTICAL REPORT

RESULT field...
- ND = not detected at the reported limit
- NA = analyte not applicable (see case narrative/methods for discussion)

Q (qualifier) field...

GENERAL:
- * = Recovery or %RPD outside method specifications
- H = value is estimated due to analysis run outside EPA holding times
- E = reported concentration is above the instrument calibration range
- D = analyte was diluted to bring within instrument calibration range or to remove matrix interferences

ORGANIC ANALYSIS DATA QUALIFIERS:
- B = analyte was detected in the laboratory method blank
- J = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL)

INORGANIC ANALYSIS DATA QUALIFIERS:
- B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL)
- W = post digestion spike did not meet criteria (85-115%)
- S = reported value determined by the Method of Standard Additions

IGN_S:	IGNITABILITY	METHOD: 1010
PNTFLT:	PAINT FILTER TEST (Free Liquids)	METHOD: 9095

Sample: 01A UB-DISP-1 Matrix: SOIL

Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
Ignitability	EPA 1010	08/12/98	10/02/98	NA		10/07/98
Paint Filter Test	SW 9095	08/12/98	10/02/98	NA		10/08/98

PAGE ___ OF ___

Transferred [illegible] 10/1

WET CHEMISTRY WORKSHEET

LGN: _____
CASE: _____

METHOD: PNT FLT

DATE: 10/8/95
UNITS: — ml
ANALYST: [illegible]

SAMPLE ID	SAMPLE SIZE mL or g	BURETTE OR INSTRUMENT READING	ALIQUOT CONC	SERIAL DF	PREP DF	FINAL CONC
9810026-01A	100g		0 ml			ND - no moisture

COMMENTS: OTHER 9810080100000

REVIEWED BY: JMC 10/13/95

transferred Ulkb 10/08/98

ANALYTICA INCORPORATED

PAGE 1 OF 1

IGNITABILITY

DATE: 10-7-98

LGN: _____

ANALYST: SBP

UNITS: °F @ 1 ATM SEA LEVEL

	SAMPLE ID	SAMPLE MODEL	OBSERVATIONS & THERMOMETER READINGS		FINAL RESULT	MATRIX
LCS KB	ICV (PCN305)	629 mm Hg	35 → 96	+8°	104 °F	~~86.7%~~ TV= ~~[illegible]~~ 95
DLCS KBD	ICV Dup		35 → 98	+8	106 °F	ok
	9809190-02A		35 → 122	+8	130 °F	S
	Dup -02A		35 → 126	+8	134 °F	ok
	~~-02A~~ SBP 10-7-98					
	9810026-01A		35 → 146	+8	154 °F	S

DEGREES F AT 1 ATM SEA LEVEL = °F + 0.06 (760 − F) F = ambient barometric pressure, mm Hg

LCS & LCS-DUPE WITH METHYLCELLOSOLVE TV = 115° F

COMMENTS: FLASH 9810070100000 Ambient Pressure = 629

ANALYTICA
ENVIRONMENTAL
LABORATORIES
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URS Operating Services, Inc.
1099 18th Street #710
Denver CO 80202-1908

Attn: Randy Perlis

RECEIVED
OCT 1 1998
UOS/START

Order #: 98-08-091
Date: 09/03/98 16:01
Work ID: 75-71203 N. DENVER SOILS
Date Received: 08/13/98
Date Completed: 09/03/98

SAMPLE IDENTIFICATION

Sample Number	Client Description	Sample Number	Client Description
01	UB-DISP-1		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. A listing of data qualifiers and analytical codes is located on the TEST METHODOLOGIES page at the end of the report.

If you have any questions regarding the analyses, please feel free to call.

Sincerely,

Claire K. Toon

Claire K. Toon
Project Manager

Samples were prepared and analyzed according to methods outlined in the following references:

- Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, January 1996.

Problems encountered with the analyses are discussed in the following narrative.

The method blank spike for the TCLP ICP metals is reported with recoveries for barium and cadmium above quality control guidelines. If detected in samples, values for these elements could be biased high. The data is not significantly impacted because the cadmium spike recovery is only 2% above QC limits, and the cadmium result is well below the action limit.

The detection limit for barium has been raised from 0.02 ppm to 0.65 ppm due to its presence in the method blank.

Target compound hexachloroethane was recovered below the quality assurance limits in the TCLP semivolatile method blank spike, matrix spike and matrix spike duplicate. If detected in samples, results for this compound could be biased low. This target was not, however, detected in the sample for this project.

Sample: 01A UB-DISP-1 Collected: 08/12/98 Matrix: SOIL

Test Description	Method	Result	Q	Limit	Units		Analyzed
BNA's, TCLP Extracted	SW 1311/8270						
Cresol, Total		ND		0.050	mg/L		08/30/98
1,4-Dichlorobenzene		ND		0.050	mg/L		08/30/98
2,4-Dinitrotoluene		ND		0.050	mg/L		08/30/98
Hexachlorobenzene		ND		0.050	mg/L		08/30/98
Hexachlorobutadiene		ND		0.050	mg/L		08/30/98
Hexachloroethane		ND		0.050	mg/L		08/30/98
Nitrobenzene		ND		0.050	mg/L		08/30/98
Pentachlorophenol		ND		0.25	mg/L		08/30/98
2,4,5-Trichlorophenol		ND		0.25	mg/L		08/30/98
2,4,6-Trichlorophenol		ND		0.050	mg/L		08/30/98
Pyridine		ND		0.050	mg/L		08/30/98
SURROGATES, % Recovery							
2-Fluorophenol		37.3		Min:	25	Max:	121
Phenol-d5		41.3		Min:	24	Max:	113
Nitrobenzene-d5		48.0		Min:	23	Max:	120
2-Fluorobiphenyl		42.0		Min:	30	Max:	115
2,4,6-Tribromophenol		46.7		Min:	19	Max:	122
Terphenyl-d14		56.0		Min:	18	Max:	137
ICP Metals, TCLP Extracted	SW 3010/6010						
Arsenic		1.3		0.050	mg/L		08/27/98
Barium		2.3		0.65	mg/L		08/27/98
Cadmium		0.020		0.0050	mg/L		08/27/98
Chromium		ND		0.010	mg/L		08/27/98
Lead		0.11		0.050	mg/L		08/27/98
Selenium		ND		0.10	mg/L		08/27/98
Silver		ND		0.010	mg/L		08/27/98
Mercury, TCLP Extracted	SW 7470	ND		0.0020	mg/L		09/01/98
Pesticides, TCLP Extracted	SW 1311/8080						
Lindane		ND		0.00013	mg/L		08/31/98
Heptachlor		ND		0.00013	mg/L		08/31/98
Heptachlor Epoxide		ND		0.00013	mg/L		08/31/98
Endrin		ND		0.00025	mg/L		08/31/98
Chlordane		ND		0.00025	mg/L		08/31/98
Methoxychlor		ND		0.0013	mg/L		08/31/98
Toxaphene		ND		0.013	mg/L		08/31/98
SURROGATES, % Recovery							
Decachlorobiphenyl		44.0		Min:	26	Max:	137
Tetrachloro-m-xylene		54.0		Min:	26	Max:	103

Sample: 01A UB-DISP-1 Collected: 08/12/98 Matrix: SOIL

Test Description	Method	Result	Q	Limit	Units		Analyzed
Volatiles, TCLP Extracted	SW 1311/8260						
Benzene		ND		0.0050	mg/L		08/26/98
Carbon Tetrachloride		ND		0.050	mg/L		08/26/98
Chlorobenzene		ND		0.015	mg/L		08/26/98
Chloroform		ND		0.015	mg/L		08/26/98
1,2-Dichloroethane		ND		0.025	mg/L		08/26/98
1,1-Dichloroethene		ND		0.025	mg/L		08/26/98
2-Butanone (MEK)		ND		0.25	mg/L		08/26/98
Tetrachloroethene		ND		0.015	mg/L		08/26/98
Trichloroethene		ND		0.015	mg/L		08/26/98
Vinyl Chloride		ND		0.010	mg/L		08/26/98
SURROGATES, % Recovery							
Dibromofluoromethane		100		Min:	70	Max:	130
Toluene d-8		96.0		Min:	70	Max:	130
Bromofluorobenzene		96.0		Min:	70	Max:	130

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B = analyte was detected above the instrument detection limit (IDL) but below the analytical reporting limit (CRDL)
W = post digestion spike did not meet criteria (80-120%)
S = reported value determined by the Method of Standard Additions

3520TP:	Continuous Liquid-Liquid Extraction of TCLP Extract for Pesticides	METHOD: 3520B
1311_P:	PESTICIDES, TCLP Extracted	METHOD: 1311/8080
	Maximum Contaminant Level (mg/L)	
	Chlordane	0.03
	Endrin	0.02
	Heptachlor	0.008
	Heptachlor Epoxide	0.008
	Lindane	0.4
	Methoxychlor	10
	Toxaphene	0.5
1311EM:	TCLP EXTRACTION Toxicity Characteristic Leachate Procedure (Metals)	METHOD: 1311
1311EO:	TCLP EXTRACTION Toxicity Characteristic Leachate Procedure (Organics)	METHOD: 1311
1311HG:	MERCURY, TCLP Extracted	METHOD: 7470
	Maximum Contaminant Level (mg/L)	0.2
ICPTWE:	Acid Digestion of TCLP Extracts for Total Metals Analysis by Inductively Coupled Plasma (ICP) Spectroscopy according to SW-846.	METHOD: 3010A
1311_M:	METALS (ICP), TCLP Extracted	METHOD: 3010/6010
	Maximum Contaminant Level (mg/L)	
	Arsenic	5.0
	Barium	100
	Cadmium	1.0
	Chromium	5.0
	Lead	5.0
	Selenium	1.0
	Silver	5.0
1311_V:	VOLATILES, TCLP Extracted:	METHOD: 1311/8240
	Maximum Contaminant Level (mg/L)	
	Benzene	0.5
	Carbon Tetrachloride	0.5
	Chlorobenzene	100
	Chloroform	6.0
	1,2-Dichloroethane	0.5
	1,1-Dichloroethene	0.7
	2-Butanone (MEK)	200
	Tetrachloroethene	0.7
	Trichloroethene	0.5
	Vinyl Chloride	0.2

1311_Z:	TCLP EXTRACTION - Zero Headspace for Volatiles Toxicity Characteristic Leachate Procedure	METHOD: 1311
3520TB:	Continuous Liquid-Liquid Extraction of TCLP Extract for Semi-volatiles.	METHOD: 3520B
1311_B:	SEMIVOLATILE ORGANICS, TCLP Extracted	METHOD: 1311/8270

Maximum Contaminant Level (mg/L)	
Cresol, Total	200
1,4-Dichlorobenzene	7.5
2,4-Dinitrotoluene	0.13
Hexachlorobenzene	0.13
Hexachlorobutadiene	0.5
Hexachloroethane	3.0
Nitrobenzene	2.0
Pentachlorophenol	100
Pyridine	5.0
2,4,5-Trichlorophenol	400
2,4,6-Trichlorophenol	2.0

Sample: 01A UB-DISP-1 Matrix: SOIL

Analysis	Method	Collected	Received	TCLP date	Extracted	Analyzed
BNA's, TCLP Extracted	SW 1311/8270	08/12/98	08/13/98	08/17/98	08/18/98	08/30/98
ICP Metals, TCLP Extracted	SW 3010/6010	08/12/98	08/13/98	08/18/98	08/18/98	08/27/98
Mercury, TCLP Extracted	SW 7470	08/12/98	08/13/98	08/18/98	08/31/98	09/01/98
Pesticides, TCLP Extracted	SW 1311/8080	08/12/98	08/13/98	08/17/98	08/18/98	08/31/98
Volatiles, TCLP Extracted	SW 1311/8260	08/12/98	08/13/98	08/20/98	08/20/98	08/26/98

QA/QC REPORT

METHOD BLANK SUMMARY

09/03/98

CLIENT: URS_OPR

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	%REC	FLAG	QC SPECS LOW	QC SPECS UPPER
MB-9800966	BNAs, TCLP Extracted	mg/L	08/29/98							
	Cresol, Total			ND	10					
	1,4-Dichlorobenzene			ND	10					
	2,4-Dinitrotoluene			ND	10					
	Hexachlorobenzene			ND	10					
	Hexachlorobutadiene			ND	10					
	Hexachloroethane			ND	10					
	Nitrobenzene			ND	10					
	Pentachlorophenol			ND	50					
	2,4,5-Trichlorophenol			ND	50					
	2,4,6-Trichlorophenol			ND	10					
	Pyridine			ND	10					
	2-Fluorophenol			57		150	38.0		25	121
	Phenol-d5			58		150	38.7		24	113
	Nitrobenzene-d5			49		100	49.0		23	120
	2-Fluorobiphenyl			44		100	44.0		30	115
	2,4,6-Tribromophenol			76		150	50.7		19	122
	Terphenyl-d14			49		100	49.0		18	137
MB-9800962	METALS, TCLP Extracted	mg/L	08/27/98							
	Arsenic			ND	0.050					
	Barium			ND	0.65					
	Cadmium			ND	0.0050					
	Chromium			ND	0.010					
	Lead			ND	0.050					
	Selenium			ND	0.10					
	Silver			ND	0.010					
MB	MERCURY, TCLP Extracted	mg/L	09/01/98	ND	0.0020					
MB-9800965	PESTICIDES, TCLP Extracted	mg/L	08/31/98							
	Lindane			ND	0.00013					
	Heptachlor			ND	0.00013					
	Heptachlor Epoxide			ND	0.00013					
	Endrin			ND	0.00025					
	Chlordane			ND	0.00025					
	Methoxychlor			ND	0.0013					
	Toxaphene			ND	0.013					
	Decachlorobiphenyl			0.00073		0.0010	73.0		26	137
	Tetrachloro-m-xylene			0.00058		0.0010	58.0		26	103

QA/QC REPORT

METHOD BLANK SUMMARY

CLIENT: URS_OPR

09/03/98

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	%REC	FLAG	QC SPECS LOW	QC SPECS UPPER
MB-9800980	Volatiles, TCLP Extracted	mg/L	08/26/98							
	Benzene			ND	0.0050					
	Carbon Tetrachloride			ND	0.050					
	Chlorobenzene			ND	0.015					
	Chloroform			ND	0.015					
	1,2-Dichloroethane			ND	0.025					
	1,1-Dichloroethene			ND	0.025					
	2-Butanone (MEK)			ND	0.25					
	Tetrachloroethene			ND	0.015					
	Trichloroethene			ND	0.015					
	Vinyl Chloride			ND	0.010					
	Dibromofluoromethane			0.23		0.25	92.0		70	130
	Toluene d-8			0.24		0.25	96.0		70	130
	Bromofluorobenzene			0.23		0.25	92.0		70	130

QA/QC REPORT

METHOD BLANK SPIKE SUMMARY

CLIENT: URS_OPR

09/03/98

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	REF VAL	%REC	FLAG	QC SPECS LOW	QC SPECS UPPER
MBS-9800966	BNAs, TCLP Extracted	mg/L	08/29/98								
	Cresol, Total			62	10	150	ND	41.3		32	119
	1,4-Dichlorobenzene			15	10	50	ND	30.0		20	124
	2,4-Dinitrotoluene			27	10	50	ND	54.0		39	139
	Hexachlorobenzene			30	10	50	ND	60.0		10	152
	Hexachlorobutadiene			22	10	50	ND	44.0		24	116
	Hexachloroethane			14	10	50	ND	28.0	*	40	113
	Nitrobenzene			27	10	50	ND	54.0		35	180
	Pentachlorophenol			35	50	50	ND	70.0		14	176
	2,4,5-Trichlorophenol			26	50	50	ND	52.0		37	144
	2,4,6-Trichlorophenol			25	10	50	ND	50.0		37	144
	Pyridine			13	10	50	ND	26.0		25	150
	2-Fluorophenol			55		150		36.7		25	121
	Phenol-d5			56		150		37.3		24	113
	Nitrobenzene-d5			51		100		51.0		23	120
	2-Fluorobiphenyl			52		100		52.0		30	115
	2,4,6-Tribromophenol			82		150		54.7		19	122
	Terphenyl-d14			52		100		52.0		18	137
MBS-9800962	METALS, TCLP Extracted	mg/L	08/27/98								
	Arsenic			2.2	0.050	2.0	ND	110		80	120
	Barium			2.6	0.65	2.0	ND	130	*	80	120
	Cadmium			0.061	0.0050	0.050	ND	122	*	80	120
	Chromium			0.19	0.010	0.20	ND	95.0		80	120
	Lead			0.48	0.050	0.50	ND	96.0		80	120
	Selenium			2.4	0.10	2.0	ND	120		80	120
	Silver			0.048	0.010	0.050	ND	96.0		80	120
MBS	MERCURY, TCLP Extracted	mg/L	09/01/98	0.0101	0.0020	0.0100	ND	101		80	120
MBS-9800965	PESTICIDES, TCLP Extracted	mg/L	08/31/98								
	Lindane			0.0026	0.00013	0.0050	ND	52.0		41	108
	Heptachlor			0.0029	0.00013	0.0050	ND	58.0		41	115
	Heptachlor Epoxide			0.0030	0.00013	0.0050	ND	60.0		24	129
	Endrin			0.0036	0.00025	0.0050	ND	72.0		48	138
	Chlordane			ND	0.00025		ND				
	Methoxychlor			0.0041	0.0013	0.0050	ND	82.0		59	133
	Toxaphene			ND	0.013		ND				
	Decachlorobiphenyl			0.00066		0.0010		66.0		26	137
	Tetrachloro-m-xylene			0.00066		0.0010		66.0		26	103

QA/QC REPORT

METHOD BLANK SPIKE SUMMARY

CLIENT: URS_OPR

09/03/98

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	REF VAL	%REC	FLAG	QC SPECS LOW	QC SPECS UPPER
MBS-9800980	Volatiles, TCLP Extracted	mg/L	08/26/98								
	Benzene			0.11	0.0050	0.10	ND	110		70	130
	Carbon Tetrachloride			0.097	0.050	0.10	ND	97.0		70	130
	Chlorobenzene			0.11	0.015	0.10	ND	110		70	130
	Chloroform			0.10	0.015	0.10	ND	100		70	130
	1,2-Dichloroethane			0.097	0.025	0.10	ND	97.0		70	130
	1,1-Dichloroethene			0.098	0.025	0.10	ND	98.0		70	130
	2-Butanone (MEK)			0.097	0.25	0.10	ND	97.0		70	130
	Tetrachloroethene			0.10	0.015	0.10	ND	100		70	130
	Trichloroethene			0.11	0.015	0.10	ND	110		70	130
	Vinyl Chloride			0.079	0.010	0.10	ND	79.0		70	130
	Dibromofluoromethane			0.23		0.25		92.0		70	130
	Toluene d-8			0.25		0.25		100		70	130
	Bromofluorobenzene			0.23		0.25		92.0		70	130

QA/QC REPORT

MATRIX SPIKE SUMMARY

CLIENT: URS_OPR

09/03/98

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	REF VAL	%REC	FLAG	QC SPECS LOW	QC SPECS UPPER
9808068-06A	BNAs, TCLP Extracted	mg/L	08/30/98								
	Cresol, Total			0.25	0.050	0.75	ND	33.3		32	119
	1,4-Dichlorobenzene			0.046	0.050	0.25	ND	18.4	*	20	124
	2,4-Dinitrotoluene			0.12	0.050	0.25	ND	48.0		39	139
	Hexachlorobenzene			0.15	0.050	0.25	ND	60.0		10	152
	Hexachlorobutadiene			0.069	0.050	0.25	ND	27.6		24	116
	Hexachloroethane			0.034	0.050	0.25	ND	13.6	*	40	113
	Nitrobenzene			0.12	0.050	0.25	ND	48.0		35	180
	Pentachlorophenol			0.13	0.25	0.25	ND	52.0		14	176
	2,4,5-Trichlorophenol			0.11	0.25	0.25	ND	44.0		37	144
	2,4,6-Trichlorophenol			0.095	0.050	0.25	ND	38.0		37	144
	Pyridine			0.048	0.050	0.25	ND	19.2	*	25	150
	2-Fluorophenol			0.21		0.75		28.0		25	121
	Phenol-d5			0.20		0.75		26.7		24	113
	Nitrobenzene-d5			0.22		0.50		44.0		23	120
	2-Fluorobiphenyl			0.22		0.50		44.0		30	115
	2,4,6-Tribromophenol			0.31		0.75		41.3		19	122
	Terphenyl-d14			0.19		0.50		38.0		18	137
S808091-01A	METALS, TCLP Extracted	mg/L	08/27/98								
	Arsenic			3.4	0.050	2.0	1.3	105		70	130
	Barium			4.3	0.65	2.0	2.3	100		70	130
	Cadmium			0.078	0.0050	0.050	0.020	116		70	130
	Chromium			0.19	0.010	0.20	ND	95.0		70	130
	Lead			0.59	0.050	0.50	0.11	96.0		70	130
	Selenium			2.4	0.10	2.0	ND	120		70	130
	Silver			0.046	0.010	0.050	ND	92.0		70	130
S808135-04A	MERCURY, TCLP Extracted	mg/L	09/01/98	0.0108	0.0020	0.0100	ND	108		70	130
S808068-06A	PESTICIDES, TCLP Extracted	mg/L	09/01/98								
	Lindane			0.0031	0.00013	0.0050	ND	62.0		50	150
	Heptachlor			0.0030	0.00013	0.0050	ND	60.0		50	150
	Heptachlor Epoxide			0.0034	0.00013	0.0050	ND	68.0		50	150
	Endrin			0.0042	0.00025	0.0050	ND	84.0		50	150
	Chlordane			ND	0.00025		ND				
	Methoxychlor			0.0047	0.0013	0.0050	ND	94.0		50	150
	Toxaphene			ND	0.013		ND				
	Decachlorobiphenyl			0.00090		0.0010		90.0		26	137
	Tetrachloro-m-xylene			0.00064		0.0010		64.0		26	103

QA/QC REPORT

MATRIX SPIKE SUMMARY

09/03/98

CLIENT: URS_OPR

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	REF VAL	%REC	FLAG	QC SPECS LOW	QC SPECS UPPER
9808091-01A	Volatiles, TCLP Extracted	mg/L	08/26/98								
	Benzene			0.12	0.0050	0.10	ND	120		70	130
	Carbon Tetrachloride			0.10	0.050	0.10	ND	100		70	130
	Chlorobenzene			0.11	0.015	0.10	ND	110		70	130
	Chloroform			0.11	0.015	0.10	ND	110		70	130
	1,2-Dichloroethane			0.11	0.025	0.10	ND	110		70	130
	1,1-Dichloroethene			0.097	0.025	0.10	ND	97.0		70	130
	2-Butanone (MEK)			0.098	0.25	0.10	ND	98.0		70	130
	Tetrachloroethene			0.11	0.015	0.10	ND	110		70	130
	Trichloroethene			0.11	0.015	0.10	ND	110		70	130
	Vinyl Chloride			0.093	0.010	0.10	ND	93.0		70	130
	Dibromofluoromethane			0.24		0.25		96.0		70	130
	Toluene d-8			0.24		0.25		96.0		70	130
	Bromofluorobenzene			0.23		0.25		92.0		70	130

QA/QC REPORT

SPIKE DUPLICATE SUMMARY

CLIENT: URS_OPR

09/03/98

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	SPIKE	REF VAL	%REC	FL	%RPD	QC SPECS LOW	QC SPECS UPPER
9808068-06A	BNAs, TCLP Extracted	mg/L	08/30/98									
	Cresol, Total			0.31	0.050	0.75	ND	41.3		21.4	32	119
	1,4-Dichlorobenzene			0.074	0.050	0.25	ND	29.6		46.7	20	124
	2,4-Dinitrotoluene			0.13	0.050	0.25	ND	52.0		8.00	39	139
	Hexachlorobenzene			0.15	0.050	0.25	ND	60.0		0.00	10	152
	Hexachlorobutadiene			0.098	0.050	0.25	ND	39.2		34.7	24	116
	Hexachloroethane			0.066	0.050	0.25	ND	26.4	*	64.0	40	113
	Nitrobenzene			0.13	0.050	0.25	ND	52.0		8.00	35	180
	Pentachlorophenol			0.15	0.25	0.25	ND	60.0		14.3	14	176
	2,4,5-Trichlorophenol			0.13	0.25	0.25	ND	52.0		16.7	37	144
	2,4,6-Trichlorophenol			0.12	0.050	0.25	ND	48.0		23.3	37	144
	Pyridine			0.062	0.050	0.25	ND	24.8	*	25.5	25	150
	2-Fluorophenol			0.27		0.75		36.0		25.0	25	121
	Phenol-d5			0.28		0.75		37.3		33.1	24	113
	Nitrobenzene-d5			0.24		0.50		48.0		8.70	23	120
	2-Fluorobiphenyl			0.24		0.50		48.0		8.70	30	115
	2,4,6-Tribromophenol			0.37		0.75		49.3		17.7	19	122
	Terphenyl-d14			0.27		0.50		54.0		34.8	18	137
S808068-06A	PESTICIDES, TCLP Extracted	mg/L	09/01/98									
	Lindane			0.0031	0.00013	0.0050	ND	62.0		0.00	50	150
	Heptachlor			0.0035	0.00013	0.0050	ND	70.0		15.4	50	150
	Heptachlor Epoxide			0.0034	0.00013	0.0050	ND	68.0		0.00	50	150
	Endrin			0.0041	0.00025	0.0050	ND	82.0		2.41	50	150
	Chlordane			ND	0.00025		ND					
	Methoxychlor			0.0046	0.0013	0.0050	ND	92.0		2.15	50	150
	Toxaphene			ND	0.013		ND					
	Decachlorobiphenyl			0.00093		0.0010		93.0		3.28	26	137
	Tetrachloro-m-xylene			0.00071		0.0010		71.0		10.4	26	103
9808091-01A	Volatiles, TCLP Extracted	mg/L	08/26/98									
	Benzene			0.12	0.0050	0.10	ND	120		0.00	70	130
	Carbon Tetrachloride			0.099	0.050	0.10	ND	99.0		1.01	70	130
	Chlorobenzene			0.11	0.015	0.10	ND	110		0.00	70	130
	Chloroform			0.11	0.015	0.10	ND	110		0.00	70	130
	1,2-Dichloroethane			0.10	0.025	0.10	ND	100		9.52	70	130
	1,1-Dichloroethene			0.096	0.025	0.10	ND	96.0		1.04	70	130
	2-Butanone (MEK)			0.10	0.25	0.10	ND	100		2.02	70	130
	Tetrachloroethene			0.10	0.015	0.10	ND	100		9.52	70	130
	Trichloroethene			0.11	0.015	0.10	ND	110		0.00	70	130
	Vinyl Chloride			0.095	0.010	0.10	ND	95.0		2.13	70	130
	Dibromofluoromethane			0.23		0.25		92.0		4.26	70	130
	Toluene d-8			0.23		0.25		92.0		4.26	70	130
	Bromofluorobenzene			0.23		0.25		92.0		0.00	70	130

QA/QC REPORT

SAMPLE DUPLICATE SUMMARY

CLIENT: URS_OPR

09/03/98

ORDER#: 9808091

SAMPLE ID	ANALYTE	UNITS	ANAL DATE	RESULT	LIMIT	REF VAL	%RPD	FLAG	QC SPECS UPPER
D808091-01A	METALS, TCLP Extracted	mg/L	08/27/98						
	Arsenic			1.2	0.050	1.3	8.00		20
	Barium			2.2	0.65	2.3	NC		20
	Cadmium			0.018	0.0050	0.020	NC		20
	Chromium			ND	0.010	ND	NC		20
	Lead			0.098	0.050	0.11	NC		20
	Selenium			ND	0.10	ND	NC		20
	Silver			ND	0.010	ND	NC		20
D808135-04A	MERCURY, TCLP Extracted	mg/L	09/01/98	ND	0.0020	ND	NC		20

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ANALYTICAL REPORT

TDD: Vazquez and I-70

Lot #: D8G280161

Randy Perlis

URS Operating Services

QUANTERRA INCORPORATED

Ellen La Riviere
Project Manager

September 12, 1998

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Case Narrative

Total Metals analyses

Antimony was recovered above the upper control limit in the LCSD associated with the samples in this project. Because this would indicate a high bias to the data, an antimony was not detected above the reporting limits in any of the samples, the data was not adversely effected, and no further action was required.

Several metals were recovered outside the accuracy and/or precision control limits in the MS/MSD associated with the samples in this project. Because the LCS/LCSD were within acceptable limits, a matrix effect is indicated and no further action was required.

With the exceptions noted above or on the analytical data sheets, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjuction with the samples in this project were within established control limits.

EXECUTIVE SUMMARY - Detection Highlights

D8G280161

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
C4336ST 07/22/98 15:47 001				
Heptachlor epoxide	0.00063	0.00050	mg/L	SW846 8081A
Arsenic - TCLP	1.1	0.50	mg/L	SW846 6010B
Barium - TCLP	0.31 B	10.0	mg/L	SW846 6010B
Cadmium - TCLP	0.012 B	0.10	mg/L	SW846 6010B
Lead - TCLP	0.065 B	0.50	mg/L	SW846 6010B
C4940ST 07/22/98 16:52 002				
Heptachlor epoxide	0.00037 J	0.00050	mg/L	SW846 8081A
Arsenic - TCLP	1.6	0.50	mg/L	SW846 6010B
Barium - TCLP	0.28 B	10.0	mg/L	SW846 6010B
Cadmium - TCLP	0.018 B	0.10	mg/L	SW846 6010B
Chromium - TCLP	0.0057 B	0.50	mg/L	SW846 6010B
Lead - TCLP	0.11 B	0.50	mg/L	SW846 6010B
C4690CY 07/24/98 12:32 003				
Heptachlor epoxide	0.00022 J	0.00050	mg/L	SW846 8081A
Arsenic - TCLP	2.0	0.50	mg/L	SW846 6010B
Barium - TCLP	0.29 B	10.0	mg/L	SW846 6010B
Cadmium - TCLP	0.0089 B	0.10	mg/L	SW846 6010B
Lead - TCLP	0.11 B	0.50	mg/L	SW846 6010B
C4336ST 07/22/98 15:47 004				
Mercury	0.74	0.038	mg/kg	SW846 7471A
Arsenic	172	1.1	mg/kg	SW846 6010B
Lead	214	0.34	mg/kg	SW846 6010B
Selenium	1.2	0.57	mg/kg	SW846 6010B
Thallium	1.2	1.1	mg/kg	SW846 6010B
Silver	0.45 B	1.1	mg/kg	SW846 6010B
Aluminum	7520	11.4	mg/kg	SW846 6010B
Barium	138	1.1	mg/kg	SW846 6010B
Beryllium	0.42	0.23	mg/kg	SW846 6010B
Calcium	3200	22.9	mg/kg	SW846 6010B
Cadmium	3.0	0.57	mg/kg	SW846 6010B
Cobalt	4.2	1.1	mg/kg	SW846 6010B
Chromium	23.4	1.1	mg/kg	SW846 6010B
Copper	31.1	2.3	mg/kg	SW846 6010B
Iron	12000	11.4	mg/kg	SW846 6010B
Potassium	2130	572	mg/kg	SW846 6010B
Magnesium	2180	22.9	mg/kg	SW846 6010B
Manganese	264	1.1	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

D8G280161

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
C4336ST 07/22/98 15:47 004				
Nickel	7.1	4.6	mg/kg	SW846 6010B
Antimony	4.7 B	6.9	mg/kg	SW846 6010B
Vanadium	20.4	1.1	mg/kg	SW846 6010B
Zinc	158	1.1	mg/kg	SW846 6010B
Percent Moisture	12.6	0.10	%	MCAWW 160.3 MOD
C4940ST 07/22/98 16:52 005				
Mercury	0.62	0.035	mg/kg	SW846 7471A
Arsenic	268	1.1	mg/kg	SW846 6010B
Lead	288	0.32	mg/kg	SW846 6010B
Selenium	0.78	0.53	mg/kg	SW846 6010B
Thallium	0.47 B	1.1	mg/kg	SW846 6010B
Silver	0.38 B	1.1	mg/kg	SW846 6010B
Aluminum	5730	10.6	mg/kg	SW846 6010B
Barium	85.4	1.1	mg/kg	SW846 6010B
Beryllium	0.33	0.21	mg/kg	SW846 6010B
Calcium	2850	21.1	mg/kg	SW846 6010B
Cadmium	4.5	0.53	mg/kg	SW846 6010B
Cobalt	3.3	1.1	mg/kg	SW846 6010B
Chromium	11.7	1.1	mg/kg	SW846 6010B
Copper	15.2	2.1	mg/kg	SW846 6010B
Iron	9380	10.6	mg/kg	SW846 6010B
Potassium	1530	528	mg/kg	SW846 6010B
Magnesium	1590	21.1	mg/kg	SW846 6010B
Manganese	218	1.1	mg/kg	SW846 6010B
Sodium	134 B	528	mg/kg	SW846 6010B
Nickel	5.5	4.2	mg/kg	SW846 6010B
Antimony	3.5 B	6.3	mg/kg	SW846 6010B
Vanadium	15.9	1.1	mg/kg	SW846 6010B
Zinc	117	1.1	mg/kg	SW846 6010B
Percent Moisture	5.4	0.10	%	MCAWW 160.3 MOD
C4690CY 07/24/98 12:32 006				
Mercury	1.2	0.40	mg/kg	SW846 7471A
Arsenic	431	1.2	mg/kg	SW846 6010B
Lead	669	0.37	mg/kg	SW846 6010B
Selenium	1.7	0.61	mg/kg	SW846 6010B
Thallium	1.3	1.2	mg/kg	SW846 6010B
Silver	0.54 B	1.2	mg/kg	SW846 6010B
Aluminum	7520	12.2	mg/kg	SW846 6010B
Barium	124	1.2	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

D8G280161

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
C4690CY 07/24/98 12:32 006				
Beryllium	0.43	0.24	mg/kg	SW846 6010B
Calcium	4560	24.3	mg/kg	SW846 6010B
Cadmium	6.8	0.61	mg/kg	SW846 6010B
Cobalt	4.2	1.2	mg/kg	SW846 6010B
Chromium	15.2	1.2	mg/kg	SW846 6010B
Copper	23.9	2.4	mg/kg	SW846 6010B
Iron	11900	12.2	mg/kg	SW846 6010B
Potassium	2490	609	mg/kg	SW846 6010B
Magnesium	2340	24.3	mg/kg	SW846 6010B
Manganese	284	1.2	mg/kg	SW846 6010B
Sodium	104 B	609	mg/kg	SW846 6010B
Nickel	8.3	4.9	mg/kg	SW846 6010B
Antimony	4.0 B	7.3	mg/kg	SW846 6010B
Vanadium	21.2	1.2	mg/kg	SW846 6010B
Zinc	184	1.2	mg/kg	SW846 6010B
Percent Moisture	17.8	0.10	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

D8G280161

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Organochlorine Pesticides	SW846 8081A
Percent Moisture	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
TCLP BNA's	SW846 8270B
TCLP Volatiles	SW846 8260A

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", *EPA-600/4-79-020, March 1983 and subsequent revisions.*

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

ANALYTICAL METHODS SUMMARY

D8G280161

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Organochlorine Pesticides	SW846 8081A
Percent Moisture	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	*SW846 6010B*
TCLP BNA's	SW846 8270B
TCLP Volatiles	SW846 8260A

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D8G280161

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 160.3 MOD		3251
SW846 6010B	Jennifer Oxelson	002720
SW846 6010B	Tracy Anderson	009690
SW846 6010B	William G. Logan	002179
SW846 7471A	Greg T. Brott	008463
SW846 7471A	William G. Logan	2179
SW846 8081A	Joseph Jamero	002001
SW846 8260A	Kerri Keller	002129
SW846 8270B	Tom Claeys	001396

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

D8G280161

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
CK5V1	001	C4336ST	07/22/98	15:47
CK5V5	002	C4940ST	07/22/98	16:52
CK5V7	003	C4690CY	07/24/98	12:32
CK7FX	004	C4336ST	07/22/98	15:47
CK7G0	005	C4940ST	07/22/98	16:52
CK7G1	006	C4690CY	07/24/98	12:32

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS OPERATING SERVICES

Client Sample ID: C4336ST

TCLP GC/MS Volatiles

Lot-Sample #...: D8G280161-001 Work Order #...: CK5V1101 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/12/98 Analysis Date..: 08/12/98
Leach Batch #..: P821502 Prep Batch #...: 8224219 Analysis Time..: 12:07
Dilution Factor: 1

Method.....: SW846 8260A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	0.050	mg/L
2-Butanone	ND	0.20	mg/L
Carbon tetrachloride	ND	0.050	mg/L
Chlorobenzene	ND	0.050	mg/L
Chloroform	ND	0.050	mg/L
1,2-Dichloroethane	ND	0.050	mg/L
1,1-Dichloroethene	ND	0.050	mg/L
Tetrachloroethene	ND	0.050	mg/L
Trichloroethene	ND	0.050	mg/L
Vinyl chloride	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	97	(80 - 120)
4-Bromofluorobenzene	96	(86 - 115)
Toluene-d8	106	(88 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4940ST

TCLP GC/MS Volatiles

Lot-Sample #...: D8G280161-002 Work Order #...: CK5V5101 Matrix.....: SOLID
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/12/98 Analysis Date..: 08/12/98
Leach Batch #..: P821502 Prep Batch #...: 8224219 Analysis Time..: 12:31
Dilution Factor: 1

Method.....: SW846 8260A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	0.050	mg/L
2-Butanone	ND	0.20	mg/L
Carbon tetrachloride	ND	0.050	mg/L
Chlorobenzene	ND	0.050	mg/L
Chloroform	ND	0.050	mg/L
1,2-Dichloroethane	ND	0.050	mg/L
1,1-Dichloroethene	ND	0.050	mg/L
Tetrachloroethene	ND	0.050	mg/L
Trichloroethene	ND	0.050	mg/L
Vinyl chloride	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(80 - 120)
4-Bromofluorobenzene	95	(86 - 115)
Toluene-d8	106	(88 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4690CY

TCLP GC/MS Volatiles

Lot-Sample #...: D8G280161-003 Work Order #...: CK5V7101 Matrix.....: SOLID
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/12/98 Analysis Date..: 08/12/98
Leach Batch #..: P821502 Prep Batch #...: 8224219 Analysis Time..: 12:55
Dilution Factor: 1

Method.....: SW846 8260A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	0.050	mg/L
2-Butanone	ND	0.020	mg/L
Carbon tetrachloride	ND	0.050	mg/L
Chlorobenzene	ND	0.050	mg/L
Chloroform	ND	0.050	mg/L
1,2-Dichloroethane	ND	0.050	mg/L
1,1-Dichloroethene	ND	0.050	mg/L
Tetrachloroethene	ND	0.050	mg/L
Trichloroethene	ND	0.050	mg/L
Vinyl chloride	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	98	(80 - 120)
4-Bromofluorobenzene	99	(86 - 115)
Toluene-d8	103	(88 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4336ST

TCLP GC/MS Semivolatiles

Lot-Sample #...: D8G280161-001 Work Order #...: CK5V1102 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/17/98
Leach Batch #..: P821106 Prep Batch #...: 8215208 Analysis Time..: 13:46
Dilution Factor: 1

Method.....: SW846 8270B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,4-Dichlorobenzene	ND	0.050	mg/L
2,4-Dinitrotoluene	ND	0.050	mg/L
Hexachlorobenzene	ND	0.050	mg/L
Hexachlorobutadiene	ND	0.050	mg/L
Hexachloroethane	ND	0.050	mg/L
2-Methylphenol	ND	0.050	mg/L
Nitrobenzene	ND	0.050	mg/L
Pentachlorophenol	ND	0.25	mg/L
Pyridine	ND	0.10	mg/L
2,4,5-Trichlorophenol	ND	0.050	mg/L
2,4,6-Trichlorophenol	ND	0.050	mg/L
3-Methylphenol & 4-Methylphenol	ND	0.050	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	77	(42 - 112)
Phenol-d5	75	(52 - 124)
Nitrobenzene-d5	86	(28 - 132)
2-Fluorobiphenyl	71	(43 - 106)
2,4,6-Tribromophenol	79	(48 - 122)
Terphenyl-d14	91	(35 - 132)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4940ST

TCLP GC/MS Semivolatiles

Lot-Sample #...: D8G280161-002 Work Order #...: CK5V5102 Matrix.....: SOLID
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/17/98
Leach Batch #..: P821106 Prep Batch #...: 8215208 Analysis Time..: 16:09
Dilution Factor: 1

Method.....: SW846 8270B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,4-Dichlorobenzene	ND	0.050	mg/L
2,4-Dinitrotoluene	ND	0.050	mg/L
Hexachlorobenzene	ND	0.050	mg/L
Hexachlorobutadiene	ND	0.050	mg/L
Hexachloroethane	ND	0.050	mg/L
2-Methylphenol	ND	0.050	mg/L
Nitrobenzene	ND	0.050	mg/L
Pentachlorophenol	ND	0.25	mg/L
Pyridine	ND	0.10	mg/L
2,4,5-Trichlorophenol	ND	0.050	mg/L
2,4,6-Trichlorophenol	ND	0.050	mg/L
3-Methylphenol & 4-Methylphenol	ND	0.050	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	79	(42 - 112)
Phenol-d5	78	(52 - 124)
Nitrobenzene-d5	89	(28 - 132)
2-Fluorobiphenyl	75	(43 - 106)
2,4,6-Tribromophenol	83	(48 - 122)
Terphenyl-d14	86	(35 - 132)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4690CY

TCLP GC/MS Semivolatiles

Lot-Sample #...: D8G280161-003 Work Order #...: CK5V7102 Matrix.....: SOLID
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/17/98
Leach Batch #..: P821106 Prep Batch #...: 8215208 Analysis Time..: 16:56
Dilution Factor: 1
Method.....: SW846 8270B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,4-Dichlorobenzene	ND	0.050	mg/L
2,4-Dinitrotoluene	ND	0.050	mg/L
Hexachlorobenzene	ND	0.050	mg/L
Hexachlorobutadiene	ND	0.050	mg/L
Hexachloroethane	ND	0.050	mg/L
2-Methylphenol	ND	0.050	mg/L
Nitrobenzene	ND	0.050	mg/L
Pentachlorophenol	ND	0.25	mg/L
Pyridine	ND	0.10	mg/L
2,4,5-Trichlorophenol	ND	0.050	mg/L
2,4,6-Trichlorophenol	ND	0.050	mg/L
3-Methylphenol & 4-Methylphenol	ND	0.050	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	79	(42 - 112)
Phenol-d5	77	(52 - 124)
Nitrobenzene-d5	90	(28 - 132)
2-Fluorobiphenyl	75	(43 - 106)
2,4,6-Tribromophenol	82	(48 - 122)
Terphenyl-d14	87	(35 - 132)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4336ST

TCLP GC Semivolatiles

Lot-Sample #...: D8G280161-001 Work Order #...: CK5V110A Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/14/98
Leach Batch #..: P821106 Prep Batch #...: 8215165 Analysis Time..: 06:28
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
gamma-BHC (Lindane)	ND	0.00050	mg/L
Endrin	ND	0.0010	mg/L
Heptachlor	ND	0.00050	mg/L
Heptachlor epoxide	0.00063	0.00050	mg/L
Methoxychlor	ND	0.0050	mg/L
Toxaphene	ND	0.050	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	111	(50 - 138)
Tetrachloro-m-xylene	102	(51 - 103)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

URS OPERATING SERVICES

Client Sample ID: C4940ST

TCLP GC Semivolatiles

Lot-Sample #...: D8G280161-002 Work Order #...: CK5V510A Matrix.....: SOLID
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/14/98
Leach Batch #..: P821106 Prep Batch #...: 8215165 Analysis Time..: 07:02
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
gamma-BHC (Lindane)	ND	0.00050	mg/L
Endrin	ND	0.0010	mg/L
Heptachlor	ND	0.00050	mg/L
Heptachlor epoxide	0.00037 J	0.00050	mg/L
Methoxychlor	ND	0.0050	mg/L
Toxaphene	ND	0.050	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(50 - 138)
Tetrachloro-m-xylene	93	(51 - 103)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

J Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4690CY

TCLP GC Semivolatiles

Lot-Sample #...: D8G280161-003 Work Order #...: CK5V710A Matrix.....: SOLID
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/14/98
Leach Batch #..: P821106 Prep Batch #...: 8215165 Analysis Time..: 08:44
Dilution Factor: 1
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
gamma-BHC (Lindane)	ND	0.00050	mg/L
Endrin	ND	0.0010	mg/L
Heptachlor	ND	0.00050	mg/L
Heptachlor epoxide	0.00022 J	0.00050	mg/L
Methoxychlor	ND	0.0050	mg/L
Toxaphene	ND	0.050	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	113	(50 - 138)
Tetrachloro-m-xylene	97	(51 - 103)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

J Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4336ST

TCLP Metals

Lot-Sample #...: D8G280161-001 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Leach Batch #..: P821106

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8218160						
Arsenic	1.1	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V1103
		Dilution Factor: 1		Analysis Time..: 18:49		
Barium	0.31 B	10.0	mg/L	SW846 6010B	08/06-08/20/98	CK5V1104
		Dilution Factor: 1		Analysis Time..: 18:49		
Cadmium	0.012 B	0.10	mg/L	SW846 6010B	08/06-08/20/98	CK5V1105
		Dilution Factor: 1		Analysis Time..: 18:49		
Chromium	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V1106
		Dilution Factor: 1		Analysis Time..: 18:49		
Lead	0.065 B	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V1107
		Dilution Factor: 1		Analysis Time..: 18:49		
Selenium	ND	0.25	mg/L	SW846 6010B	08/06-08/20/98	CK5V1108
		Dilution Factor: 1		Analysis Time..: 18:49		
Silver	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V1109
		Dilution Factor: 1		Analysis Time..: 18:49		
Prep Batch #...: 8238335						
Mercury	ND	0.00020	mg/L	SW846 7471A	08/26/98	CK5V110C
		Dilution Factor: 1		Analysis Time..: 13:54		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4940ST

TCLP Metals

Lot-Sample #...: D8G280161-002 Matrix.....: SOLID
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Leach Batch #..: P821106

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8218160						
Arsenic	1.6	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V5103
		Dilution Factor: 1		Analysis Time..: 18:21		
Barium	0.28 B	10.0	mg/L	SW846 6010B	08/06-08/20/98	CK5V5104
		Dilution Factor: 1		Analysis Time..: 18:21		
Cadmium	0.018 B	0.10	mg/L	SW846 6010B	08/06-08/20/98	CK5V5105
		Dilution Factor: 1		Analysis Time..: 18:21		
Chromium	0.0057 B	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V5106
		Dilution Factor: 1		Analysis Time..: 18:21		
Lead	0.11 B	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V5107
		Dilution Factor: 1		Analysis Time..: 18:21		
Selenium	ND	0.25	mg/L	SW846 6010B	08/06-08/20/98	CK5V5108
		Dilution Factor: 1		Analysis Time..: 18:21		
Silver	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V5109
		Dilution Factor: 1		Analysis Time..: 18:21		
Prep Batch #...: 8238335						
Mercury	ND	0.00020	mg/L	SW846 7471A	08/26/98	CK5V510C
		Dilution Factor: 1		Analysis Time..: 13:54		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

B Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4690CY

TCLP Metals

Lot-Sample #...: D8G280161-003 Matrix.....: SOLID
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Leach Batch #..: P821106

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8218160						
Arsenic	2.0	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V7103
		Dilution Factor: 1		Analysis Time..: 18:24		
Barium	0.29 B	10.0	mg/L	SW846 6010B	08/06-08/20/98	CK5V7104
		Dilution Factor: 1		Analysis Time..: 18:24		
Cadmium	0.0089 B	0.10	mg/L	SW846 6010B	08/06-08/20/98	CK5V7105
		Dilution Factor: 1		Analysis Time..: 18:24		
Chromium	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V7106
		Dilution Factor: 1		Analysis Time..: 18:24		
Lead	0.11 B	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V7107
		Dilution Factor: 1		Analysis Time..: 18:24		
Selenium	ND	0.25	mg/L	SW846 6010B	08/06-08/20/98	CK5V7108
		Dilution Factor: 1		Analysis Time..: 18:24		
Silver	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK5V7109
		Dilution Factor: 1		Analysis Time..: 18:24		
Prep Batch #...: 8238335						
Mercury	ND	0.00020	mg/L	SW846 7471A	08/26/98	CK5V710C
		Dilution Factor: 1		Analysis Time..: 13:54		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characterisitic Leaching Procedure Method 1311 (55 FR 26986)

B Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4336ST

TOTAL Metals

Lot-Sample #...: D8G280161-004 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8218276						
Mercury	0.74	0.038	mg/kg	SW846 7471A	08/06-08/07/98	CK7FX10Q
		Dilution Factor: 1		Analysis Time..: 11:54		
Prep Batch #...: 8222147						
Silver	0.45 B	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX101
		Dilution Factor: 1		Analysis Time..: 14:54		
Aluminum	7520	11.4	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX102
		Dilution Factor: 1		Analysis Time..: 14:54		
Arsenic	172	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10L
		Dilution Factor: 1		Analysis Time..: 15:27		
Barium	138	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX103
		Dilution Factor: 1		Analysis Time..: 14:54		
Beryllium	0.42	0.23	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX104
		Dilution Factor: 1		Analysis Time..: 14:54		
Calcium	3200	22.9	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX105
		Dilution Factor: 1		Analysis Time..: 14:54		
Cadmium	3.0	0.57	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX106
		Dilution Factor: 1		Analysis Time..: 14:54		
Cobalt	4.2	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX107
		Dilution Factor: 1		Analysis Time..: 14:54		
Chromium	23.4	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX108
		Dilution Factor: 1		Analysis Time..: 14:54		
Copper	31.1	2.3	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX109
		Dilution Factor: 1		Analysis Time..: 14:54		
Iron	12000	11.4	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10A
		Dilution Factor: 1		Analysis Time..: 14:54		
Potassium	2130	572	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10C
		Dilution Factor: 1		Analysis Time..: 14:54		
Magnesium	2180	22.9	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10D
		Dilution Factor: 1		Analysis Time..: 14:54		

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URS OPERATING SERVICES

Client Sample ID: C4336ST

TOTAL Metals

Lot-Sample #...: D8G280161-004 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	264	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10E
		Dilution Factor: 1		Analysis Time..: 14:54		
Sodium	ND	572	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10F
		Dilution Factor: 1		Analysis Time..: 14:54		
Nickel	7.1	4.6	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10G
		Dilution Factor: 1		Analysis Time..: 14:54		
Lead	214	0.34	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10M
		Dilution Factor: 1		Analysis Time..: 15:27		
Antimony	4.7 B	6.9	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10H
		Dilution Factor: 1		Analysis Time..: 14:54		
Selenium	1.2	0.57	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10N
		Dilution Factor: 1		Analysis Time..: 15:27		
Thallium	1.2	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10P
		Dilution Factor: 1		Analysis Time..: 15:27		
Vanadium	20.4	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10J
		Dilution Factor: 1		Analysis Time..: 14:54		
Zinc	158	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7FX10K
		Dilution Factor: 1		Analysis Time..: 14:54		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4940ST

TOTAL Metals

Lot-Sample #...: D8G280161-005 Matrix.....: SOLID
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8218276						
Mercury	0.62	0.035	mg/kg	SW846 7471A	08/06-08/07/98	CK7G010Q
		Dilution Factor: 1		Analysis Time..: 12:12		
Prep Batch #...: 8222147						
Silver	0.38 B	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0101
		Dilution Factor: 1		Analysis Time..: 14:58		
Aluminum	5730	10.6	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0102
		Dilution Factor: 1		Analysis Time..: 14:58		
Arsenic	268	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010L
		Dilution Factor: 1		Analysis Time..: 15:32		
Barium	85.4	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0103
		Dilution Factor: 1		Analysis Time..: 14:58		
Beryllium	0.33	0.21	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0104
		Dilution Factor: 1		Analysis Time..: 14:58		
Calcium	2850	21.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0105
		Dilution Factor: 1		Analysis Time..: 14:58		
Cadmium	4.5	0.53	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0106
		Dilution Factor: 1		Analysis Time..: 14:58		
Cobalt	3.3	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0107
		Dilution Factor: 1		Analysis Time..: 14:58		
Chromium	11.7	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0108
		Dilution Factor: 1		Analysis Time..: 14:58		
Copper	15.2	2.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G0109
		Dilution Factor: 1		Analysis Time..: 14:58		
Iron	9380	10.6	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010A
		Dilution Factor: 1		Analysis Time..: 14:58		
Potassium	1530	528	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010C
		Dilution Factor: 1		Analysis Time..: 14:58		
Magnesium	1590	21.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010D
		Dilution Factor: 1		Analysis Time..: 14:58		

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URS OPERATING SERVICES

Client Sample ID: C4940ST

TOTAL Metals

Lot-Sample #...: D8G280161-005 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	218	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010E
		Dilution Factor: 1		Analysis Time..: 14:58		
Sodium	134 B	528	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010F
		Dilution Factor: 1		Analysis Time..: 14:58		
Nickel	5.5	4.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010G
		Dilution Factor: 1		Analysis Time..: 14:58		
Lead	288	0.32	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010M
		Dilution Factor: 1		Analysis Time..: 15:32		
Antimony	3.5 B	6.3	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010H
		Dilution Factor: 1		Analysis Time..: 14:58		
Selenium	0.78	0.53	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010N
		Dilution Factor: 1		Analysis Time..: 15:32		
Thallium	0.47 B	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010P
		Dilution Factor: 1		Analysis Time..: 15:32		
Vanadium	15.9	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010J
		Dilution Factor: 1		Analysis Time..: 14:58		
Zinc	117	1.1	mg/kg	SW846 6010B	08/10-08/21/98	CK7G010K
		Dilution Factor: 1		Analysis Time..: 14:58		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4690CY

TOTAL Metals

Lot-Sample #...: D8G280161-006 Matrix.....: SOLID
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8218276						
Mercury	1.2	0.40	mg/kg	SW846 7471A	08/06-08/07/98	CK7G110Q
		Dilution Factor: 10		Analysis Time..: 19:49		
Prep Batch #...: 8222147						
Silver	0.54 B	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1101
		Dilution Factor: 1		Analysis Time..: 15:03		
Aluminum	7520	12.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1102
		Dilution Factor: 1		Analysis Time..: 15:03		
Arsenic	431	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110L
		Dilution Factor: 1		Analysis Time..: 15:36		
Barium	124	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1103
		Dilution Factor: 1		Analysis Time..: 15:03		
Beryllium	0.43	0.24	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1104
		Dilution Factor: 1		Analysis Time..: 15:03		
Calcium	4560	24.3	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1105
		Dilution Factor: 1		Analysis Time..: 15:03		
Cadmium	6.8	0.61	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1106
		Dilution Factor: 1		Analysis Time..: 15:03		
Cobalt	4.2	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1107
		Dilution Factor: 1		Analysis Time..: 15:03		
Chromium	15.2	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1108
		Dilution Factor: 1		Analysis Time..: 15:03		
Copper	23.9	2.4	mg/kg	SW846 6010B	08/10-08/21/98	CK7G1109
		Dilution Factor: 1		Analysis Time..: 15:03		
Iron	11900	12.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110A
		Dilution Factor: 1		Analysis Time..: 15:03		
Potassium	2490	609	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110C
		Dilution Factor: 1		Analysis Time..: 15:03		
Magnesium	2340	24.3	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110D
		Dilution Factor: 1		Analysis Time..: 15:03		

(Continued on next page)

URS OPERATING SERVICES

Client Sample ID: C4690CY

TOTAL Metals

Lot-Sample #...: D8G280161-006 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	284	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110E
		Dilution Factor: 1		Analysis Time..: 15:03		
Sodium	104 B	609	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110F
		Dilution Factor: 1		Analysis Time..: 15:03		
Nickel	8.3	4.9	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110G
		Dilution Factor: 1		Analysis Time..: 15:03		
Lead	669	0.37	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110M
		Dilution Factor: 1		Analysis Time..: 15:36		
Antimony	4.0 B	7.3	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110H
		Dilution Factor: 1		Analysis Time..: 15:03		
Selenium	1.7	0.61	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110N
		Dilution Factor: 1		Analysis Time..: 15:36		
Thallium	1.3	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110P
		Dilution Factor: 1		Analysis Time..: 15:36		
Vanadium	21.2	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110J
		Dilution Factor: 1		Analysis Time..: 15:03		
Zinc	184	1.2	mg/kg	SW846 6010B	08/10-08/21/98	CK7G110K
		Dilution Factor: 1		Analysis Time..: 15:03		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

URS OPERATING SERVICES

Client Sample ID: C4336ST

General Chemistry

Lot-Sample #...: D8G280161-004 Work Order #...: CK7FX Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	12.6	0.10	%	MCAWW 160.3 MOD	08/01-08/22/98	8215253

Dilution Factor: 1 Analysis Time..: 00:00

URS OPERATING SERVICES

Client Sample ID: C4940ST

General Chemistry

Lot-Sample #...: D8G280161-005 Work Order #...: CK7G0 Matrix.....: SOLID
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	5.4	0.10	%	MCAWW 160.3 MOD	08/01-08/22/98	8215253

Dilution Factor: 1 Analysis Time..: 00:00

URS OPERATING SERVICES

Client Sample ID: C4690CY

General Chemistry

Lot-Sample #...: D8G280161-006 Work Order #...: CK7G1 Matrix.....: SOLID
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	17.8	0.10	%	MCAWW 160.3 MOD	08/01-08/22/98	8215253

Dilution Factor: 1 Analysis Time..: 00:00

QC DATA ASSOCIATION SUMMARY

D8G280161

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8270B	P821106	8215208	8215068
	SOLID	SW846 8260A	P821502	8224219	8224089
	SOLID	SW846 7471A	P821106	8238335	8238175
	SOLID	SW846 8081A	P821106	8215165	8215100
	SOLID	SW846 6010B	P821106	8218160	8218037
002	SOLID	SW846 8270B	P821106	8215208	8215068
	SOLID	SW846 8260A	P821502	8224219	8224089
	SOLID	SW846 7471A	P821106	8238335	8238175
	SOLID	SW846 8081A	P821106	8215165	8215100
	SOLID	SW846 6010B	P821106	8218160	8218037
003	SOLID	SW846 8270B	P821106	8215208	8215068
	SOLID	SW846 8260A	P821502	8224219	8224089
	SOLID	SW846 7471A	P821106	8238335	8238175
	SOLID	SW846 8081A	P821106	8215165	8215100
	SOLID	SW846 6010B	P821106	8218160	8218037
004	SOLID	SW846 7471A		8218276	8218127
	SOLID	SW846 6010B		8222147	8222032
	SOLID	MCAWW 160.3 MOD		8215253	
005	SOLID	SW846 7471A		8218276	8218127
	SOLID	SW846 6010B		8222147	8222032
	SOLID	MCAWW 160.3 MOD		8215253	
006	SOLID	SW846 7471A		8218276	8218127
	SOLID	SW846 6010B		8222147	8222032
	SOLID	MCAWW 160.3 MOD		8215253	

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D8G280161 Work Order #...: CKH9X102-LCS Matrix.....: SOLID
LCS Lot-Sample#: D8H120000-219 CKH9X103-LCSD
Prep Date.....: 08/12/98 Analysis Date..: 08/12/98
Prep Batch #...: 8224219 Analysis Time..: 10:11
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	94	(66 - 148)			SW846 8260A
	87	(66 - 148)	7.2	(0-20)	SW846 8260A
1,2-Dichloroethane	96	(79 - 126)			SW846 8260A
	92	(79 - 126)	4.6	(0-20)	SW846 8260A
2-Butanone	67	(13 - 179)			SW846 8260A
	60	(13 - 179)	10	(0-21)	SW846 8260A
Benzene	94	(80 - 125)			SW846 8260A
	91	(80 - 125)	3.3	(0-20)	SW846 8260A
Carbon tetrachloride	98	(79 - 125)			SW846 8260A
	95	(79 - 125)	2.4	(0-20)	SW846 8260A
Chlorobenzene	101	(84 - 119)			SW846 8260A
	97	(84 - 119)	4.1	(0-20)	SW846 8260A
Chloroform	99	(81 - 120)			SW846 8260A
	94	(81 - 120)	4.6	(0-20)	SW846 8260A
Tetrachloroethene	97	(80 - 121)			SW846 8260A
	95	(80 - 121)	2.5	(0-20)	SW846 8260A
Trichloroethene	96	(78 - 126)			SW846 8260A
	94	(78 - 126)	2.8	(0-20)	SW846 8260A
Vinyl chloride	113	(14 - 185)			SW846 8260A
	109	(14 - 185)	4.1	(0-20)	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	103	(80 - 120)
	102	(80 - 120)
4-Bromofluorobenzene	99	(86 - 115)
	98	(86 - 115)
Toluene-d8	100	(88 - 110)
	100	(88 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D8G280161
MB Lot-Sample #: D8H120000-219
Analysis Date..: 08/12/98
Dilution Factor: 1

Work Order #...: CKH9X101
Prep Date.....: 08/12/98
Prep Batch #...: 8224219

Matrix.....: SOLID
Analysis Time..: 11:19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.050	mg/L	SW846 8260A
2-Butanone	ND	0.020	mg/L	SW846 8260A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8260A
Chlorobenzene	ND	0.050	mg/L	SW846 8260A
Chloroform	ND	0.050	mg/L	SW846 8260A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8260A
1,1-Dichloroethene	ND	0.050	mg/L	SW846 8260A
Tetrachloroethene	ND	0.050	mg/L	SW846 8260A
Trichloroethene	ND	0.050	mg/L	SW846 8260A
Vinyl chloride	ND	0.10	mg/L	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	97	(80 - 120)
4-Bromofluorobenzene	99	(86 - 115)
Toluene-d8	104	(88 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Volatiles

Client Lot #...: D8G280161 Work Order #...: CK5V710E-MS Matrix.....: SOLID
MS Lot-Sample #: D8G280161-003 CK5V710F-MSD
Date Sampled...: 07/24/98 12:32 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/12/98 Analysis Date..: 08/12/98
Leach Batch #..: P821502 Prep Batch #...: 8224219 Analysis Time..: 13:19
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	95	(80 - 125)			SW846 8260A
	96	(80 - 125)	1.8	(0-20)	SW846 8260A
2-Butanone	58	(13 - 179)			SW846 8260A
	61	(13 - 179)	5.4	(0-21)	SW846 8260A
Carbon tetrachloride	100	(79 - 125)			SW846 8260A
	104	(79 - 125)	3.4	(0-20)	SW846 8260A
Chlorobenzene	99	(84 - 119)			SW846 8260A
	103	(84 - 119)	3.9	(0-20)	SW846 8260A
Chloroform	96	(81 - 120)			SW846 8260A
	99	(81 - 120)	2.6	(0-20)	SW846 8260A
1,2-Dichloroethane	93	(79 - 126)			SW846 8260A
	96	(79 - 126)	3.3	(0-20)	SW846 8260A
1,1-Dichloroethene	86	(66 - 148)			SW846 8260A
	88	(66 - 148)	2.4	(0-20)	SW846 8260A
Tetrachloroethene	96	(80 - 121)			SW846 8260A
	100	(80 - 121)	4.0	(0-20)	SW846 8260A
Trichloroethene	98	(78 - 126)			SW846 8260A
	100	(78 - 126)	2.2	(0-20)	SW846 8260A
Vinyl chloride	108	(14 - 185)			SW846 8260A
	110	(14 - 185)	1.8	(0-20)	SW846 8260A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	102	(80 - 120)
	103	(80 - 120)
4-Bromofluorobenzene	99	(86 - 115)
	99	(86 - 115)
Toluene-d8	99	(88 - 110)
	101	(88 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK9R5102-LCS Matrix.....: SOLID
LCS Lot-Sample#: D8H030000-208 CK9R5103-LCSD
Prep Date.....: 08/03/98 Analysis Date..: 08/17/98
Prep Batch #...: 8215208 Analysis Time..: 12:04
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,4-Dichlorobenzene	66	(42 - 108)			SW846 8270B
	59	(42 - 108)	11	(0-20)	SW846 8270B
2,4-Dinitrotoluene	89	(44 - 122)			SW846 8270B
	96	(44 - 122)	8.0	(0-20)	SW846 8270B
Hexachlorobenzene	105	(59 - 116)			SW846 8270B
	99	(59 - 116)	5.8	(0-20)	SW846 8270B
Hexachlorobutadiene	73	(42 - 110)			SW846 8270B
	65	(42 - 110)	11	(0-20)	SW846 8270B
Hexachloroethane	63	(38 - 107)			SW846 8270B
	55	(38 - 107)	12	(0-20)	SW846 8270B
Nitrobenzene	90	(43 - 127)			SW846 8270B
	89	(43 - 127)	1.0	(0-20)	SW846 8270B
Pentachlorophenol	60	(23 - 129)			SW846 8270B
	61	(23 - 129)	1.4	(0-26)	SW846 8270B
Pyridine	40	(23 - 103)			SW846 8270B
	44	(23 - 103)	10	(0-32)	SW846 8270B
2,4,5-Trichlorophenol	93	(43 - 113)			SW846 8270B
	98	(43 - 113)	5.2	(0-20)	SW846 8270B
2,4,6-Trichlorophenol	76	(47 - 114)			SW846 8270B
	80	(47 - 114)	4.2	(0-20)	SW846 8270B
2-Methylphenol	91	(49 - 125)			SW846 8270B
	82	(49 - 125)	9.8	(0-20)	SW846 8270B
3-Methylphenol & 4-Methylphenol	84	(45 - 119)			SW846 8270B
	70	(45 - 119)	19	(0-20)	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	86	(42 - 112)
	84	(42 - 112)
Phenol-d5	93	(52 - 124)
	90	(52 - 124)
Nitrobenzene-d5	96	(28 - 132)
	95	(28 - 132)
2-Fluorobiphenyl	78	(43 - 106)
	76	(43 - 106)
2,4,6-Tribromophenol	95	(48 - 122)
	88	(48 - 122)
Terphenyl-d14	94	(35 - 132)
	97	(35 - 132)

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK9R5102-LCS Matrix.....: SOLID
LCS Lot-Sample#: D8H030000-208 CK9R5103-LCSD

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK9R5101 Matrix.....: SOLID
MB Lot-Sample #: D8H030000-208
Prep Date.....: 08/03/98 Analysis Time..: 11:18
Analysis Date..: 08/17/98 Prep Batch #...: 8215208
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,4-Dichlorobenzene	ND	0.050	mg/L	SW846 8270B
2,4-Dinitrotoluene	ND	0.050	mg/L	SW846 8270B
Hexachlorobenzene	ND	0.050	mg/L	SW846 8270B
Hexachlorobutadiene	ND	0.050	mg/L	SW846 8270B
Hexachloroethane	ND	0.050	mg/L	SW846 8270B
2-Methylphenol	ND	0.050	mg/L	SW846 8270B
Nitrobenzene	ND	0.050	mg/L	SW846 8270B
Pentachlorophenol	ND	0.25	mg/L	SW846 8270B
Pyridine	ND	0.10	mg/L	SW846 8270B
2,4,5-Trichlorophenol	ND	0.050	mg/L	SW846 8270B
2,4,6-Trichlorophenol	ND	0.050	mg/L	SW846 8270B
3-Methylphenol & 4-Methylphenol	ND	0.050	mg/L	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(42 - 112)
Phenol-d5	81	(52 - 124)
Nitrobenzene-d5	92	(28 - 132)
2-Fluorobiphenyl	77	(43 - 106)
2,4,6-Tribromophenol	85	(48 - 122)
Terphenyl-d14	90	(35 - 132)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK5V110G-MS Matrix.....: SOLID
MS Lot-Sample #: D8G280161-001 CK5V110H-MSD
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/17/98
Leach Batch #..: P821106 Prep Batch #...: 8215208 Analysis Time..: 14:34
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,4-Dichlorobenzene	73	(42 - 108)			SW846 8270B
	63	(42 - 108)	15	(0-20)	SW846 8270B
2,4-Dinitrotoluene	88	(44 - 122)			SW846 8270B
	89	(44 - 122)	0.80	(0-20)	SW846 8270B
Hexachlorobenzene	98	(59 - 116)			SW846 8270B
	100	(59 - 116)	2.5	(0-20)	SW846 8270B
Hexachlorobutadiene	74	(42 - 110)			SW846 8270B
	67	(42 - 110)	10	(0-20)	SW846 8270B
Hexachloroethane	69	(38 - 107)			SW846 8270B
	61	(38 - 107)	12	(0-20)	SW846 8270B
2-Methylphenol	88	(49 - 125)			SW846 8270B
	85	(49 - 125)	4.3	(0-20)	SW845 8270B
Nitrobenzene	92	(43 - 127)			SW846 8270B
	83	(43 - 127)	11	(0-20)	SW846 8270B
Pentachlorophenol	59	(23 - 129)			SW846 8270B
	67	(23 - 129)	13	(0-26)	SW846 8270B
Pyridine	42	(23 - 103)			SW846 8270B
	39	(23 - 103)	7.0	(0-32)	SW846 8270B
2,4,5-Trichlorophenol	66	(43 - 113)			SW846 8270B
	71	(43 - 113)	7.3	(0-20)	SW846 8270B
2,4,6-Trichlorophenol	80	(47 - 114)			SW846 8270B
	78	(47 - 114)	2.1	(0-20)	SW846 8270B
3-Methylphenol & 4-Methylphenol	70	(45 - 119)			SW846 8270B
	77	(45 - 119)	10	(0-20)	SW846 8270B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	78	(42 - 112)
	81	(42 - 112)
Phenol-d5	87	(52 - 124)
	88	(52 - 124)
Nitrobenzene-d5	90	(28 - 132)
	89	(28 - 132)
2-Fluorobiphenyl	74	(43 - 106)
	73	(43 - 106)
2,4,6-Tribromophenol	89	(48 - 122)
	93	(48 - 122)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK5V110G-MS Matrix.....: SOLID
MS Lot-Sample #: D8G280161-001 CK5V110H-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	89	(35 - 132)
	91	(35 - 132)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK9L8102-LCS Matrix.....: SOLID
LCS Lot-Sample#: D8H030000-165 CK9L8103-LCSD
Prep Date.....: 08/03/98 Analysis Date..: 08/14/98
Prep Batch #...: 8215165 Analysis Time..: 05:20
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Endrin	100	(77 - 112)			SW846 8081A
	102	(77 - 112)	2.2	(0-15)	SW846 8081A
gamma-BHC (Lindane)	101	(74 - 121)			SW846 8081A
	104	(74 - 121)	2.9	(0-15)	SW846 8081A
Heptachlor epoxide	107	(37 - 142)			SW846 8081A
	106	(37 - 142)	1.5	(0-15)	SW846 8081A
Heptachlor	106	(69 - 125)			SW846 8081A
	107	(69 - 125)	0.93	(0-13)	SW846 8081A
Methoxychlor	118	(30 - 150)			SW846 8081A
	111	(30 - 150)	6.1	(0-15)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	114	(50 - 138)
	108	(50 - 138)
Tetrachloro-m-xylene	92	(51 - 103)
	94	(51 - 103)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: D8G280161
MB Lot-Sample #: D8H030000-165
Work Order #...: CK9L8101
Matrix.....: SOLID
Prep Date.....: 08/03/98
Analysis Time..: 04:46
Analysis Date..: 08/14/98
Prep Batch #...: 8215165
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
gamma-BHC (Lindane)	ND	0.00050	mg/L	SW846 8081A
Endrin	ND	0.0010	mg/L	SW846 8081A
Heptachlor	ND	0.00050	mg/L	SW846 8081A
Heptachlor epoxide	ND	0.00050	mg/L	SW846 8081A
Methoxychlor	ND	0.0050	mg/L	SW846 8081A
Toxaphene	ND	0.050	mg/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	115	(50 - 138)
Tetrachloro-m-xylene	102	(51 - 103)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC Semivolatiles

Client Lot #...: D8G280161 Work Order #...: CK5V510E-MS Matrix.....: SOLID
MS Lot-Sample #: D8G280161-002 CK5V510F-MSD
Date Sampled...: 07/22/98 16:52 Date Received..: 07/28/98
Leach Date.....: 07/29/98 Prep Date.....: 08/03/98 Analysis Date..: 08/14/98
Leach Batch #..: P821106 Prep Batch #...: 8215165 Analysis Time..: 07:36
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
gamma-BHC (Lindane)	106	(74 - 121)			SW846 8081A
	109	(74 - 121)	2.0	(0-15)	SW846 8081A
Endrin	106	(77 - 112)			SW846 8081A
	107	(77 - 112)	1.1	(0-15)	SW846 8081A
Heptachlor	110	(69 - 125)			SW846 8081A
	111	(69 - 125)	1.3	(0-13)	SW846 8081A
Heptachlor epoxide	108	(37 - 142)			SW846 8081A
	109	(37 - 142)	1.4	(0-15)	SW846 8081A
Methoxychlor	121	(30 - 150)			SW846 8081A
	119	(30 - 150)	2.2	(0-15)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(50 - 138)
	106	(50 - 138)
Tetrachloro-m-xylene	96	(51 - 103)
	100	(51 - 103)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Lot-Sample #...: D8G280161 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	111	(80 - 116)			SW846 6010B	08/06-08/20/98	8218160
	114	(80 - 116)	2.0	(0-10)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Barium	106	(83 - 111)			SW846 6010B	08/06-08/20/98	8218160
	107	(83 - 111)	1.1	(0-10)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Cadmium	107	(82 - 110)			SW846 6010B	08/06-08/20/98	8218160
	108	(82 - 110)	1.7	(0-10)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Chromium	105	(80 - 120)			SW846 6010B	08/06-08/20/98	8218160
	107	(80 - 120)	1.6	(0-10)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Lead	105	(82 - 114)			SW846 6010B	08/06-08/20/98	8218160
	107	(82 - 114)	1.3	(0-10)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Selenium	108	(85 - 125)			SW846 6010B	08/06-08/20/98	8218160
	109	(85 - 125)	0.96	(0-11)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Silver	104	(83 - 108)			SW846 6010B	08/06-08/20/98	8218160
	106	(83 - 108)	1.5	(0-10)	SW846 6010B	08/06-08/20/98	8218160
		Dilution Factor: 1					
Mercury	86	(80 - 111)			SW846 7471A	08/26/98	8238335
	89	(80 - 111)	4.0	(0-10)	SW846 7471A	08/26/98	8238335
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D8G280161 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	103	(82 - 114)			SW846 7471A	08/06-08/07/98	8218276
	103	(82 - 114)	0.02	(0-10)	SW846 7471A	08/06-08/07/98	8218276
		Dilution Factor: 1					
Aluminum	103	(88 - 120)			SW846 6010B	08/10-08/21/98	8222147
	103	(88 - 120)	0.18	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Antimony	113	(82 - 113)			SW846 6010B	08/10-08/21/98	8222147
	116 N	(82 - 113)	2.6	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Arsenic	95	(88 - 108)			SW846 6010B	08/10-08/21/98	8222147
	96	(88 - 108)	0.84	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Barium	103	(85 - 112)			SW846 6010B	08/10-08/21/98	8222147
	104	(85 - 112)	0.52	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Beryllium	103	(78 - 118)			SW846 6010B	08/10-08/21/98	8222147
	104	(78 - 118)	0.89	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Cadmium	104	(80 - 120)			SW846 6010B	08/10-08/21/98	8222147
	102	(80 - 120)	1.9	(0-16)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Calcium	98	(85 - 114)			SW846 6010B	08/10-08/21/98	8222147
	99	(85 - 114)	0.56	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Chromium	99	(83 - 112)			SW846 6010B	08/10-08/21/98	8222147
	100	(83 - 112)	0.70	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Cobalt	102	(80 - 116)			SW846 6010B	08/10-08/21/98	8222147
	102	(80 - 116)	0.27	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D8G280161 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Copper	104	(84 - 115)			SW846 6010B	08/10-08/21/98	8222147
	105	(84 - 115)	0.32	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Iron	101	(87 - 117)			SW846 6010B	08/10-08/21/98	8222147
	101	(87 - 117)	0.29	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Lead	102	(89 - 115)			SW846 6010B	08/10-08/21/98	8222147
	102	(89 - 115)	0.45	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Magnesium	106	(84 - 113)			SW846 6010B	08/10-08/21/98	8222147
	106	(84 - 113)	0.73	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Manganese	99	(84 - 114)			SW846 6010B	08/10-08/21/98	8222147
	100	(84 - 114)	0.77	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Nickel	97	(84 - 112)			SW846 6010B	08/10-08/21/98	8222147
	99	(84 - 112)	2.6	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Potassium	103	(82 - 110)			SW846 6010B	08/10-08/21/98	8222147
	103	(82 - 110)	0.16	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Selenium	92	(82 - 110)			SW846 6010B	08/10-08/21/98	8222147
	93	(82 - 110)	0.59	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Silver	99	(80 - 115)			SW846 6010B	08/10-08/21/98	8222147
	99	(80 - 115)	0.08	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Sodium	104	(85 - 117)			SW846 6010B	08/10-08/21/98	8222147
	104	(85 - 117)	0.28	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D8G280161 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Thallium	93	(86 - 114)			SW846 6010B	08/10-08/21/98	8222147
	93	(86 - 114)	0.65	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Vanadium	100	(85 - 116)			SW846 6010B	08/10-08/21/98	8222147
	100	(85 - 116)	0.49	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					
Zinc	100	(80 - 120)			SW846 6010B	08/10-08/21/98	8222147
	99	(80 - 120)	0.20	(0-10)	SW846 6010B	08/10-08/21/98	8222147
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D8H060000-276 Prep Batch #...: 8218276						
Mercury	ND	0.033	mg/kg	SW846 7471A	08/06-08/07/98	CKDGF101
		Dilution Factor: 1				
		Analysis Time..: 11:44				
MB Lot-Sample #: D8H100000-147 Prep Batch #...: 8222147						
Aluminum	ND	10.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11P
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Antimony	2.2	6.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W102
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Arsenic	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11E
		Dilution Factor: 1				
		Analysis Time..: 15:14				
Barium	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W109
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Beryllium	ND	0.20	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W10A
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Cadmium	ND	0.50	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W10C
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Calcium	ND	20.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11Q
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Chromium	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W10E
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Cobalt	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W10D
		Dilution Factor: 1				
		Analysis Time..: 14:41				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	2.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W10F
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Iron	1.7 B	10.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11H
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Lead	0.26 B	0.30	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W105
		Dilution Factor: 1				
		Analysis Time..: 15:14				
Magnesium	ND	20.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11K
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Manganese	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11L
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Nickel	ND	4.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W101
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Potassium	ND	500	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11J
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Selenium	ND	0.50	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W106
		Dilution Factor: 1				
		Analysis Time..: 15:14				
Silver	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W108
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Sodium	ND	500	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11M
		Dilution Factor: 1				
		Analysis Time..: 14:41				
Thallium	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W11N
		Dilution Factor: 1				
		Analysis Time..: 15:14				
Vanadium	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W103
		Dilution Factor: 1				
		Analysis Time..: 14:41				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Zinc	ND	1.0	mg/kg	SW846 6010B	08/10-08/21/98	CKF6W104

Dilution Factor: 1
Analysis Time..: 14:41

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: D8G280161 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D8G300000-316		Prep Batch #...: 8218160				
Leach Date.....: 07/29/98		Leach Batch #..: P821106				
Arsenic	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK80H103
		Dilution Factor: 1				
		Analysis Time..: 18:14				
Barium	0.030 B	10.0	mg/L	SW846 6010B	08/06-08/20/98	CK80H104
		Dilution Factor: 1				
		Analysis Time..: 18:14				
Cadmium	ND	0.10	mg/L	SW846 6010B	08/06-08/20/98	CK80H105
		Dilution Factor: 1				
		Analysis Time..: 18:14				
Chromium	0.0046 B	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK80H106
		Dilution Factor: 1				
		Analysis Time..: 18:14				
Lead	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK80H107
		Dilution Factor: 1				
		Analysis Time..: 18:14				
Selenium	ND	0.25	mg/L	SW846 6010B	08/06-08/20/98	CK80H108
		Dilution Factor: 1				
		Analysis Time..: 18:14				
Silver	ND	0.50	mg/L	SW846 6010B	08/06-08/20/98	CK80H109
		Dilution Factor: 1				
		Analysis Time..: 18:14				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: D8G280161 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D8H260000-335 Prep Batch #...: 8238335						
Mercury	ND	0.00020	mg/L	SW846 7471A	08/26/98	CL0KD101
		Dilution Factor: 1				
		Analysis Time..: 13:54				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID
Date Sampled...: 08/04/98 15:15 Date Received..: 08/05/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8H050140-002 Prep Batch #...: 8222147							
Aluminum	NC	(88 - 120)			SW846 6010B	08/10-08/21/98	CKC8A12D
	NC	(88 - 120)		(0-10)	SW846 6010B	08/10-08/21/98	CKC8A12E
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Antimony	84	(82 - 113)			SW846 6010B	08/10-08/21/98	CKC8A10R
	72 N,*	(82 - 113)	15	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A10T
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Arsenic	86 N	(88 - 108)			SW846 6010B	08/10-08/21/98	CKC8A11N
	87 N	(88 - 108)	0.92	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11P
		Dilution Factor: 1					
		Analysis Time..: 17:06					
Barium	103	(85 - 112)			SW846 6010B	08/10-08/21/98	CKC8A118
	102	(85 - 112)	0.82	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A119
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Beryllium	100	(78 - 118)			SW846 6010B	08/10-08/21/98	CKC8A11A
	98	(78 - 118)	1.2	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11C
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Cadmium	95	(80 - 120)			SW846 6010B	08/10-08/21/98	CKC8A11D
	98	(80 - 120)	2.9	(0-16)	SW846 6010B	08/10-08/21/98	CKC8A11E
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Calcium	95	(85 - 114)			SW846 6010B	08/10-08/21/98	CKC8A12G
	92	(85 - 114)	1.9	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A12H
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Chromium	114 N	(83 - 112)			SW846 6010B	08/10-08/21/98	CKC8A11H
	111	(83 - 112)	2.0	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11J
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Cobalt	96	(80 - 116)			SW846 6010B	08/10-08/21/98	CKC8A11F
	95	(80 - 116)	0.89	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11G
		Dilution Factor: 1					
		Analysis Time..: 16:25					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID
Date Sampled...: 08/04/98 15:15 Date Received..: 08/05/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	105	(84 - 115)			SW846 6010B	08/10-08/21/98	CKC8A11K
	103	(84 - 115)	1.6	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11L
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Iron	NC	(87 - 117)			SW846 6010B	08/10-08/21/98	CKC8A11R
	NC	(87 - 117)		(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11T
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Lead	102	(89 - 115)			SW846 6010B	08/10-08/21/98	CKC8A110
	99	(89 - 115)	2.4	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A111
		Dilution Factor: 1					
		Analysis Time..: 17:06					
Magnesium	117 N	(84 - 113)			SW846 6010B	08/10-08/21/98	CKC8A120
	115 N	(84 - 113)	1.4	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A121
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Manganese	102	(84 - 114)			SW846 6010B	08/10-08/21/98	CKC8A123
	112	(84 - 114)	3.1	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A124
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Nickel	95	(84 - 112)			SW846 6010B	08/10-08/21/98	CKC8A10P
	92	(84 - 112)	2.2	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A10Q
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Potassium	121 N	(82 - 110)			SW846 6010B	08/10-08/21/98	CKC8A11V
	120 N	(82 - 110)	0.32	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A11W
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Selenium	82	(82 - 110)			SW846 6010B	08/10-08/21/98	CKC8A112
	82	(82 - 110)	0.40	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A113
		Dilution Factor: 1					
		Analysis Time..: 17:06					
Silver	93	(80 - 115)			SW846 6010B	08/10-08/21/98	CKC8A116
	91	(80 - 115)	2.4	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A117
		Dilution Factor: 1					
		Analysis Time..: 16:25					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID
Date Sampled...: 08/04/98 15:15 Date Received..: 08/05/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Sodium	98	(85 - 117)			SW846 6010B	08/10-08/21/98	CKC8A126
	97	(85 - 117)	0.43	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A127
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Thallium	82 N	(86 - 114)			SW846 6010B	08/10-08/21/98	CKC8A129
	82 N	(86 - 114)	0.14	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A12A
		Dilution Factor: 1					
		Analysis Time..: 17:06					
Vanadium	113	(85 - 116)			SW846 6010B	08/10-08/21/98	CKC8A10U
	109	(85 - 116)	2.3	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A10V
		Dilution Factor: 1					
		Analysis Time..: 16:25					
Zinc	110	(80 - 120)			SW846 6010B	08/10-08/21/98	CKC8A10W
	103	(80 - 120)	4.3	(0-10)	SW846 6010B	08/10-08/21/98	CKC8A10X
		Dilution Factor: 1					
		Analysis Time..: 16:25					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: D8G280161 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8G280161-001 Prep Batch #...: 8218160							
Leach Date.....: 07/29/98 Leach Batch #..: P821106							
Arsenic	109	(80 - 116)			SW846 6010B	08/06-08/20/98	CK5V110E
	107	(80 - 116)	1.7	(0-10)	SW846 6010B	08/06-08/20/98	CK5V110F
		Dilution Factor: 1					
		Analysis Time..: 18:53					
Barium	104	(83 - 111)			SW846 6010B	08/06-08/20/98	CK5V110J
	103	(83 - 111)	1.4	(0-10)	SW846 6010B	08/06-08/20/98	CK5V110K
		Dilution Factor: 1					
		Analysis Time..: 18:53					
Cadmium	104	(82 - 110)			SW846 6010B	08/06-08/20/98	CK5V110L
	105	(82 - 110)	0.82	(0-10)	SW846 6010B	08/06-08/20/98	CK5V110M
		Dilution Factor: 1					
		Analysis Time..: 18:53					
Chromium	104	(80 - 120)			SW846 6010B	08/06-08/20/98	CK5V110N
	102	(80 - 120)	1.6	(0-10)	SW846 6010B	08/06-08/20/98	CK5V110P
		Dilution Factor: 1					
		Analysis Time..: 18:53					
Lead	105	(82 - 114)			SW846 6010B	08/06-08/20/98	CK5V110Q
	103	(82 - 114)	1.7	(0-10)	SW846 6010B	08/06-08/20/98	CK5V110R
		Dilution Factor: 1					
		Analysis Time..: 18:53					
Selenium	111	(85 - 125)			SW846 6010B	08/06-08/20/98	CK5V110T
	109	(85 - 125)	2.3	(0-11)	SW846 6010B	08/06-08/20/98	CK5V110U
		Dilution Factor: 1					
		Analysis Time..: 18:53					
Silver	100	(83 - 108)			SW846 6010B	08/06-08/20/98	CK5V110V
	102	(83 - 108)	1.5	(0-10)	SW846 6010B	08/06-08/20/98	CK5V110W
		Dilution Factor: 1					
		Analysis Time..: 18:53					
MS Lot-Sample #: D8G280161-001 Prep Batch #...: 8238335							
Leach Date.....: 07/29/98 Leach Batch #..: P821106							
Mercury	97	(80 - 111)			SW846 7471A	08/26/98	CK5V110X
	94	(80 - 111)	3.7	(0-10)	SW846 7471A	08/26/98	CK5V1110
		Dilution Factor: 1					
		Analysis Time..: 13:54					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT		UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8G280161-004 Prep Batch #...: 8218276										
Mercury										
	0.74	0.477	1.47	N	mg/kg	153		SW846 7471A	08/06-08/07/98	CK7FX10R
	0.74	0.477	1.11	N,*	mg/kg	78	27	SW846 7471A	08/06-08/07/98	CK7FX10T
			Dilution Factor: 10							
			Analysis Time..: 19:42							

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8G280161 Matrix.....: SOLID
Date Sampled...: 07/22/98 15:47 Date Received..: 07/28/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8G280161-004 Prep Batch #...: 8218276							
Mercury	153 N	(82 - 114)			SW846 7471A	08/06-08/07/98	CK7FX10R
	78 N,*	(82 - 114)	27	(0-10)	SW846 7471A	08/06-08/07/98	CK7FX10T

Dilution Factor: 10
Analysis Time..: 19:42

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D8G280161

UOS URS Operating Services, Inc.
1099 18th Street, Suite 710, Denver, CO 80202

SHIP TO:

CHAIN OF CUSTODY RECORD

PROJECT NO/NAME: VASQUEZ BLVD / I-70

SITE MANAGER: M. RUDDLE

SAMPLERS SIGNATURE:

STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	TCLP (ORGANIC INORGANIC)	TOTAL METALS				REMARKS
01, 04ICP	7/22/98	1547	✓	GRAB	C4336ST TCLP	1	✓	✓				ND00 4042
02, 05ICP	7/22/98	1052	✓	GRAB	C4940ST TCLP	1	✓	✓				ND00 4053
03, 06ICP	7/24/98	1232	✓	GRAB	C4690CY TCLP	1	✓	✓				ND00 4130

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
[signature]	7/28/98	1130	[signature]				
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
[signature]	7/28/98	1330	ZOOM				
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE	TIME	REMARKS: AIRBILL NUMBER:	
			[signature]	7-28-98	1530		

71-50906.00
RSTART\Forms\Custody.Fm.bas

White - Original to Accompany Samples Yellow - UOS Main Office Pink - UOS Field Office

DN 4146

A 58

SAMPLE CHECKLIST

Revision Date: 6/26/98
Page: 12 of 24

Lot #: D8G280161 Date/Time Received: 7-28-98 @ 1530

Company Name & Sampling Site: URS

*Cooler #(s): 1

Temperatures: 24.1

Unpacking & Labeling Check Points:

N/A	Yes	No		
	☑	☐	1. Radiation checked, record if reading > 0.5 mR/hr. (mR/hr)	
	☑	☐	2. Cooler seals intact.	
	☑	☐	3. Chain of custody present.	
	☐	☑	4. Bottles broken and/or are leaking, comment if yes.	
			PHOTOGRAPH BROKEN BOTTLES	
	☑	☐	5. Containers labeled, comment if no.	
	☐	☑	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☑	☐	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☑	☐	☐	11. VOA samples filled completely, comment if no.	
☑	☐	☐	12. VOA bottles preserved, check for labels.	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in "D," dissolved, bottles.	
	☐	☑	16. Are analyses with short holding times requested?	
☑	☐	☐	17. Is extra sample volume provided for MS, MSD or matrix duplicates?	
	☐	☑	18. Multiphase samples present? If yes, comment below.	
	☐	☑	19. Any subsampling for volatiles? If yes, list samples.	
			PHOTOGRAPH MULTIPHASE SAMPLES	
☑	☐	☐	20. Clear picture taken, labeled, and stapled to project folder.	
☑	☐	☐	21. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	22. Was sample labeling double checked?	

Comments: Include action taken to resolve discrepancies/problems. Include a hard copy of e-mail or use extra paper if more space is needed. Sampled sampled 7-22 - 7-24
Poly bottles and headspace

Initials:

FAX TRANSMITTAL	# Pages + 1	
To: Randy Perlis	From Ellen La Riviere	
Co.:URS Operating Services	Quanterra Denver	
Fax #: (303)291-8296	Phone: (303)421-6611	Fax: (303)431-7171

Quanterra
Environmental Services

CONFIRMATION OF COMMUNICATION

Pursuant to our conversation today, the following is Quanterra's understanding of your instructions. We believe this ☐ is ☒ is not a contract change. An estimate of the schedule and cost impact (if any) will follow, so that change order negotiations may begin, if necessary. Meanwhile, Quanterra ☒ will ☐ will not perform according to the revised instructions, unless you instruct otherwise.

Client Name: URS Operating Services, Inc.	Program Name/LIMS Number: 25025
Quanterra Project Number: D8G280161	Contact at Laboratory: Ellen La Riviere
Date of Request: July 29, 1998	Contract/Order Number: PO# OS-98-P-5240
Date Change Order Submitted to Client: July 29, 1998	Authorized Client Representative: Randy Perlis

TYPE OF CHANGE:	DESCRIPTION OF MODIFICATION/CHANGE/DISCREPANCY/NOTIFICATION:
☐ Method ☐ Sample Delivery Schedule ☐ SDA Criteria ☐ Matrix ☐ QC Change ☒ Bottles Received ☐ Deliverable ☐ C of C Discrepancies ☐ PROGRAM CHANGE ☒ PROJECT CHANGE ONLY	Samples logged in under Quanterra lot # D8G280161 were received at room temperature in plastic jars with headspace. The client was contacted on July 29, 1998 and approved the laboratory to proceed with the analyses.

Date change is to be implemented: July 29, 1998	
APPROVED BY: CLIENT REP:	QUANTERRA REP: Ellen LaRiviere

Follow-up required:	☐ N/A
☒ Yes, Describe: Please sign and return copy of this confirmation of communication.	