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GROUNDWATER MONITORING
VALIDATED ANALYTICAL RESULTS FOR THE FIRST QUARTER 1996
OB/OD GROUND, SENECA ARMY DEPOT

PREPARED FOR:
U.S. Army Corps of Engineers
Hunstville, Alabama

PREPARED BY:

Parsons Engineering Science, Inc.
Boston, Massachusetts

June 1995
H\Eng\Seneca\quartsmp\obod\1qtr96\ob4thtoc.doc

TABLES

TABLE 1

SENECA ARMY DEPOT ACTIVITY
1995/1996 GROUNDWATER MONITORING PROGRAM
GROUNDWATER ELEVATION DATA

Monitoring Well	Elevation at Top of Riser (MSL)	First Quarter 1995			Second Quarter 1995			Third Quarter 1995			Fourth Quarter 1995			First Quarter 1996		
		Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)
OB Grounds																
MW-1	634.22													03/18/96	6.24	627.98
MW-4	NA													03/18/96	6.74	NA
MW-5	637.99													03/18/96	Frozen	Frozen
MW-6	630.31													03/18/96	Not Measured	Not Measured
MW-7	622.94													03/18/96	Not Measured	Not Measured
MW-8	638.78													03/18/96	2.76	636.02
MW-9	634.95													03/18/96	Frozen	Frozen
MW-10	638.62													03/18/96	Frozen	Frozen
MW-11	630.65													03/18/96	Frozen	Frozen
MW-12	624.50	03/15/95	Not Measured		06/08/95	4.36	620.14	09/13/95	5.65	618.85	1/15/96	Frozen	NA	03/18/96	Frozen	Frozen
MW-13	627.09	03/15/95	2.3	624.79	06/08/95	4.95	622.14	09/13/95	6.47	620.62	1/16/96	2.38	624.71	03/18/96	2.26	624.83
MW-14	624.51	03/15/95	Not Measured		06/08/95	6.4	618.11	09/13/95	7.69	616.82	1/15/96	Frozen	NA	03/18/96	Frozen	Frozen
MW-15	621.99													03/18/96	Frozen	Frozen
MW-16	622.60													03/18/96	Frozen	Frozen
MW-17	624.53													03/18/96	2.82	621.71
MW-18	623.95													03/18/96	Frozen	Frozen
MW-19	636.34													03/18/96	Frozen	Frozen
MW-21	637.88													03/18/96	2.90	634.98
MW-22	623.15													03/18/96	Frozen	Frozen
MW-23	622.87													03/18/96	3.56	619.31
MW-24	627.33													03/18/96	3.45	623.88
MW-25	623.80													03/18/96	4.64	619.16
MW-26	624.31													03/18/96	4.88	619.43
MW-27	625.94	03/15/95	Not Measured		06/08/95	6.7	619.24	09/13/95	7.15	618.79	1/15/96	3.68	622.26	03/18/96	2.93	623.01
MW-28	631.90													03/18/96	3.66	628.24
MW-29	632.07													03/18/96	3.86	628.21
MW-30	628.12													03/18/96	3.67	624.45
MW-31	634.57													03/18/96	Not Measured	Not Measured
MW-32	634.81													03/18/96	Frozen	Frozen
MW-36	640.55													03/18/96	5.67	634.88
MW-37	640.81													03/18/96	5.58	635.23
MW-38	620.67													03/18/96	2.64	618.03
MW-39	620.14													03/18/96	3.60	616.54
MW-40	620.46													03/18/96	3.50	616.96
OD Grounds - SEAD-45 wells																
MW45-1	625.08	03/15/95	Not Measured		06/08/95	Dry	NA	09/13/95	Dry	NA	1/15/96	8.00	617.08	03/18/96	7.95	617.13
MW45-2	626.76	03/15/95	Not Measured		06/08/95	Dry	NA	09/13/95	Dry	NA	1/15/96	11.98	614.78	03/18/96	11.51	615.25
MW45-3	626.45	03/15/95	Not Measured		06/08/95	9.4	617.05	09/13/95	11.3	615.15	1/15/96	9.24	617.21	03/18/96	7.83	618.62
MW45-4	633.04	03/15/95	Not Measured	633.04	06/08/95	8.36	624.68	09/13/95	Dry	NA	1/15/96	7.28	625.76	03/18/96	5.34	627.7

TABLE 2

SENECA ARMY DEPOT ACTIVITY
OB GROUNDS FIRST QUARTER 1996 MONITORING PROGRAM
INDICATOR ANALYSIS RESULTS

	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	SITE	OB	OB	OB	OB	OB	OB	OB	OB
	DATE SAMPLED	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96
	ES ID	MW12A	MW12B	MW12C	MW12D	MW13A	MW13B	MW13C	MW13D
	LAB ID	294442	294443	294446	294447	294665	294666	294667	294668
PARAMETER	**UNITS**								
pH	standard units	7.45	7.42	7.31	7.37	7.14	7.1	7.07	7.1
Conductivity	umhos/cm	808	849	863	857	926	923	915	917
Total Organic Carbon	mg/L	1.0	1.0	1.2	1.2	1.1	1.1	1.2	1.0
Total Organic Halides	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

TABLE 2

SENECA ARMY DEPOT ACTIVITY
OB GROUNDS FIRST QUARTER 1996 MONITORING PROGRAM
INDICATOR ANALYSIS RESULTS

	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	SITE	OB	OB	OB	OB	OB	OB	OB	OB	OB
	DATE SAMPLED	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/18/96	03/18/96	03/18/96	03/18/96
	ES ID	MW14A	MW14B	MW14C	MW14D	MW14R	MW27A	MW27B	MW27C	MW27D
	LAB ID	294670	294679	294680	294681	294682	294449	294451	294452	294453
PARAMETER	UNITS					Rinsate				
pH	standard units	7.08	7.24	7.24	7.21	6.39	7.3	7.33	7.32	7.33
Conductivity	umhos/cm	1083	1060	1050	995	4.4	892	886	884	892
Total Organic Carbon	mg/L	0.9	0.9	1.1	0.9	<0.5	0.9	1.0	1.0	0.9
Total Organic Halides	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

TABLE 3

SENECA ARMY DEPOT ACTIVITY
OD GROUNDS FIRST QUARTER 1996 MONITORING PROGRAM
INDICATOR ANALYSIS RESULTS

	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	SITE	OD	OD	OD	OD	OD	OD	OD	OD
	DATE SAMPLED	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96	03/19/96
	ES ID	MW45-3A	MW45-3B	MW45-3C	MW45-3D	MW45-4A	MW45-4B	MW45-4C	MW45-4D
	LAB ID	294455	294456	294457	294458	294684	294685	294686	294687
PARAMETER	**UNITS**								
pH	standard units	7.27	7.27	7.27	7.29	7.23	7.19	7.19	7.1
Conductivity	umhos/cm	1190	1200	1250	1210	830	841	842	830
Total Organic Carbon	mg/L	0.8	0.7	0.8	0.8	0.6	0.5	0.6	0.6
Total Organic Halides	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

Table 4

OB/OD 1996 First Quarter Groundwater Monitoring
Validated TAL Metals Analytical Results

ES ID		MW12	MW13	MW14	MW27	MW114	MW14R	MW45-3	MW45-4
SITE		OB	OB	OB	OB	OB	OB	OD	OD
MATRIX		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
DATA SAMPLED		03/19/96	03/19/96	03/19/96	03/18/96	03/19/96	03/19/96	03/19/96	03/19/96
LAB ID		57313	57342	57342	57342	57371	57371	57342	57371
COMPOUND	UNITS								
Aluminimum	ug/l	48.2	36.4 J	636 J	34.5 U	1110 J	34.5 U	51 J	40.8 J
Antimony	ug/l	1 U	1 U	1 U	6.6	1 U	1 U	1 U	1 U
Arsenic	ug/l	5.1 J	5 J	4.4 J	5.3 J	4 J	4 B	4 U	4.6 J
Barium	ug/l	83.4	76.6	44.7	71.6	46	1.2 U	16.2	19.4
Beryllium	ug/l	0.1 U	0.1 U	0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Cadmium	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.34
Calcium	ug/l	79300	160000	163000	99400	167000	42.2 U	164000	131000
Chromium	ug/l	0.7 U	0.7 U	0.9	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Cobalt	ug/l	0.9 U	1	0.9 U	1.2	0.9 U	0.9 U	1.3	1 U
Copper	ug/l	1.5	1.4	3.6	2	1.4	1.3 B	1.6	1.4
Iron	ug/l	60	44.6	484	47.3	568	21.7 U	189	52.8
Lead	ug/l	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Magnesium	ug/l	60700	30800	33100	53600	33900	40 U	62100	29000
Manganese	ug/l	0.2 U	2.3 R	5.7 R	39.2 R	5.2 R	0.2 U	99.7 R	7.9 R
Mercury	ug/l	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	ug/l	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.5	1.6 U
Potassium	ug/l	7790	1520 J	1320 J	6730 J	1350	39.3 U	6930 J	2150
Selenium	ug/l	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Silver	ug/l	1.3 U	1.3 U	1.8	1.8	1.6	1.3 U	1.3 U	1.8
Sodium	ug/l	15000	15100 J	29800 J	16600 J	30800	219 U	15200 J	12100
Thallium	ug/l	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Vanadium	ug/l	1.2	1.1	1.1 U	1.5	2.4	1.1 U	1.9	1.7
Zinc	ug/l	3 J	1.9	12.4 R	2.1	10.6 J	3.4 B	5 R	2.5
Cyanide	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ

H:\eng\seneca\quartsmp\obod\4qtr95\Q196MET9.WK4

TABLE 5

SENECA ARMY DEPOT ACTIVITY
FIRST QUARTER 1996 GROUNDWATER MONITORING PROGRAM
HISTORICAL SUMMARY OF OB GROUNDS INDICATOR PARAMETER DATA

Monitoring Well		June 1994	Dec 1994	June 1995	January 1996	March 1996
pH						
Upgradient Well:	MW-13	6.97	7.04	7.14	7.13	7.1
Downgradient Wells:	MW-12	7.3	7.37	7.4	7.18	7.39
	MW-14	7.07	7.11	7.18	6.75	7.19
	MW-27	7.28	7.34	7.4	7.26	7.32
Conductivity						
Upgradient Well:	MW-13	936	886	838	894	920
Downgradient Wells:	MW-12	897	911	892	869	844
	MW-14	1100	1082	1090	1025	1047
	MW-27	875	953	912	944	889
Total Organic Carbon						
Upgradient Well:	MW-13	1.2	1.2	1.2	1.2	1.1
Downgradient Wells:	MW-12	1.1	1.2	1.3	1.1	1.1
	MW-14	1	1	1.1	1.0	0.95
	MW-27	0.6	1	1.1	0.8	0.95
Total Organic Halides						
Upgradient Well:	MW-13	0.02U	0.03	0.02U	0.02U	<0.02
Downgradient Wells:	MW-12	0.02U	0.04	0.02U	0.02U	<0.02
	MW-14	0.02U	0.02U	0.02U	0.02U	<0.02
	MW-27	0.02U	0.03	0.02U	0.02U	<0.02

TABLE 6

SENECA ARMY DEPOT ACTIVITY
FIRST QUARTER 1996 GROUNDWATER MONITORING PROGRAM
HISTORICAL SUMMARY OF OD GROUNDS INDICATOR PARAMETER DATA

Monitoring Well		June 1994	Dec 1994	June 1995	January 1996	March 1996
pH						
Upgradient Well:	MW45-4	7.19	7.1	7.24	7.16	7.18
Downgradient Wells:	MW45-1	-	-	-	-	-
	MW45-2	7.05	-	-	-	-
	MW45-3	7.32	7.19	7.38	7.18	7.28
Conductivity						
Upgradient Well:	MW45-4	772	1030	829	891	836
Downgradient Wells:	MW45-1	-	-	-	-	-
	MW45-2	1488	-	-	-	-
	MW45-3	1788	1430	1335	1325	1213
Total Organic Carbon						
Upgradient Well:	MW45-4	0.6	1	0.9	1.1	0.58
Downgradient Wells:	MW45-1	-	-	-	-	-
	MW45-2	0.9	-	-	-	-
	MW45-3	0.8	0.8	0.9	0.65	0.78
Total Organic Halides						
Upgradient Well:	MW45-4	0.02U	0.02U	0.02U	0.02U	<0.02
Downgradient Wells:	MW45-1	-	-	-	-	-
	MW45-2	0.02U	-	-	-	-
	MW45-3	0.02	0.02U	0.02U	0.02U	<0.02

Table 7

OB Grounds First Quarter 1996 Monitoring Program
Students t-Test Statistical Analysis Results

Background Well MW-13	TOC	pH	Specific Cond.	TOX
Intital Mean =	1.19	7.02	909.50	0.01
Initial Variance =	0.14	0.00	704.53	0.00
Sample Size =	16.00	16.00	16.00	16.00

TOTAL ORGANIC CARBON (TOC)								
Compliance Well MW -12		Background Well MW -13		Compliance Well MW -14		Compliance Well MW -27		
t*=	-0.80	t*=	-0.86	t*=	-2.26	t*=	-2.45	
tc=	3.14	tc=	2.92	tc=	3.04	tc=	2.77	
	No Change		No Change		No Change		No Change	
pH								
Compliance Well MW -12		Background Well MW -13		Compliance Well MW -14		Compliance Well MW -27		
t*=	10.60	t*=	3.82	t*=	4.17	t*=	17.20	
tc=	5.20	tc=	3.01	tc=	5.39	tc=	2.95	
	Increase		Increase		No Change		Increase	
SPECIFIC CONDUCTANCE								
Compliance Well MW -12		Background Well MW -13		Compliance Well MW -14		Compliance Well MW -27		
t*=	-4.63	t*=	1.51	t*=	6.94	t*=	-3.02	
tc=	4.11	tc=	2.85	tc=	4.32	tc=	2.77	
	No Change		No Change		Increase		No Change	
TOTAL ORGANIC HALIDES (TOX)								
Compliance Well MW -12		Background Well MW -13		Compliance Well MW -14		Compliance Well MW -27		
t*=	-1.00	t*=	-1.00	t*=	-1.00	t*=	-1.00	
tc=	2.60	tc=	2.60	tc=	2.60	tc=	2.60	
	No Change		No Change		No Change		No Change	

key:
t*>= tc Indicates a statistically significant increase in the indicator parameter
t*<tc Indicates no statistically significant change in the indicator parameter

Table 7

OD Grounds Fourth Quarter 1995 Monitoring Program
Students t-Test Statistical Analysis Results

Background Well MW45-4	TOC	pH	Spec Cond.	TOX
Intital Mean =	0.85	7.18	875.08	0.005
Initial Variance =	0.03	0.00	14375.90	0.000
Sample Size =	12.00	12.00	12.00	12

TOTAL ORGANIC CARBON (TOC)

Compliance Well MW 45-1		Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW 45-4	
t*=	0.00	t*=	0.00	t*=	-1.34	t*=	-4.92
tc=	0.00	tc=	0.00	tc=	3.08	tc=	3.08
	Dry		Dry		No Change		No Change

pH

Compliance Well MW 45-1		Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW 45-4	
t*=	0.00	t*=	0.00	t*=	4.89	t*=	0.05
tc=	0.00	tc=	0.00	tc=	3.27	tc=	4.92
	Dry		Dry		Increase		No Change

SPECIFIC CONDUCTANCE

Compliance Well MW 45-1		Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW 45-4	
t*=	0.00	t*=	0.00	t*=	9.11	t*=	-1.13
tc=	0.00	tc=	0.00	tc=	2.95	tc=	2.73
	Dry		Dry		Increase		No Change

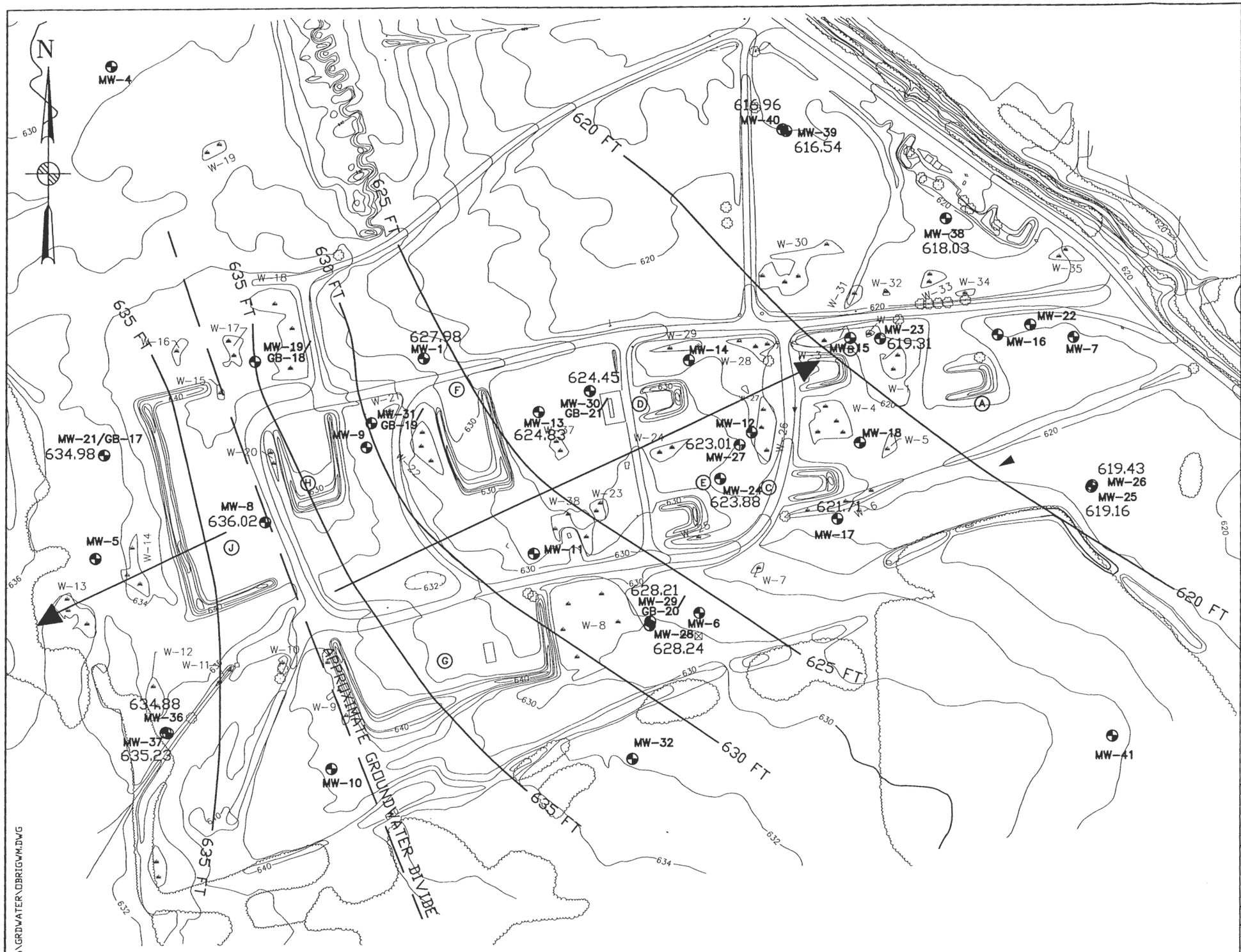
TOTAL ORGANIC HALIDES (TOX)

Compliance Well MW 45-1		Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW 45-4	
t*=	0.00	t*=	0.00	t*=	3.32	t*=	3.32
tc=	0.00	tc=	0.00	tc=	2.72	tc=	2.72
	Dry		Dry		Increase		Increase

key:

t*>= tc	Indicates a statistically significant increase in the indicator parameter
t*<tc	Indicates no statistically significant change in the indicator parameter

FIGURES



LEGEND:

- BURNING PAD DESIGNATION
- PAD OR GRID BORING
- GROUND CONTOUR AND ELEVATION
- WETLAND & DESIGNATION
- UTILITY POLE
- TREE
- BRUSH
- MW-37 535.23 — MONITORING WELL & DESIGNATION AND MSL ELEVATION DATUM
- 635 — GROUNDWATER CONTOUR LINE (DASHED WHERE INFERRED) MSL DATUM
- ARROW INDICATES PREDOMINANT GROUNDWATER FLOW DIRECTION

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE

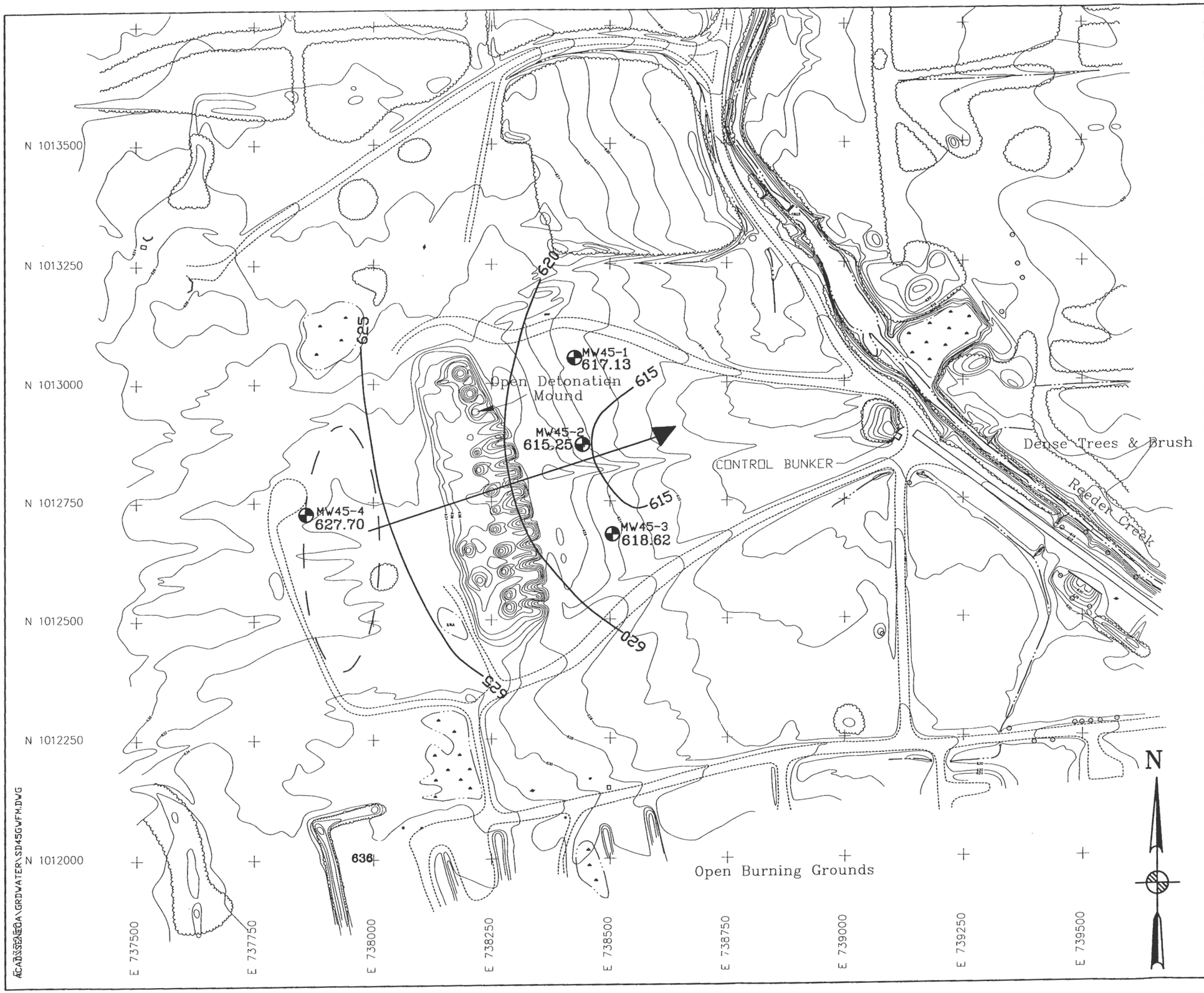
SENECA ARMY DEPOT ACTIVITY
OB GROUNDS
GROUNDWATER MONITORING PROGRAM

DEPT.	Dwg. No.
ENVIRONMENTAL ENGINEERING	725980-01009

FIGURE 1
GROUNDWATER ELEVATION PLAN
MARCH 1996

SCALE	DATE	REV
1" = 200'	JUNE 1996	A

R:\SENECA\GRDWATER\DBRIGWM.DWG



LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- LANDFILL EXTENTS
- RAILROAD
- 760 — GROUND SURFACE ELEVATION CONTOUR
- ROAD SIGN
- DECIDUOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- COORDINATE GRID (250' GRID)
- POLE
- UTILITY BOX
- MAILBOX/RR SIGNAL
- OVERHEAD UTILITY POLE
- SURVEY MONUMENT
- LOCATION OF DETONATION MOUND IN 1988
- MW45-1 617.08 — MONITORING WELL & DESIGNATION AND MSL ELEVATION DATUM
- 625 — GROUNDWATER CONTOUR LINE (DASHED WHERE INFERRED)
- ARROW INDICATES PREDOMINANT GROUNDWATER FLOW DIRECTION

100 0 100 200
(feet)

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE
SENECA ARMY DEPOT ACTIVITY
OD GROUNDS
GROUNDWATER MONITORING PROGRAM

DEPT. ENVIRONMENTAL ENGINEERING
D•G No. 725980-01009

FIGURE 2
GROUNDWATER ELEVATION PLAN
MARCH 18, 1996

SCALE 1" = 200'
DATE JUNE 1996
REV A

ACAD\SENECA\GRDWATER\SD45GWFM.DWG

APPENDIX A

FIELD DATA

OB/OD First Quarter 1996 Groundwater Monitoring Program

1. Groundwater Sampling Forms

2. Chain-of-Custody Forms

1. Groundwater Sampling Forms

GROUNDWATER ELEVATION REPORT

PARSONS ENGINEERING-SCIENCE, INC.	CLIENT: ACOE	DATE: 3-18-96
PROJECT: Quarterly		PROJECT NO:
LOCATION: OB/OD		INSPECTOR: BH

MONITORING EQUIPMENT:

INSTRUMENT	DECTECTOR	BGD	TIME	REMARKS

WATER LEVEL INDICATOR:

INSTRUMENT	CORRECTION FACTOR

COMMENTS:

WELL	TIME	DEPTH TO WATER	DEPTH TO PRODUCT	CORRECTED WATER LEVEL	MEASURED POW	INSTALLED POW	PRODUCT SPEC. GRAV.	WELL STATUS / COMMENTS (Lock?, Well #?, Surface Disturbance?, Riser marked?, Condition of: riser, concrete, protective casing, etc.)
65-4	1423	5.34						Pad heaved
MW-4	1426	6.24						Bollards dmd
MW-8	1437	2.76						No well cap, No Lock
MW-37	1447	5.58						
MW-36	1448	5.67						
LA-5	1457	Frozen						
MW-21	1458	2.90						Pad heaved
	1459	2.80						well next to MW-21; No Lock

(ALL DEPTH MEASUREMENTS FROM MARKED LOCATION ON RISER)

GROUNDWATER ELEVATION REPORT

PARSONS ENGINEERING-SCIENCE, INC. | CLIENT: ACOE | DATE: 3-18-96

PROJECT: Quarterly | PROJECT NO:

LOCATION: OB/OD | INSPECTOR: BH, AJP

MONITORING EQUIPMENT:

INSTRUMENT	DECTECTOR	BGD	TIME	REMARKS

WATER LEVEL INDICATOR:

INSTRUMENT	CORRECTION FACTOR

COMMENTS:

WELL	TIME	DEPTH TO WATER	DEPTH TO PRODUCT	CORRECTED WATER LEVEL	MEASURED POW	INSTALLED POW	PRODUCT SPEC. GRAV.	WELL STATUS / COMMENTS (Lock?, Well #?, Surface Disturbance?, Riser marked?, Condition of: riser, concrete, protective casing, etc.)
MW-29	1500	3.86'						
MW-28	1502	3.66'						
MW-11	1505	Frozen						Frozen 2.60'
MW-10	1515	Frozen						Frozen 2.39'
MW-32	1520	Frozen						Frozen 2.42'
MW-17	1531	2.82'						
MW-18	1535	Frozen						Frozen 2.30'
MW-26	1540	4.88'						No Lock.
MW-25	1542	4.64'						
MW-7	1546							Can't Open Lid
MW-22	1547							Unable to Open Lock.
MW-16	1550	Frozen						Frozen 2.19'
MW-15	1553	Lock Frozen						

(ALL DEPTH MEASUREMENTS FROM MARKED LOCATION ON RISER)

GROUNDWATER ELEVATION REPORT

PARSONS ENGINEERING-SCIENCE, INC. | CLIENT: ACOE | DATE: 3-18-96

PROJECT: Quarterly | PROJECT NO:

LOCATION: OB/OD | INSPECTOR: AJP

MONITORING EQUIPMENT:

INSTRUMENT	DECTECTOR	BGD	TIME	REMARKS

WATER LEVEL INDICATOR:

INSTRUMENT	CORRECTION FACTOR

COMMENTS:

WELL	TIME	DEPTH TO WATER	DEPTH TO PRODUCT	CORRECTED WATER LEVEL	MEASURED POW	INSTALLED POW	PRODUCT SPEC. GRAV.	WELL STATUS / COMMENTS (Lock?, Well #?, Surface Disturbance?, Riser marked?, Condition of: riser, concrete, protective casing, etc.)
45-3	1359	7.83						
45-2	1403	11.51						
45-1	1406	7.95						
MW-19	1420	Frozen						Frozen 3.03'
31	1424	Frozen						Frozen 1.76' No Lock
MW-9	1427	Frozen						Frozen 3.00'
MW-1	1431	6.24'						4" Well
MW-13								Under 1' of Water
MW-30	1436	3.67'						
MW-14	1440	Frozen						Frozen 3.02'
MW-12	1442	1.98'*						Frozen Just Below Water
MW-27	1449	2.93'						
MW-24	1453	3.45'						
MW-6	1457							Can't remove Lid.

(ALL DEPTH MEASUREMENTS FROM MARKED LOCATION ON RISER)

GROUNDWATER ELEVATION REPORT

PARSONS ENGINEERING-SCIENCE, INC. | CLIENT: ACOE | DATE: 3-18-96

PROJECT: Quarterly | PROJECT NO:

LOCATION: OB/OD | INSPECTOR: LH

MONITORING EQUIPMENT:

INSTRUMENT	DECTECTOR	BGD	TIME	REMARKS

WATER LEVEL INDICATOR:

INSTRUMENT	CORRECTION FACTOR

COMMENTS:

WELL	TIME	DEPTH TO WATER	DEPTH TO PRODUCT	CORRECTED WATER LEVEL	MEASURED POW	INSTALLED POW	PRODUCT SPEC. GRAV.	WELL STATUS / COMMENTS (Lock?, Well #?, Surface Disturbance?, Riser marked?, Condition of: riser, concrete, protective casing, etc.)
MW-13	1516	2.26						
MW-40	1538	3.50						
MW-39	1534	3.60						
MW-38	1546	2.64						
MW-23	1554	3.56						Pad leaked

(ALL DEPTH MEASUREMENTS FROM MARKED LOCATION ON RISER)

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 3-19-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: BH, ASD
LOCATION: OB GROUNDS		LABORATORY: Accutest
WELL NUMBER: MW-12		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT / DETECTOR

WELL DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2.00	2.61	3.30	5.87

PURGE INFORMATION:

STATIC DEPTH TO WATER (TOC): 2.01
WELL DEPTH (TOC): 9.11
FEET OF WATER IN WELL: 7.1
STANDING WATER VOLUME IN WELL (gallons): 1.15
THREE WELL VOLUMES (gallons):
ONE: 1.15 TWO: 2.3 THREE: 3.45

PURGING WITH A PERISTALTIC PUMP OR BAILER

(measure indicator parameters at one, two and three well volumes)

TIME BEGIN PURGING: TIME END PURGING:

TIME:	11:00	11:04	11:08			
DEPTH TO WATER (ft)	~~2.91~~ 2.91'	2.98'	2.99'			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	~~2.91~~ 9.10'	~~7.98~~ 7.10'	7.10'			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	1 l/min	1 l/m	1 l/min.			
VOLUME OF WATER REMOVED (gals)	1.2 gal	2.4 gal	3.6 gal.			
TEMPERATURE (deg. C)	4.9	4.6	4.6			
SPEC. COND (umhos)	485	470	480			
PH	7.37	7.26	7.23			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	3-19-96					
TIME	1120					
DEPTH TO WATER (ft)	2.04					
"AFTER PURGE" WATER COLUMN (ft)	7.07					
"STATIC" WATER COLUMN (ft)	7.1					
% RECOVERY	99.5%					

Notes:

(1) Determine water column in the well (for both "after purge" and "static" conditions) by subtracting the measured water level from the well point.

(2) Divide the "after purge" water column by the "static" water column and multiply by 100 to determine the percent of recovery for the well.

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 3-19-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: Aquatec
LOCATION: OB GROUNDS		LABORATORY: BH, AJT
		CHAIN OF CUSTODY #:
WELL NUMBER: NWW-13		MONITORING INSTRUMENT / DETECTOR
SCREENED INTERVAL (TOC):		

WELL DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2.00	2.61	3.30	5.87

PURGE INFORMATION:

STATIC DEPTH TO WATER (TOC): 2.23
WELL DEPTH (TOC): 10.14
FEET OF WATER IN WELL: 7.91
STANDING WATER VOLUME IN WELL (gallons):
THREE WELL VOLUMES (gallons):
ONE: 1.29 TWO: 2.58 THREE: 3.87

PURGING WITH A PERISTALTIC PUMP OR BAILER

(measure indicator parameters at one, two and three well volumes)

TIME BEGIN PURGING: 1500 TIME END PURGING: 1515

TIME:	1506	1511	1518			
DEPTH TO WATER (ft)	~~1506~~ 3.81'	3.92'	3.92'			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	10.14	8.14	8.14'			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	870 ml/min	870 ml/min	870 ml/min			
VOLUME OF WATER REMOVED (gals)	1.3 gal.	2.7 gal.	4.0 gal			
TEMPERATURE (deg. C)	6.2	5.9	6.0			
SPEC. COND (umhos)	505	505	510			
PH	6.95	6.93	6.87			
	2 NTU's	1 NTU	2 NTU's			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	3-19-96					
TIME	1526					
DEPTH TO WATER (ft)	2.30					
"AFTER PURGE" WATER COLUMN (ft)	7.84					
"STATIC" WATER COLUMN (ft)	7.91					
% RECOVERY	99%					

Notes:

(1) Determine water column in the well (for both "after purge" and "static" conditions) by subtracting the measured water level from the well point.

(2) Divide the "after purge" water column by the "static" water column and multiply by 100 to determine the percent of recovery for the well.

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 3-19-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: BH, BJP
LOCATION: OB GROUNDS		LABORATORY: Hequstar
		CHAIN OF CUSTODY #:
WELL NUMBER: MW-14		MONITORING INSTRUMENT / DETECTOR
SCREENED INTERVAL (TOC):		

WELL DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2.00	2.61	3.30	5.87

PURGE INFORMATION:

STATIC DEPTH TO WATER (TOC): 3.20
WELL DEPTH (TOC): 10.58
FEET OF WATER IN WELL: 7.38
STANDING WATER VOLUME IN WELL (gallons): 1.20
THREE WELL VOLUMES (gallons):
ONE: 1.20 TWO: THREE:

PURGING WITH A PERISTALTIC PUMP OR BAILER

(measure indicator parameters at one, two and three well volumes)

TIME BEGIN PURGING: 1600 TIME END PURGING: 1614

TIME:	1605	1611	1614			
DEPTH TO WATER (ft)	4.97'	5.21'	5.31			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	10.58'	8.58'	8.58			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	660ml/min	660ml/min	660			
VOLUME OF WATER REMOVED (gals)	1.2	2.5				
TEMPERATURE (deg. C)	6.0	5.2	6.0°C			
SPEC. COND (umhos)	600	600	600			
PH	6.84	6.94	6.93 3 UNITS			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	3-19-96					
TIME	1640					
DEPTH TO WATER (ft)	3.33					
"AFTER PURGE" WATER COLUMN (ft)	7.25					
"STATIC" WATER COLUMN (ft)	7.38					
% RECOVERY	98%					

Notes:

(1) Determine water column in the well (for both "after purge" and "static conditions") by subtracting the measured water level from the well point.

(2) Divide the "after purge" water column by the "static" water column and multiply by 100 to determine the percent of recovery for the well.

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 3-18-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: BH, AJD
LOCATION: OB GROUNDS		LABORATORY: Aquatec CHAIN OF CUSTODY #:
WELL NUMBER: MW-27		MONITORING INSTRUMENT / DETECTOR
SCREENED INTERVAL (TOC):		

WELL DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2.00	2.61	3.30	5.87

PURGE INFORMATION:

STATIC DEPTH TO WATER (TOC): 2.96
WELL DEPTH (TOC): 15.46
FEET OF WATER IN WELL: 12.5
STANDING WATER VOLUME IN WELL (gallons): 2.03
THREE WELL VOLUMES (gallons):
ONE: 2.03 TWO: 4.06 THREE: 6.09

PURGING WITH A PERISTALTIC PUMP OR BAILER

(measure indicator parameters at one, two and three well volumes)

TIME BEGIN PURGING: 1652 TIME END PURGING:

TIME:	1700	1708	1715			
DEPTH TO WATER (ft)	4.75'	4.84'	4.83'			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	15.45'	13.40'	1340'			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	1l/min	1l/min	1l/min			
VOLUME OF WATER REMOVED (gals)	2gal.	4.0	6.0			
TEMPERATURE (deg. C)	6.5	6.9	6.3			
SPEC. COND (umhos)	6.75	600	600			
PH	7.01	7.16	7.09			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	3-18-96	~~3/19-96~~				
TIME	1720	~~0950~~				
DEPTH TO WATER (ft)	2.96	5.04				
"AFTER PURGE" WATER COLUMN (ft)	12.5					
"STATIC" WATER COLUMN (ft)	12.5					
% RECOVERY	100%					

Notes:

(1) Determine water column in the well (for both "after purge" and "static" conditions) by subtracting the measured water level from the well point.

(2) Divide the "after purge" water column by the "static" water column and multiply by 100 to determine the percent of recovery for the well.

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 3-18-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: BH, AJP
LOCATION: OB GROUNDS		LABORATORY: Hunter
WELL NUMBER: MW 45-3		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT: — DETECTOR: —

WELL DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2.00	2.61	3.30	5.87

PURGE INFORMATION:

STATIC DEPTH TO WATER (TOC): 7.83
WELL DEPTH (TOC): 14.09
FEET OF WATER IN WELL: 6.26
STANDING WATER VOLUME IN WELL (gallons):
THREE WELL VOLUMES (gallons):
ONE: 1.02 TWO: 2.04 THREE: 3.06

PURGING WITH A PERISTALTIC PUMP OR BAILER

(measure indicator parameters at one, two and three well volumes)

TIME BEGIN PURGING: 1601 TIME END PURGING: 1637

TIME:	1615	1627	1637			
DEPTH TO WATER (ft)	9.80	11.20	12.32			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	14.09	1200	13'			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	180	418	418			
VOLUME OF WATER REMOVED (gals)	1.0	1.0	1.0			
TEMPERATURE (deg. C)	8°C	5.5°C	6°C			
SPEC. COND (umhos)	710	800	795			
PH	7.17	7.13	7.05			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	3-19-96					
TIME	1010					
DEPTH TO WATER (ft)	10.56					
"AFTER PURGE" WATER COLUMN (ft)	3.53					
"STATIC" WATER COLUMN (ft)	6.27					
% RECOVERY	56%					

Notes:

(1) Determine water column in the well (for both "after purge" and "static" conditions) by subtracting the measured water level from the well point.

(2) Divide the "after purge" water column by the "static" water column and multiply by 100 to determine the percent of recovery for the well.

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 3-19-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: BH, JT, JP
LOCATION: OB GROUNDS		LABORATORY: Accutec
WELL NUMBER: MW454		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT / DETECTOR

WELL DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2.00	2.61	3.30	5.87

PURGE INFORMATION:

STATIC DEPTH TO WATER (TOC): 5.23
WELL DEPTH (TOC): 9.75
FEET OF WATER IN WELL: 4.52
STANDING WATER VOLUME IN WELL (gallons): .73
THREE WELL VOLUMES (gallons):
ONE: .73 TWO: 1.46 THREE: 2.19

PURGING WITH A PERISTALTIC PUMP OR BAILER

(measure indicator parameters at one, two and three well volumes)

TIME BEGIN PURGING: 1416 TIME END PURGING: 1435

TIME:	14:18	1421	1425			
DEPTH TO WATER (ft)	5.75	5.74'	5.75'			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	7.73	7.70	7.70			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	1L/min	1L/min	1L/min.			
VOLUME OF WATER REMOVED (gals)	0.8gal	1.8	2.6			
TEMPERATURE (deg. C)	6.0	5.1	5.4			
SPEC. COND (umhos)	500	505	480			
PH	7.23	7.11	7.10			
	7NTUs	2NTU's	2NTU's			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	3-19-96					
TIME	1430					
DEPTH TO WATER (ft)	5.24					
"AFTER PURGE" WATER COLUMN (ft)	4.51					
"STATIC" WATER COLUMN (ft)	4.52					
% RECOVERY	99.77					

Notes:

(1) Determine water column in the well (for both "after purge" and "static conditions) by subtracting the measured water level from the well point.

(2) Divide the "after purge" water column by the "static" water column and multiply by 100 to determine the percent of recovery for the well.

2. Chain-of-Custody Forms

PARSONS ENGINEERING-SCIENCE, INC.

Prudential Center
Boston, MA 02199
Phone: 617-859-2000
Fax: 617-859-2043

CHAIN-OF-CUSTODY RECORD

JOB NO. 725980-01009
PROJECT 1st Quarterly Monitoring [illegible] SEAD
CONTACT M. [illegible]

LABORATORY Aquatec
ADDRESS Colchester, VT
CONTACT Kelly Malik

SAMPLE NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp Cond pH T	NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW45-4		3-19-96	1420		water			1		1						2	
MW45-4a													1	1	1	4	
MW45-4b													1	1	1	4	
MW45-4c													1	1	1	4	
MW45-4d													1	1	1	4	
MW-13		3-19-96	1520		Water			1		1						2	
MW-13a													1	1	1	4	
MW-13b													1	1	1	4	
MW-13c													1	1	1	4	
MW-13d													1	1	1	4	

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp Cond pH T
VOA Vial									✓	
Glass Bottle								✓		
Plastic Bottle			✓		✓					✓
Preservative			A		A F			A	A E	A
Container Volume			1L		1L			250 ml	40 ml	1L

Sampled and Relinquished by
Sign [signature]
Print Bowman F. Harvey
Firm Parsons ES
Date 3-20-96 Time 0930

Received by
Sign
Print
Firm
Date Time

Relinquished by
Sign
Print
Firm
Date Time

Received by
Sign
Print
Firm
Date Time

Evidence Samples tampered with? ☐ No ☐ Yes
If Yes, explain in remarks.

PRESERVATION KEY:
A - Ice
B - Filtered
C - Acidified with HCl
D - Acidified with HNO_3
E - Acidified with H_2SO_4
F - NaOH + Ascorbic
G - Other

REMARKS: (Sample storage, nonstandard sample bottles)
Metals and TOX bottles will be preserved in the Lab

Cooler #: 19

PARSONS
ENGINEERING-SCIENCE, INC.
Prudential Center
Boston, MA 02199
Phone: 617-859-2000
Fax: 617-859-2043

CHAIN-OF-CUSTODY RECORD

JOB NO. 725980-01004
PROJECT 1st Quarterly Monitoring 96 Ser.
CONTACT M. D...

LABORATORY Aquatec
ADDRESS Colchester, VT
CONTACT Kelly Mc...k

SAMPLE NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	[illegible]	NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW-14R		3-19-96	[illegible]		Water			1		1			1	1	1	6	
MW-114		3-19-96	1640		Water			1		1						2	
MW-14		3-19-96	1140		Water			1		1						2	
MW-14a		3-19-96	1140		Water								1	1	1	4	
MW-14b													1	1	1	4	
MW-14c													1	1	1	4	
MW-14d													1	1	1	4	
TB-31996		3-19-96	0800		Water	1										2	

Sampled and Relinquished by
Sign [signature]
Print Bowman F. Harvey
Firm Parsons ES
Date 3-20-96 Time 0910

Received by
Sign
Print
Firm
Date Time

Relinquished by
Sign
Print
Firm
Date Time

Received by
Sign
Print
Firm
Date Time

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	[illegible]
VOA Vial	✓								✓	
Glass Bottle								✓		
Plastic Bottle			✓		✓					✓
Preservative	A C		A		A F			A	A E	A
Container Volume	40 ml		1L		1L			250 ml	40 ml	1L

PRESERVATION KEY:
A - Ice
B - Filtered
C - Acidified with HCl
D - Acidified with HNO_3
E - Acidified with H_2SO_4
F - NaOH + Ascorbic
G - Other

REMARKS: (Sample storage, nonstandard sample bottles)
Metals and TOX bottles will be preserved in the lab.

Cooler #: 998

Evidence Samples tampered with? ☐ No ☐ Yes
If Yes, explain in remarks.

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 1

PARSONS
ENGINEERING-SCIENCE, INC.
Prudential Center
Boston, MA 02199
Phone: 617-859-2000
Fax: 617-859-2043

JOB NO. 725980-01009
PROJECT 1st Quarterly Monitoring '96
CONTACT M. Duchesneau

LABORATORY MRD
ADDRESS 420 So. 18th St Omaha, Nebraska
CONTACT Laura Penfield

SAMPLE NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSES: VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp. Cond. & pH	NO. OF CONTAINERS	COMMENTS (Special Instructions, cautions, etc.)
TB-31996MRD	—	3-19-96	0800	NA	Water	1										2	
MW-14MRD-R	—	3-19-96	0830	NA	Water			1		1			1	1	1	6	
MW-14MRD	—	3-19-96	1640	NA	Water			1		1			1	1	1	6	

Sampled and Relinquished by
Sign [signature]
Print Edward F. Harney
Firm Parsons ES
Date 3-20-96 Time 0845

Received by
Sign
Print
Firm
Date Time

Relinquished by
Sign
Print
Firm
Date Time

Received by
Sign
Print
Firm
Date Time

Evidence Samples tampered with? ☐ No ☐ Yes
If Yes, explain in remarks.

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp. Cond. & pH
VOA Vial	✓								✓	
Glass Bottle								✓		
Plastic Bottle			✓		✓					✓
Preservative	A C		A D		A F			A	A E	A
Container Volume	40 ml		1L		1L			250 ml	40 ml	1L

PRESERVATION KEY:
A - Ice
B - Filtered
C - Acidified with HCl
D - Acidified with HNO_3
E - Acidified with H_2SO_4
F - NaOH + Ascorbic
G - Other

REMARKS: (Sample storage, nonstandard sample bottles)
LIMS # 3928

Cooler #: ES-12

ESB - Form COC1 White - return with data Yellow - lab copy Pink - Sampler copy

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 1

PARSONS
ENGINEERING-SCIENCE, INC.
Prudential Center, Boston, MA 02199 — Phone: 617-859-2000, Fax: 617-859-2043

JOB NO. 225580-01009
PROJECT 1st Quarterly Monitoring '96 SEAD
CONTACT M. Duchesneau

LABORATORY Aquatec
ADDRESS Colchester, VT
CONTACT Polly Malik

SAMPLE NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSES: VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp. Cond + pH	NO. OF CONTAINERS	COMMENTS (Special Instructions, cautions, etc.)
MW-12		3-19-96	1120		Water			1		1						2	
MW-12a													1	1	1	4	
MW-12b													1	1	1	4	
MW-12c													1	1	1	4	
MW-12d													1	1	1	4	
MW-12MS								1		1			1	1	1	6	
MW-12MSD								1		1			1	1	1	6	
					HOLD			1		1			1	1	1	6	

Sampled and Relinquished by
Sign Bowman F. Hardy
Print Bowman F. Hardy
Firm Parsons ES
Date 3-19-96 Time 1335

Received by
Sign
Print
Firm
Date Time

Relinquished by
Sign
Print
Firm
Date Time

Received by
Sign
Print
Firm
Date Time

Evidence Samples tampered with? ☐ No ☐ Yes
If Yes, explain in remarks.

	VOA Vial	Glass Bottle	Plastic Bottle	Preservative	Container Volume
METALS			✓	A	
CN			✓	A, F	
TOX		✓		A	
TOC	✓			A, E	
Sp. Cond + pH			✓	A	

PRESERVATION KEY: A - Ice; B - Filtered; C - Acidified with HCl; D - Acidified with HNO_3; E - Acidified with H_2SO_4; F - NaOH + Ascorbic; G - Other

REMARKS: (Sample storage, nonstandard sample bottles)
~~Method 5xx.2~~
* All metals and TOX bottles will be preserved in the lab.

Cooler #: 99°C

ESB - Form COC1 White - return with data Yellow - lab copy Pink - Sampler copy

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 1

PARSONS
ENGINEERING-SCIENCE, INC.
Prudential Center, Boston, MA 02199 Phone: 617-859-2000 Fax: 617-859-2043

JOB NO. 725980-0100S
PROJECT 1st Quarterly Monitoring '96 SEAD
CONTACT M. Duclersmeau

LABORATORY Aquater
ADDRESS Colchester, VT
CONTACT Polly Hlatik

SAMPLE NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSES VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp. Cond & DH	NO. OF CONTAINERS	COMMENTS (Special Instructions, cautions, etc.)
MW-27		3-18-96	1720		Water			1		1						2	
MW-27a													1	1	1	4	
MW-27b													1	1	1	4	
MW-27c													1	1	1	4	
MW-27d													1	1	1	4	
MW-27ash		3-19-96	0950			1										3	
MW45-3		3-19-96	1010					1		1						2	
MW45-3a													1	1	1	4	
MW45-3b													1	1	1	4	
MW45-3c													1	1	1	4	
MW45-3d													1	1	1	4	

Sampled and Relinquished by
Sign [signature]
Print Bowman F. Harvey
Firm Parsons ES
Date 3-19-96 Time 1310

Received by
Sign
Print
Firm
Date Time

Relinquished by
Sign
Print
Firm
Date Time

Received by
Sign
Print
Firm
Date Time

Evidence Samples tampered with? ☐ No ☐ Yes
If Yes, explain in remarks.

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOX	TOC	Sp. Cond & DH
VOA Vial	✓								✓	
Glass Bottle								✓		
Plastic Bottle			✓		✓					✓
Preservative	A C		A		A F			A	A E	A
Container Volume	40 ml		1L		1L			250 ml	40 ml	1L

PRESERVATION KEY: A - Ice; B - Filtered; C - Acidified with HCl; D - Acidified with HNO_3; E - Acidified with H_2SO_4; F - NaOH + Ascorbic; G - Other

REMARKS: (Sample storage, nonstandard sample bottles)
Method 524.2
* All metals and TOX bottles will be preserved in the lab.

Cooler #: 302

ESB - Form COC1 White - return with data Yellow - lab copy Pink - Sampler copy

APPENDIX B

Laboratory Analytical Packages with QA/QC Data

1. **Sample Delivery Group No. 57342**

   A. **Indicator Analysis Results**
   B. **TAL Metals Analysis**

2. **Sample Delivery Group No. 57313**

   A. **Indicator Analysis Results**
   B. **TAL Metals Analysis**

3. **Sample Delivery Group No. 57371**

   A. **Indicatory Analysis Results**
   B. **TAL Metals Analysis**

1. Sample Delivery Group No. 57342

Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57370
Project No.: 93206
No. Samples: 26
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294665	MW13A:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	926
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.14
9060	Total Organic Carbon	1.1
294665MS	MW13AMS:[MS]03/19/96 (Water)	
9020	Total Organic Halides	0.10
9060	Total Organic Carbon	2.2
294665DP	MW13AREP:[REP]03/19/96 (Water)	
9050	Conductivity (umhos/cm)	926
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.12
9060	Total Organic Carbon	1.1
294665R1	MW13A:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294665R2	MW13A:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294665R3	MW13A:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294666	MW13B:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	923
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.10
9060	Total Organic Carbon	1.1

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Environmental Laboratories

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Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57370
Project No.: 93206
No. Samples: 26
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294666R1	MW13B:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294666R2	MW13B:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294666R3	MW13B:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294667	MW13C:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	915
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.07
9060	Total Organic Carbon	1.2
294667R1	MW13C:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294667R2	MW13C:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294667R3	MW13C:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294668	MW13D:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	917
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.10
9060	Total Organic Carbon	1.0

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Inchcape Testing Services
Environmental Laboratories

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Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57370
Project No.: 93206
No. Samples: 26
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294668R1	MW13D:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294668R2	MW13D:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294668R3	MW13D:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294670	MW14A:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1083
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.08
9060	Total Organic Carbon	0.9
294670R1	MW14A:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294670R2	MW14A:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294670R3	MW14A:03/19/96 (Water)	
9060	Total Organic Carbon	0.9

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Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
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South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57342
Project No.: 93206
No. Samples: 49
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294446	MW12C:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	863
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.31
9060	Total Organic Carbon	1.2
294446R1	MW12C:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294446R2	MW12C:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294446R3	MW12C:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294447	MW12D:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	857
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.37
9060	Total Organic Carbon	1.2
294447R1	MW12D:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294447R2	MW12D:03/19/96 (Water)	
9060	Total Organic Carbon	1.2
294447R3	MW12D:03/19/96 (Water)	
9060	Total Organic Carbon	1.1

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Analytical Report

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Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57342
Project No.: 93206
No. Samples: 49
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294449	MW27A:03/18/96 (Water)	
9050	Conductivity (umhos/cm)	892
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.30
9060	Total Organic Carbon	0.9
294449R1	MW27A:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294449R2	MW27A:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294449R3	MW27A:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294451	MW27B:03/18/96 (Water)	
9050	Conductivity (umhos/cm)	886
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.33
9060	Total Organic Carbon	1.0
294451R1	MW27B:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294451R2	MW27B:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294451R3	MW27B:03/18/96 (Water)	
9060	Total Organic Carbon	1.0

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Environmental Laboratories

55 South Park Drive
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South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57342
Project No.: 93206
No. Samples: 49
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294452	MW27C:03/18/96 (Water)	
9050	Conductivity (umhos/cm)	884
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.32
9060	Total Organic Carbon	1.0
294452R1	MW27C:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294452R2	MW27C:03/18/96 (Water)	
9060	Total Organic Carbon	1.0
294452R3	MW27C:03/18/96 (Water)	
9060	Total Organic Carbon	0.9
294453	MW27D:03/18/96 (Water)	
9050	Conductivity (umhos/cm)	892
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.33
9060	Total Organic Carbon	0.9
294453R1	MW27D:03/18/96 (Water)	
9060	Total Organic Carbon	<0.5
294453R2	MW27D:03/18/96 (Water)	
9060	Total Organic Carbon	0.8
294453R3	MW27D:03/18/96 (Water)	
9060	Total Organic Carbon	0.7

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Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57342
Project No.: 93206
No. Samples: 49
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294455	MW453A:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1190
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.27
9060	Total Organic Carbon	0.8
294455R1	MW453A:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294455R2	MW453A:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294455R3	MW453A:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294456	MW453B:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1200
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.27
9060	Total Organic Carbon	0.7
294456R1	MW453B:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294456R2	MW453B:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294456R3	MW453B:03/19/96 (Water)	
9060	Total Organic Carbon	0.9

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Inchcape Testing Services
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Analytical Report

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Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57342
Project No.: 93206
No. Samples: 49
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57342

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294457	MW453C:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1250
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.27
9060	Total Organic Carbon	0.8
294457R1	MW453C:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294457R2	MW453C:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294457R3	MW453C:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294458	MW453D:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1210
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.29
9060	Total Organic Carbon	0.8
294458R1	MW453D:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294458R2	MW453D:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294458R3	MW453D:03/19/96 (Water)	
9060	Total Organic Carbon	0.8

< Last Page > Submitted By : Aquatec Inc.

Quality Control Summary

Project No: 93206
ETR No: 57342
SDG No: 57342
Units: mg/L

Parameter	Method Preparation Blank	Laboratory Control Sample Reported Value	Laboratory Control Sample True Value	Laboratory Control Sample Percent Recovery
Conductivity (umhos/cm)	NA	1445	1413	102.3
pH (Std Units)	NA	5.99	6.00	99.8
Total Organic Carbon	< 0.5	50.5	49.2	102.6
Total Organic Carbon	< 0.5	52.0	49.2	105.7
Total Organic Carbon	< 0.5	50.3	49.2	102.2
Total Organic Halides	< 0.02	0.102	0.100	102.0

Quality Control Summary

Project No: 93206
ETR No: 57370
SDG No: 57342
Units: mg/L

Parameter	Method Preparation Blank	Laboratory Control Sample Reported Value	Laboratory Control Sample True Value	Laboratory Control Sample Percent Recovery
Conductivity (umhos/cm)	NA	1398	1413	98.9
pH (Std Units)	NA	5.99	6.00	99.8
Total Organic Carbon	< 0.5	49.2	49.2	100.0
Total Organic Halides	< 0.02	0.099	0.100	99.0

Inchcape Testing Services
Environmental Laboratories

Quality Control Summary

Project No:	93206
ETR No:	57370
SDG No:	57342
Sample No:	294665
Units:	mg/L

Parameter	Sample Result	Duplicate Sample Result	Relative Percent Difference	Spiked Sample Result	Spike Added	Percent Spike Recovery
Conductivity (umhos/cm)	926	926	0.0	NA	NA	NA
pH (Std Units)	7.14	7.12	0.3	NA	NA	NA
Total Organic Carbon	1.1	1.1	0.0	2.2	1.0	110.0
Total Organic Halides	< 0.02	< 0.02	NA	0.10	0.10	100.0

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH SAS No.: _____ SDG No.:57342_

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MW13	294664
MW14	294669
MW27	294448
MW453	294454
MW14S	294669MS
MW14D	294669DP

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW13

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER Lab Sample ID: 294664

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	36.4	B	*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	5.0	B		P
7440-39-3	Barium	76.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	160000			P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	1.0	B		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	44.6	B		P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	30800			P
7439-96-5	Manganese	2.3	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	U		P
7440-09-7	Potassium	1520	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	15100		E	P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	1.1	B		P
7440-66-6	Zinc	1.9	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW14

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER Lab Sample ID: 294669

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	636		*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	4.4	B		P
7440-39-3	Barium	44.7	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	163000			P
7440-47-3	Chromium	0.90	B		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	3.6	B		P
7439-89-6	Iron	484			P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	33100			P
7439-96-5	Manganese	5.7	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	U		P
7440-09-7	Potassium	1320	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	29800		E	P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	12.4	B		P
	Cyanide	5.0	U		AS

Color Before: GRAY_____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW27

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER Lab Sample ID: 294448

Level (low/med): LOW__ Date Received: 03/20/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.5	U	*	P
7440-36-0	Antimony	6.6	B		P
7440-38-2	Arsenic	5.3	B		P
7440-39-3	Barium	71.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	99400			P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	2.0	B		P
7439-89-6	Iron	47.3	B		P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	53600			P
7439-96-5	Manganese	39.2			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	U		P
7440-09-7	Potassium	6730			P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	16600		E	P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	2.1	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW453

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER Lab Sample ID: 294454

Level (low/med): LOW__ Date Received: 03/20/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	51.0	B	*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	16.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	164000			P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	1.3	B		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	189			P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	62100			P
7439-96-5	Manganese	99.7			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium	6930			P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	15200		E	P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	1.9	B		P
7440-66-6	Zinc	5.0	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	26000.0	25900.00	99.6	30200.0	29980.00	99.3	30060.00	99.5	P
Antimony	250.0	253.70	101.5	300.0	307.80	102.6	308.20	102.7	P
Arsenic	250.0	260.40	104.2	100.0	101.90	101.9	101.90	101.9	P
Barium	500.0	487.80	97.6	200.0	200.20	100.1	200.60	100.3	P
Beryllium	500.0	503.20	100.6	100.0	99.52	99.5	99.59	99.6	P
Cadmium	500.0	486.70	97.3	100.0	97.41	97.4	98.04	98.0	P
Calcium	25000.0	25080.00	100.3	30200.0	30100.00	99.7	30120.00	99.7	P
Chromium	500.0	496.50	99.3	200.0	200.80	100.4	201.40	100.7	P
Cobalt	500.0	487.10	97.4	200.0	196.10	98.0	197.70	98.8	P
Copper	500.0	496.00	99.2	200.0	200.70	100.4	202.00	101.0	P
Iron	25500.0	25920.00	101.6	30200.0	30170.00	99.9	30150.00	99.8	P
Lead	1000.0	1014.00	101.4	400.0	404.30	101.1	404.40	101.1	P
Magnesium	25000.0	24630.00	98.5	30200.0	29940.00	99.1	30010.00	99.4	P
Manganese	500.0	492.20	98.4	200.0	196.30	98.2	196.70	98.4	P
Mercury	1.8	1.73	96.1	3.0	3.15	105.0	2.90	96.7	CV
Nickel	500.0	485.00	97.0	200.0	198.10	99.0	197.40	98.7	P
Potassium	25000.0	25740.00	103.0	30200.0	30660.00	101.5	30750.00	101.8	P
Selenium	250.0	256.30	102.5	100.0	99.63	99.6	99.56	99.6	P
Silver	500.0	520.80	104.2	100.0	100.40	100.4	101.80	101.8	P
Sodium	25000.0	24150.00	96.6	30200.0	29300.00	97.0	29330.00	97.1	P
Thallium	250.0	237.20	94.9	100.0	95.76	95.8	99.95	100.0	P
Vanadium	500.0	502.30	100.5	200.0	198.80	99.4	199.70	99.8	P
Zinc	500.0	497.90	99.6	200.0	201.70	100.8	202.00	101.0	P
Cyanide	120.0	121.50	101.2	150.0	143.00	95.3	143.00	95.3	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	29970.00	99.2	29960.00	99.2	P
Antimony				300.0	309.20	103.1	308.60	102.9	P
Arsenic				100.0	99.24	99.2	103.70	103.7	P
Barium				200.0	200.60	100.3	200.60	100.3	P
Beryllium				100.0	99.79	99.8	99.49	99.5	P
Cadmium				100.0	97.68	97.7	97.23	97.2	P
Calcium				30200.0	30180.00	99.9	30100.00	99.7	P
Chromium				200.0	201.50	100.8	200.80	100.4	P
Cobalt				200.0	197.30	98.6	196.60	98.3	P
Copper				200.0	202.00	101.0	202.20	101.1	P
Iron				30200.0	30170.00	99.9	30050.00	99.5	P
Lead				400.0	402.60	100.6	404.20	101.0	P
Magnesium				30200.0	29960.00	99.2	29900.00	99.0	P
Manganese				200.0	196.60	98.3	196.10	98.0	P
Mercury	1.8	1.77	98.3	3.0	3.11	103.7	2.99	99.7	CV
Nickel				200.0	198.40	99.2	196.80	98.4	P
Potassium				30200.0	30670.00	101.6	30710.00	101.7	P
Selenium				100.0	103.40	103.4	99.76	99.8	P
Silver				100.0	100.80	100.8	100.60	100.6	P
Sodium				30200.0	29260.00	96.9	29360.00	97.2	P
Thallium				100.0	99.81	99.8	96.13	96.1	P
Vanadium				200.0	199.30	99.6	199.20	99.6	P
Zinc				200.0	202.20	101.1	202.10	101.0	P
Cyanide				150.0	142.00	94.7	145.00	96.7	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				30200.0	29870.00	98.9			P
Antimony				300.0	303.40	101.1			P
Arsenic				100.0	100.70	100.7			P
Barium				200.0	198.90	99.4			P
Beryllium				100.0	99.08	99.1			P
Cadmium				100.0	97.16	97.2			P
Calcium				30200.0	30060.00	99.5			P
Chromium				200.0	200.20	100.1			P
Cobalt				200.0	194.90	97.4			P
Copper				200.0	200.40	100.2			P
Iron				30200.0	29980.00	99.3			P
Lead				400.0	401.50	100.4			P
Magnesium				30200.0	29860.00	98.9			P
Manganese				200.0	195.50	97.8			P
Mercury				3.0	2.86	95.3	3.09	103.0	CV
Nickel				200.0	197.70	98.8			P
Potassium				30200.0	30430.00	100.8			P
Selenium				100.0	99.46	99.5			P
Silver				100.0	100.10	100.1			P
Sodium				30200.0	29070.00	96.3			P
Thallium				100.0	96.56	96.6			P
Vanadium				200.0	198.30	99.2			P
Zinc				200.0	200.50	100.2			P
Cyanide	120.0	113.00	94.2	150.0	140.00	93.3	138.00	92.0	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide				150.0	139.00	92.7			AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide	120.0	111.00	92.5	150.0	146.00	97.3	145.00	96.7	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide				150.0	146.00	97.3	146.00	97.3	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

AA CRDL Standard Source: VENTURES____

ICP CRDL Standard Source: VENTURES____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	126.10	105.1	127.20	106.0
Arsenic				20.0	24.69	123.4	26.29	131.4
Barium								
Beryllium				10.0	10.29	102.9	10.41	104.1
Cadmium				10.0	10.22	102.2	10.24	102.4
Calcium								
Chromium				20.0	20.16	100.8	20.31	101.6
Cobalt				100.0	100.50	100.5	100.30	100.3
Copper				50.0	51.55	103.1	51.86	103.7
Iron								
Lead				6.0	5.50	91.7	6.85	114.2
Magnesium								
Manganese				30.0	30.51	101.7	30.61	102.0
Mercury	0.2	0.21	105.0					
Nickel				80.0	80.01	100.0	79.80	99.8
Potassium								
Selenium				10.0	8.24	82.4	10.11	101.1
Silver				20.0	22.59	113.0	22.14	110.7
Sodium								
Thallium				20.0	17.96	89.8	16.28	81.4
Vanadium				100.0	104.40	104.4	104.70	104.7
Zinc				40.0	40.19	100.5	40.61	101.5

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

AA CRDL Standard Source: VENTURES____

ICP CRDL Standard Source: VENTURES____

Concentration Units: ug/L

	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
Analyte	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury	0.2	0.21	105.0					
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	34.5	U	34.5	U	34.5	U	34.5	U	34.500	U	P
Antimony	-1.1	B	-1.4	B	1.0	U	1.0	U	1.018	B	P
Arsenic	4.5	B	4.0	U	4.1	B	4.0	U	4.000	U	P
Barium	1.2	U	1.2	U	1.2	U	1.2	U	1.200	U	P
Beryllium	0.1	U	0.1	U	0.1	B	0.1	U	0.100	U	P
Cadmium	0.3	U	0.3	U	0.3	U	0.5	B	0.300	U	P
Calcium	42.2	U	42.2	U	42.2	U	42.2	U	42.200	U	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cobalt	0.9	U	0.9	U	0.9	U	0.9	U	0.906	B	P
Copper	1.7	B	1.1	B	1.0	U	1.0	U	1.230	B	P
Iron	21.7	U	21.7	U	21.7	U	21.7	U	21.700	U	P
Lead	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Magnesium	40.0	U	40.0	U	40.0	U	40.0	U	40.000	U	P
Manganese	0.2	B	0.2	U	0.2	U	0.2	U	0.200	U	P
Mercury	0.1	U	0.1	U	0.1	U			0.100	U	CV
Nickel	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Potassium	39.3	U	39.3	U	39.3	U	39.3	U	39.300	U	P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U	3.400	U	P
Silver	1.3	U	1.3	U	1.3	U	1.3	U	1.719	B	P
Sodium	218.8	U	218.8	U	218.8	U	218.8	U	218.800	U	P
Thallium	4.7	U	4.7	U	4.7	U	4.7	U	4.700	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.154	B	P
Zinc	2.9	B	-0.3	B	0.3	U	0.3	U	0.300	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum			34.5	U	34.5	U					P
Antimony			1.0	U	1.0	U					P
Arsenic			4.0	U	4.0	U					P
Barium			1.2	U	1.2	U					P
Beryllium			0.1	U	0.1	B					P
Cadmium			0.3	U	0.3	U					P
Calcium			42.2	U	42.2	U					P
Chromium			0.7	U	0.7	U					P
Cobalt			0.9	U	1.0	B					P
Copper			1.0	U	1.8	B					P
Iron			21.7	U	22.8	B					P
Lead			1.9	U	1.9	U					P
Magnesium			40.0	U	40.0	U					P
Manganese			0.2	U	0.2	B					P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel			1.6	U	1.6	U					P
Potassium			-57.2	B	39.3	U					P
Selenium			3.4	U	3.4	U					P
Silver			1.4	B	2.1	B					P
Sodium			218.8	U	218.8	U					P
Thallium			4.7	U	4.7	U					P
Vanadium			1.1	U	1.1	U					P
Zinc			0.3	U	0.3	U					P
Cyanide			10.0	U					5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury			0.1	U							CV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U			AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide			10.0	U							AS

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4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No: _____ SDG No.: 57342_

ICP ID Number: ICP4 TJA61E_ ICS Source: VENTURES____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial %R	Final Found Sol. A	Final Found Sol. AB	Final %R
Aluminum	500000	481743	487700	494000.0	102.5	490500	493900.0	102.5
Antimony	0	639	-4	649.0	101.6	3	647.1	101.3
Arsenic	0	97	5	98.7	101.8	4	91.4	94.2
Barium	0	500	2	498.6	99.7	2	498.2	99.6
Beryllium	0	497	0	496.3	99.9	0	497.9	100.2
Cadmium	0	960	2	942.0	98.1	2	942.1	98.1
Calcium	500000	494457	499700	513100.0	103.8	506000	515600.0	104.3
Chromium	0	493	4	490.7	99.5	5	492.2	99.8
Cobalt	0	473	1	467.3	98.8	1	468.1	99.0
Copper	0	539	4	524.1	97.2	4	524.7	97.3
Iron	200000	194543	193100	197700.0	101.6	194200	197700.0	101.6
Lead	0	50	4	50.8	101.6	1	50.0	100.0
Magnesium	500000	514557	511300	520700.0	101.2	515800	520300.0	101.1
Manganese	0	493	2	487.8	98.9	2	487.4	98.9
Mercury								
Nickel	0	929	2	1063.0	114.4	2	1065.0	114.6
Potassium	0	0	-2	24.8		-31	-9.3	
Selenium	0	50	0	53.2	106.4	0	56.5	113.0
Silver	0	213	2	212.3	99.7	1	212.0	99.5
Sodium	0	0	18	181.7		64	87.8	
Thallium	0	84	0	84.1	100.1	3	93.0	110.7
Vanadium	0	494	4	490.5	99.3	5	492.8	99.8
Zinc	0	1016	18	1004.0	98.8	18	1001.0	98.5

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW14S

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2387.0000		635.6000		2000.00	87.6		P
Antimony	75-125	520.5000		1.0000	U	500.00	104.1		P
Arsenic	75-125	48.3900		4.3840	B	40.00	110.0		P
Barium	75-125	1999.0000		44.7400	B	2000.00	97.7		P
Beryllium	75-125	51.6100		0.1380	B	50.00	102.9		P
Cadmium	75-125	49.3800		0.3000	U	50.00	98.8		P
Calcium									NR
Chromium	75-125	200.5000		0.9050	B	200.00	99.8		P
Cobalt	75-125	485.0000		0.9000	U	500.00	97.0		P
Copper	75-125	255.5000		3.5920	B	250.00	100.8		P
Iron	75-125	1434.0000		483.6000		1000.00	95.0		P
Lead	75-125	19.7900		1.9000	U	20.00	99.0		P
Magnesium									NR
Manganese	75-125	497.2000		5.7210	B	500.00	98.3		P
Mercury	75-125	0.9180		0.1000	U	1.00	91.8		CV
Nickel	75-125	478.6000		1.6000	U	500.00	95.7		P
Potassium									NR
Selenium	75-125	11.5000		3.4000	U	10.00	115.0		P
Silver	75-125	54.0800		1.8320	B	50.00	104.5		P
Sodium									NR
Thallium	75-125	49.1900		4.7000	U	50.00	98.4		P
Vanadium	75-125	500.7000		1.1000	U	500.00	100.1		P
Zinc	75-125	511.7000		12.3800	B	500.00	99.9		P
Cyanide	75-125	89.4000		5.0000	U	100.00	89.4		AS

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MW14A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water) : WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum		2867.00		635.60		2000.0	111.6		P
Antimony		563.50		1.00	U	500.0	112.7		P
Arsenic		53.69		4.38	B	40.0	123.3		P
Barium		2112.00		44.74	B	2000.0	103.4		P
Beryllium		53.32		0.14	B	50.0	106.4		P
Cadmium		51.99		0.30	U	50.0	104.0		P
Calcium									NR
Chromium		211.20		0.90	B	200.0	105.2		P
Cobalt		511.50		0.90	U	500.0	102.3		P
Copper		270.30		3.59	B	250.0	106.7		P
Iron		1617.00		483.60		1000.0	113.3		P
Lead		22.63		1.90	U	20.0	113.2		P
Magnesium									NR
Manganese		525.60		5.72	B	500.0	104.0		P
Mercury									NR
Nickel		508.40		1.60	U	500.0	101.7		P
Potassium									NR
Selenium		9.02		3.40	U	10.0	90.2		P
Silver									NR
Sodium									NR
Thallium		51.73		4.70	U	50.0	103.5		P
Vanadium		527.60		1.10	U	500.0	105.5		P
Zinc		536.60		12.38	B	500.0	104.8		P
Cyanide									NR

Comments:

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6
DUPLICATES

EPA SAMPLE NO.

MW14D

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER Level (low/med): _LOW__

Solids for Sample: __0.0 % Solids for Duplicate: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	635.6000		346.7000		58.8	*	P
Antimony		1.0000	U	1.0000	U			P
Arsenic		4.3840	B	5.3350	B	19.6		P
Barium		44.7400	B	45.1800	B	1.0		P
Beryllium		0.1380	B	0.1020	B	30.0		P
Cadmium		0.3000	U	0.3000	U			P
Calcium		163400.0000		166400.0000		1.8		P
Chromium		0.9050	B	0.7710	B	16.0		P
Cobalt		0.9000	U	1.0820	B	200.0		P
Copper		3.5920	B	3.6780	B	2.4		P
Iron	100.0	483.6000		409.5000		16.6		P
Lead		1.9000	U	1.9000	U			P
Magnesium		33130.0000		33710.0000		1.7		P
Manganese		5.7210	B	5.5510	B	3.0		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		1.6000	U	1.6000	U			P
Potassium		1322.0000	B	1280.0000	B	3.2		P
Selenium		3.4000	U	3.4000	U			P
Silver		1.8320	B	2.0420	B	10.8		P
Sodium		29750.0000		30080.0000		1.1		P
Thallium		4.7000	U	4.7000	U			P
Vanadium		1.1000	U	2.1830	B	200.0		P
Zinc		12.3800	B	12.2500	B	1.1		P
Cyanide		5.0000	U	10.0000	U			AS

7
LABORATORY CONTROL SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Solid LCS Source: _____

Aqueous LCS Source: VENTURES____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	51250.00	100.5						
Antimony	2000.0	2068.00	103.4						
Arsenic	1050.0	1087.00	103.5						
Barium	500.0	469.30	93.9						
Beryllium	500.0	483.60	96.7						
Cadmium	525.0	487.00	92.8						
Calcium	50000.0	50670.00	101.3						
Chromium	500.0	475.90	95.2						
Cobalt	500.0	465.80	93.2						
Copper	500.0	478.60	95.7						
Iron	50500.0	51090.00	101.2						
Lead	1015.0	981.70	96.7						
Magnesium	50000.0	49750.00	99.5						
Manganese	500.0	471.20	94.2						
Mercury	1.0	0.95	95.1						
Nickel	500.0	464.80	93.0						
Potassium	50000.0	49440.00	98.9						
Selenium	25.0	26.56	106.2						
Silver	500.0	503.00	100.6						
Sodium	50000.0	49980.00	100.0						
Thallium	50.0	46.52	93.0						
Vanadium	500.0	477.20	95.4						
Zinc	500.0	478.80	95.8						
Cyanide									

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7
LABORATORY CONTROL SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Solid LCS Source: _____

Aqueous LCS Source: VENTURES____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	1.0	0.92	91.5						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

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8
STANDARD ADDITION RESULTS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract:93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.:______ SDG No.:57342_

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

FORM VIII - IN ILM02.1

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9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MW14L

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

Matrix (soil/water): WATER Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	635.60		686.60	B	8.0		P
Antimony	1.00	U	5.00	U			P
Arsenic	4.38	B	20.00	U	100.0		P
Barium	44.74	B	56.61	B	26.5		P
Beryllium	0.14	B	0.65	B	364.3		P
Cadmium	0.30	U	2.08	B			P
Calcium	163400.00		162000.00		0.9		P
Chromium	0.90	B	5.22	B	480.0		P
Cobalt	0.90	U	6.76	B			P
Copper	3.59	B	18.95	B	427.9		P
Iron	483.60		540.80		11.8		P
Lead	1.90	U	9.50	U			P
Magnesium	33130.00		32960.00		0.5		P
Manganese	5.72	B	19.72	B	244.8		P
Mercury							NR
Nickel	1.60	U	19.72	B			P
Potassium	1322.00	B	2559.00	B	93.6		P
Selenium	3.40	U	17.00	U			P
Silver	1.83	B	8.16	B	345.9		P
Sodium	29750.00		33470.00		12.5	E	P
Thallium	4.70	U	23.50	U			P
Vanadium	1.10	U	9.14	B			P
Zinc	12.38	B	66.04	B	433.4		P

10
Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

ICP ID Number: ICP4_TJA61E_ Date: 04/01/96

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	34.5	P
Antimony	206.84		60	1.0	P
Arsenic	189.04		10	4.0	P
Barium	493.41		200	1.2	P
Beryllium	313.04		5	0.1	P
Cadmium	226.50		5	0.3	P
Calcium	317.93		5000	42.2	P
Chromium	267.72		10	0.7	P
Cobalt	228.62		50	0.9	P
Copper	324.75		25	1.0	P
Iron	271.44		100	21.7	P
Lead	220.35		3	1.9	P
Magnesium	279.08		5000	40.0	P
Manganese	257.61		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	1.6	P
Potassium	766.49		5000	39.3	P
Selenium	196.03		5	3.4	P
Silver	328.07		10	1.3	P
Sodium	330.23		5000	218.8	P
Thallium	190.86		10	4.7	P
Vanadium	292.40		50	1.1	P
Zinc	213.86		20	0.3	P

Comments:

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10

Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

ICP ID Number: _____ Date: 04/01/96

Flame AA ID Number : PS200_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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10
Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

ICP ID Number: _____ Date: 01/01/96

Flame AA ID Number : PS1214_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

ICP ID Number: ICP4 TJA61E_ Date: 01/01/96

Analyte	Wave-length (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	CO_
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000390	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000400	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001035	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0000596	-0.0000184	0.0000823	0.0000111	-0.0048710
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.0011240
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0001999	0.0000000	-0.0000465
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	-0.0000100	0.0000000	-0.0000800	0.0000000	0.0049700
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

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11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

ICP ID Number: ICP4 TJA61E_ Date: 01/01/96

Analyte	Wave-length (nm)	Interelement Correction Factors for : CR_	MN_	NI_	V__	___
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0264000	
Antimony	206.84	0.0055040	0.0000000	-0.0002668	-0.0036670	
Arsenic	189.04	-0.0029900	0.0000000	0.0000000	0.0000000	
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0011400	
Cadmium	226.50	0.0000000	0.0000000	-0.0000329	0.0000000	
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	267.72	0.0000000	0.0000704	0.0000000	-0.0000540	
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	-0.0001864	0.0000279	0.0002131	-0.0006255	
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	-0.0001310	0.0000000	0.0000000	
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.03	0.0000000	0.0002108	0.0000000	0.0000188	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.86	0.0003750	-0.0005820	0.0000000	0.0036030	
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

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12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57342_

ICP ID Number: ICP4 TJA61E_ Date: 04/01/96

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	10000.0	P
Calcium	10.00	1000000.0	P
Chromium	10.00	50000.0	P
Cobalt	10.00	50000.0	P
Copper	10.00	100000.0	P
Iron	10.00	500000.0	P
Lead	10.00	50000.0	P
Magnesium	10.00	1000000.0	P
Manganese	10.00	20000.0	P
Mercury			NR
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	50000.0	P
Zinc	10.00	5000.0	P

Comments:

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57342_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	04/08/96		100
MW13	04/08/96		100
MW14	04/08/96		100
MW14D	04/08/96		100
MW14S	04/08/96		100
MW27	04/08/96		100
MW453	04/08/96		100
PBW1	04/08/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57342_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	04/10/96		100
MW13	04/10/96		100
MW14	04/10/96		100
MW27	04/10/96		100
MW453	04/10/96		100
PBW1	04/10/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57342_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW2	04/15/96		100
MW14D	04/15/96		100
MW14S	04/15/96		100
PBW2	04/15/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57342_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	03/25/96		250
MW27	03/25/96		250
MW453	03/25/96		250
PBW1	03/25/96		250

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57342_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	03/28/96		250
MW13	03/28/96		250
MW14	03/28/96		250
PBW2	03/28/96		250

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57342_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	04/16/96		250
MW14D	04/16/96		250
MW14S	04/16/96		250
PBW3	04/16/96		250

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: ICP4 TJA61E__ Method: P_

Start Date: 04/12/96 End Date: 04/12/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1219		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.00	1223					X	X	X		X	X	X				X		X			X		X	X	
S	1.00	1227		X						X				X		X				X			X			
S	1.00	1231			X	X									X						X			X		
ICV	1.00	1238		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICB	1.00	1243		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	1247		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1252		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1256			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1301		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1306		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1310																									
ZZZZZZ	1.00	1315																									
ZZZZZZ	1.00	1319																									
ZZZZZZ	1.00	1324																									
ZZZZZZ	5.00	1328																									
ZZZZZZ	1.00	1332																									
ZZZZZZ	1.00	1337																									
PBW1	1.00	1341		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSW1	1.00	1346		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1350																									
CCV	1.00	1355		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1359		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	5.00	1404																									
ZZZZZZ	1.00	1408																									
ZZZZZZ	1.00	1413																									
ZZZZZZ	1.00	1417																									
ZZZZZZ	1.00	1422																									
ZZZZZZ	1.00	1426																									
ZZZZZZ	1.00	1431																									
ZZZZZZ	5.00	1435																									
ZZZZZZ	1.00	1440																									

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: ICP4 TJA61E__ Method: P_

Start Date: 04/12/96 End Date: 04/12/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1444																									
CCV	1.00	1451		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1500																									
MW27	1.00	1505		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW453	1.00	1509		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW13	1.00	1514		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW14	1.00	1518		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW14L	5.00	1523		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW14A	1.00	1527		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW14S	1.00	1532		X	X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
MW14D	1.00	1536		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1541		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1545		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	1550		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1554		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1559			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1603		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1608		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: PS200_____ Method: CV

Start Date: 04/11/96 End Date: 04/11/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1508																X								
S0	1.00	1508																X								
S0.2	1.00	1508																X								
S0.5	1.00	1508																X								
S1	1.00	1508																X								
S3	1.00	1508																X								
S5	1.00	1508																X								
ICV	1.00	1508																X								
ICB	1.00	1508																X								
CRA	1.00	1508																X								
CCV	1.00	1508																X								
CCB	1.00	1508																X								
PBW1	1.00	1508																X								
LCSW1	1.00	1508																X								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1508																								
MW27	1.00	1508																X								
MW453	1.00	1508																X								
MW13	1.00	1508																X								
MW14	1.00	1509																X								
ZZZZZZ	1.00	1509																								
CCV	1.00	1509																X								
CCB	1.00	1509																X								

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: PS200_____ Method: CV

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1213																X									
S0	1.00	1216																X									
S0.2	1.00	1219																X									
S0.5	1.00	1222																X									
S1	1.00	1226																X									
S3	1.00	1229																X									
S5	1.00	1232																X									
ICV	1.00	1235																X									
ICB	1.00	1238																X									
CRA	1.00	1242																X									
CCV	1.00	1245																X									
CCB	1.00	1248																X									
ZZZZZZ	1.00	1251																									
ZZZZZZ	1.00	1254																									
ZZZZZZ	1.00	1257																									
ZZZZZZ	1.00	1300																									
ZZZZZZ	1.00	1304																									
ZZZZZZ	1.00	1307																									
ZZZZZZ	1.00	1310																									
ZZZZZZ	1.00	1313																									
ZZZZZZ	1.00	1316																									
CCV	1.00	1319																X									
CCB	1.00	1322																X									
ZZZZZZ	1.00	1325																									
ZZZZZZ	1.00	1329																									
ZZZZZZ	1.00	1332																									
ZZZZZZ	1.00	1335																									
PBW2	1.00	1338																X									
LCSW2	1.00	1341																X									
ZZZZZZ	1.00	1344																									
ZZZZZZ	1.00	1347																									
ZZZZZZ	1.00	1350																									

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206______

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _______ SDG No.:57342_

Instrument ID Number: PS200_________ Method: CV

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1353																X									
CCB	1.00	1356																X									
ZZZZZZ	1.00	1359																									
ZZZZZZ	1.00	1403																									
ZZZZZZ	1.00	1406																									
ZZZZZZ	1.00	1409																									
ZZZZZZ	1.00	1412																									
ZZZZZZ	1.00	1415																									
ZZZZZZ	1.00	1418																									
MW14S	1.00	1421																X									
MW14D	1.00	1424																X									
CCV	1.00	1427																X									
CCB	1.00	1430																X									

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2048																								X
S10	1.00	2051																								X
S50	1.00	2053																								X
S100	1.00	2055																								X
S200	1.00	2057																								X
S300	1.00	2059																								X
ICV	1.00	2102																								X
ICB	1.00	2104																								X
CCV	1.00	2106																								X
CCB	1.00	2108																								X
ZZZZZZ	1.00	2110																								
PBW1	1.00	2113																								X
ZZZZZZ	1.00	2115																								
ZZZZZZ	5.00	2117																								
ZZZZZZ	1.00	2119																								
ZZZZZZ	1.00	2121																								
ZZZZZZ	1.00	2123																								
ZZZZZZ	1.00	2125																								
ZZZZZZ	1.00	2127																								
ZZZZZZ	1.00	2129																								
ZZZZZZ	1.00	2132																								
CCV	1.00	2134																								X
CCB	1.00	2136																								X
ZZZZZZ	1.00	2138																								
ZZZZZZ	1.00	2140																								
ZZZZZZ	1.00	2142																								
ZZZZZZ	5.00	2144																								
CCV	1.00	2146																								X
CCB	1.00	2148																								X
MW27	1.00	2150																								X
MW453	1.00	2153																								X
ZZZZZZ	1.00	2155																								

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206______

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _______ SDG No.:57342_

Instrument ID Number: PS1214________ Method: AS

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2157																									
ZZZZZZ	1.00	2159																									
ZZZZZZ	1.00	2201																									
ZZZZZZ	1.00	2203																									
ZZZZZZ	1.00	2205																									
CCV	1.00	2207																									X
CCB	1.00	2209																									X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 03/29/96 End Date: 03/29/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1805																								X
S10	1.00	1808																								X
S50	1.00	1810																								X
S100	1.00	1812																								X
S200	1.00	1814																								X
S300	1.00	1817																								X
ICV	1.00	1819																								X
ICB	1.00	1821																								X
CCV	1.00	1823																								X
CCB	1.00	1825																								X
ZZZZZZ	1.00	1827																								
PBW2	1.00	1830																								X
ZZZZZZ	1.00	1832																								-
ZZZZZZ	5.00	1834																								-
ZZZZZZ	1.00	1836																								-
ZZZZZZ	1.00	1838																								-
ZZZZZZ	1.00	1840																								-
ZZZZZZ	1.00	1842																								-
ZZZZZZ	1.00	1845																								-
ZZZZZZ	1.00	1847																								-
CCV	1.00	1849																								X
CCB	1.00	1851																								X
ZZZZZZ	1.00	1853																								-
ZZZZZZ	1.00	1855																								-
ZZZZZZ	1.00	1857																								-
ZZZZZZ	1.00	1859																								-
ZZZZZZ	1.00	1901																								-
MW13	1.00	1903																								X
MW14	1.00	1905																								X
CCV	1.00	1908																								X
CCB	1.00	1910																								X
																										-
																										-

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57342_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0136																								X
S10	1.00	0138																								X
S50	1.00	0140																								X
S100	1.00	0142																								X
S200	1.00	0144																								X
S300	1.00	0147																								X
ICV	1.00	0149																								X
ICB	1.00	0151																								X
CCV	1.00	0153																								X
CCB	1.00	0156																								X
ZZZZZZ	1.00	0158																								
PBW3	1.00	0200																								X
ZZZZZZ	1.00	0202																								
ZZZZZZ	5.00	0204																								
ZZZZZZ	1.00	0206																								
ZZZZZZ	1.00	0208																								
ZZZZZZ	1.00	0210																								
ZZZZZZ	1.00	0213																								
ZZZZZZ	1.00	0215																								
CCV	1.00	0217																								X
CCB	1.00	0219																								X
ZZZZZZ	1.00	0221																								
ZZZZZZ	1.00	0223																								
ZZZZZZ	1.00	0225																								
ZZZZZZ	1.00	0227																								
ZZZZZZ	1.00	0229																								
ZZZZZZ	1.00	0231																								
ZZZZZZ	1.00	0234																								
ZZZZZZ	1.00	0236																								
ZZZZZZ	1.00	0238																								
ZZZZZZ	1.00	0240																								
CCV	1.00	0242																								X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:57342_

Instrument ID Number: PS1214_______ Method: AS

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	0244																									X
ZZZZZZ	1.00	0246																									
ZZZZZZ	1.00	0248																									
MW14S	1.00	0250																									X
MW14D	1.00	0252																									X
ZZZZZZ	1.00	0254																									
CCV	1.00	0256																									X
CCB	1.00	0259																									X

2. Sample Delivery Group No. 57313

Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57340
Project No.: 93206
No. Samples: 14
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57313

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294441	MW12:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	911
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.36
9060	Total Organic Carbon	1.0
294441R1	MW12:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294441R2	MW12:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294441R3	MW12:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294441MS	MW12:[MS]03/19/96 (Water)	
9020	Total Organic Halides	0.09
9060	Total Organic Carbon	2.1
294441DP	MW12REP:[REP]03/19/96 (Water)	
9050	Conductivity (umhos/cm)	911
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.38
9060	Total Organic Carbon	1.1
294442	MW12A:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	808
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.45
9060	Total Organic Carbon	1.0

< Cont. Next Page >

Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57340
Project No.: 93206
No. Samples: 14
Arrived : 03/20/96
P.O. Number: *

Case:OBASH SDG:57313

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294442R1	MW12A:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294442R2	MW12A:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294442R3	MW12A:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294443	MW12B:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	849
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.42
9060	Total Organic Carbon	1.0
294443R1	MW12B:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294443R2	MW12B:03/19/96 (Water)	
9060	Total Organic Carbon	1.1
294443R3	MW12B:03/19/96 (Water)	
9060	Total Organic Carbon	1.0

< Last Page > Submitted By : Aquatec Inc.

Quality Control Summary

Project No: 93206
ETR No: 57340
SDG No: 57313
Units: mg/L

Parameter	Method Preparation Blank	Laboratory Control Sample Reported Value	Laboratory Control Sample True Value	Laboratory Control Sample Percent Recovery
Conductivity (umhos/cm)	NA	1445	1413	102.3
pH (Std Units)	NA	5.99	6.00	99.8
Total Organic Carbon	< 0.5	49.4	49.2	100.4
Total Organic Halides	< 0.02	0.102	0.100	102.0

Quality Control Summary

Project No: 03206
ETR No: 57340
SDG No: 57313
Sample No: 294441
Units: mg/L

Parameter	Sample Result	Duplicate Sample Result	Relative Percent Difference	Spiked Sample Result	Spike Added	Percent Spike Recovery
Conductivity (umhos/cm)	911	911	0.0	NA	NA	NA
pH (Std Units)	7.36	7.38	0.3	NA	NA	NA
Total Organic Carbon	1.0	1.1	9.5	2.1	1.0	110.0
Total Organic Halides	< 0.02	< 0.02	NA	0.09	0.10	90.0

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH SAS No.: _____ SDG No.:57313_

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MW12_____	_294441_____
_MW12S_____	_294441MS_____
_MW12D_____	_294441DP_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

_____

_____

_____

_____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW12

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Matrix (soil/water): WATER Lab Sample ID: 294441

Level (low/med): LOW__ Date Received: 03/20/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	48.2	B		P_
7440-36-0	Antimony_	1.0	U		P_
7440-38-2	Arsenic__	5.1	B		P_
7440-39-3	Barium___	83.4	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	79300			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.90	U		P_
7440-50-8	Copper___	1.5	B		P_
7439-89-6	Iron_____	60.0	B		P_
7439-92-1	Lead_____	1.9	U		P_
7439-95-4	Magnesium	60700			P_
7439-96-5	Manganese	0.20	U		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	1.6	U		P_
7440-09-7	Potassium	7790			P_
7782-49-2	Selenium_	3.4	U		P_
7440-22-4	Silver___	1.3	U		P_
7440-23-5	Sodium___	15000			P_
7440-28-0	Thallium_	4.7	U		P_
7440-62-2	Vanadium_	1.2	B		P_
7440-66-6	Zinc_____	3.0	B		P_
_____	Cyanide__	5.0	U	N	AS
_____	_____	_____	_	_____	__

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

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2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	26000.0	25900.00	99.6	30200.0	29980.00	99.3	30060.00	99.5	P
Antimony	250.0	253.70	101.5	300.0	307.80	102.6	308.20	102.7	P
Arsenic	250.0	260.40	104.2	100.0	101.90	101.9	101.90	101.9	P
Barium	500.0	487.80	97.6	200.0	200.20	100.1	200.60	100.3	P
Beryllium	500.0	503.20	100.6	100.0	99.52	99.5	99.59	99.6	P
Cadmium	500.0	486.70	97.3	100.0	97.41	97.4	98.04	98.0	P
Calcium	25000.0	25080.00	100.3	30200.0	30100.00	99.7	30120.00	99.7	P
Chromium	500.0	496.50	99.3	200.0	200.80	100.4	201.40	100.7	P
Cobalt	500.0	487.10	97.4	200.0	196.10	98.0	197.70	98.8	P
Copper	500.0	496.00	99.2	200.0	200.70	100.4	202.00	101.0	P
Iron	25500.0	25920.00	101.6	30200.0	30170.00	99.9	30150.00	99.8	P
Lead	1000.0	1014.00	101.4	400.0	404.30	101.1	404.40	101.1	P
Magnesium	25000.0	24630.00	98.5	30200.0	29940.00	99.1	30010.00	99.4	P
Manganese	500.0	492.20	98.4	200.0	196.30	98.2	196.70	98.4	P
Mercury	1.8	1.73	96.1	3.0	3.15	105.0	2.90	96.7	CV
Nickel	500.0	485.00	97.0	200.0	198.10	99.0	197.40	98.7	P
Potassium	25000.0	25740.00	103.0	30200.0	30660.00	101.5	30750.00	101.8	P
Selenium	250.0	256.30	102.5	100.0	99.63	99.6	99.56	99.6	P
Silver	500.0	520.80	104.2	100.0	100.40	100.4	101.80	101.8	P
Sodium	25000.0	24150.00	96.6	30200.0	29300.00	97.0	29330.00	97.1	P
Thallium	250.0	237.20	94.9	100.0	95.76	95.8	99.95	100.0	P
Vanadium	500.0	502.30	100.5	200.0	198.80	99.4	199.70	99.8	P
Zinc	500.0	497.90	99.6	200.0	201.70	100.8	202.00	101.0	P
Cyanide	120.0	121.50	101.2	150.0	143.00	95.3	143.00	95.3	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	29970.00	99.2	29960.00	99.2	P
Antimony				300.0	309.20	103.1	308.60	102.9	P
Arsenic				100.0	99.24	99.2	103.70	103.7	P
Barium				200.0	200.60	100.3	200.60	100.3	P
Beryllium				100.0	99.79	99.8	99.49	99.5	P
Cadmium				100.0	97.68	97.7	97.23	97.2	P
Calcium				30200.0	30180.00	99.9	30100.00	99.7	P
Chromium				200.0	201.50	100.8	200.80	100.4	P
Cobalt				200.0	197.30	98.6	196.60	98.3	P
Copper				200.0	202.00	101.0	202.20	101.1	P
Iron				30200.0	30170.00	99.9	30050.00	99.5	P
Lead				400.0	402.60	100.6	404.20	101.0	P
Magnesium				30200.0	29960.00	99.2	29900.00	99.0	P
Manganese				200.0	196.60	98.3	196.10	98.0	P
Mercury				3.0	2.59	86.3			CV
Nickel				200.0	198.40	99.2	196.80	98.4	P
Potassium				30200.0	30670.00	101.6	30710.00	101.7	P
Selenium				100.0	103.40	103.4	99.76	99.8	P
Silver				100.0	100.80	100.8	100.60	100.6	P
Sodium				30200.0	29260.00	96.9	29360.00	97.2	P
Thallium				100.0	99.81	99.8	96.13	96.1	P
Vanadium				200.0	199.30	99.6	199.20	99.6	P
Zinc				200.0	202.20	101.1	202.10	101.0	P
Cyanide				150.0	142.00	94.7	145.00	96.7	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	29870.00	98.9			P
Antimony				300.0	303.40	101.1			P
Arsenic				100.0	100.70	100.7			P
Barium				200.0	198.90	99.4			P
Beryllium				100.0	99.08	99.1			P
Cadmium				100.0	97.16	97.2			P
Calcium				30200.0	30060.00	99.5			P
Chromium				200.0	200.20	100.1			P
Cobalt				200.0	194.90	97.4			P
Copper				200.0	200.40	100.2			P
Iron				30200.0	29980.00	99.3			P
Lead				400.0	401.50	100.4			P
Magnesium				30200.0	29860.00	98.9			P
Manganese				200.0	195.50	97.8			P
Mercury									NR
Nickel				200.0	197.70	98.8			P
Potassium				30200.0	30430.00	100.8			P
Selenium				100.0	99.46	99.5			P
Silver				100.0	100.10	100.1			P
Sodium				30200.0	29070.00	96.3			P
Thallium				100.0	96.56	96.6			P
Vanadium				200.0	198.30	99.2			P
Zinc				200.0	200.50	100.2			P
Cyanide	120.0	121.50	101.2	150.0	142.00	94.7	140.00	93.3	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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2B
CRDL STANDARD FOR AA AND ICP

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 93206

Lab Code: INCHVT Case No.: OBASH SAS No.: SDG No.: 57313

AA CRDL Standard Source: VENTURES

ICP CRDL Standard Source: VENTURES

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial			Final
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	126.10	105.1	127.20	106.0
Arsenic				20.0	24.69	123.4	26.29	131.4
Barium								
Beryllium				10.0	10.29	102.9	10.41	104.1
Cadmium				10.0	10.22	102.2	10.24	102.4
Calcium								
Chromium				20.0	20.16	100.8	20.31	101.6
Cobalt				100.0	100.50	100.5	100.30	100.3
Copper				50.0	51.55	103.1	51.86	103.7
Iron								
Lead				6.0	5.50	91.7	6.85	114.2
Magnesium								
Manganese				30.0	30.51	101.7	30.61	102.0
Mercury	0.2	0.21	105.0					
Nickel				80.0	80.01	100.0	79.80	99.8
Potassium								
Selenium				10.0	8.24	82.4	10.11	101.1
Silver				20.0	22.59	113.0	22.14	110.7
Sodium								
Thallium				20.0	17.96	89.8	16.28	81.4
Vanadium				100.0	104.40	104.4	104.70	104.7
Zinc				40.0	40.19	100.5	40.61	101.5

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2

BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	34.5	U	34.5	U	34.5	U	34.5	U	34.500	U	P
Antimony	-1.1	B	-1.4	B	1.0	U	1.0	U	1.018	B	P
Arsenic	4.5	B	4.0	U	4.1	B	4.0	U	4.000	U	P
Barium	1.2	U	1.2	U	1.2	U	1.2	U	1.200	U	P
Beryllium	0.1	U	0.1	U	0.1	B	0.1	U	0.100	U	P
Cadmium	0.3	U	0.3	U	0.3	U	0.5	B	0.300	U	P
Calcium	42.2	U	42.2	U	42.2	U	42.2	U	42.200	U	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cobalt	0.9	U	0.9	U	0.9	U	0.9	U	0.906	B	P
Copper	1.7	B	1.1	B	1.0	U	1.0	U	1.230	B	P
Iron	21.7	U	21.7	U	21.7	U	21.7	U	21.700	U	P
Lead	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Magnesium	40.0	U	40.0	U	40.0	U	40.0	U	40.000	U	P
Manganese	0.2	B	0.2	U	0.2	U	0.2	U	0.200	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Potassium	39.3	U	39.3	U	39.3	U	39.3	U	39.300	U	P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U	3.400	U	P
Silver	1.3	U	1.3	U	1.3	U	1.3	U	1.719	B	P
Sodium	218.8	U	218.8	U	218.8	U	218.8	U	218.800	U	P
Thallium	4.7	U	4.7	U	4.7	U	4.7	U	4.700	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.154	B	P
Zinc	2.9	B	-0.3	B	0.3	U	0.3	U	0.300	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 93206

Lab Code: INCHVT Case No.: OBASH SAS No.: _____ SDG No.: 57313

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum			34.5	U	34.5	U					P
Antimony			1.0	U	1.0	U					P
Arsenic			4.0	U	4.0	U					P
Barium			1.2	U	1.2	U					P
Beryllium			0.1	U	0.1	B					P
Cadmium			0.3	U	0.3	U					P
Calcium			42.2	U	42.2	U					P
Chromium			0.7	U	0.7	U					P
Cobalt			0.9	U	1.0	B					P
Copper			1.0	U	1.8	B					P
Iron			21.7	U	22.8	B					P
Lead			1.9	U	1.9	U					P
Magnesium			40.0	U	40.0	U					P
Manganese			0.2	U	0.2	B					P
Mercury											NR
Nickel			1.6	U	1.6	U					P
Potassium			-57.2	B	39.3	U					P
Selenium			3.4	U	3.4	U					P
Silver			1.4	B	2.1	B					P
Sodium			218.8	U	218.8	U					P
Thallium			4.7	U	4.7	U					P
Vanadium			1.1	U	1.1	U					P
Zinc			0.3	U	0.3	U					P
Cyanide			10.0	U							AS

3
BLANKS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 93206

Lab Code: INCHVT Case No.: OBASH SAS No.: _____ SDG No.: 57313

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide	10.0	U	10.0	U	10.0	U					AS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No: _____ SDG No.: 57313_

ICP ID Number: ICP4 TJA61E_ ICS Source: VENTURES____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	481743	487700	494000.0	102.5	490500	493900.0	102.5
Antimony	0	639	-4	649.0	101.6	3	647.1	101.3
Arsenic	0	97	5	98.7	101.8	4	91.4	94.2
Barium	0	500	2	498.6	99.7	2	498.2	99.6
Beryllium	0	497	0	496.3	99.9	0	497.9	100.2
Cadmium	0	960	2	942.0	98.1	2	942.1	98.1
Calcium	500000	494457	499700	513100.0	103.8	506000	515600.0	104.3
Chromium	0	493	4	490.7	99.5	5	492.2	99.8
Cobalt	0	473	1	467.3	98.8	1	468.1	99.0
Copper	0	539	4	524.1	97.2	4	524.7	97.3
Iron	200000	194543	193100	197700.0	101.6	194200	197700.0	101.6
Lead	0	50	4	50.8	101.6	1	50.0	100.0
Magnesium	500000	514557	511300	520700.0	101.2	515800	520300.0	101.1
Manganese	0	493	2	487.8	98.9	2	487.4	98.9
Mercury								
Nickel	0	929	2	1063.0	114.4	2	1065.0	114.6
Potassium	0	0	-2	24.8		-31	-9.3	
Selenium	0	50	0	53.2	106.4	0	56.5	113.0
Silver	0	213	2	212.3	99.7	1	212.0	99.5
Sodium	0	0	18	181.7		64	87.8	
Thallium	0	84	0	84.1	100.1	3	93.0	110.7
Vanadium	0	494	4	490.5	99.3	5	492.8	99.8
Zinc	0	1016	18	1004.0	98.8	18	1001.0	98.5

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW12S

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Matrix (soil/water): WATER_ Level (low/med): LOW___

Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2111.0000		48.2200	B	2000.00	103.1		P
Antimony	75-125	527.5000		1.0000	U	500.00	105.5		P
Arsenic	75-125	48.0100		5.0950	B	40.00	107.3		P
Barium	75-125	2023.0000		83.4200	B	2000.00	97.0		P
Beryllium	75-125	51.5500		0.1000	U	50.00	103.1		P
Cadmium	75-125	49.3100		0.3000	U	50.00	98.6		P
Calcium									NR
Chromium	75-125	200.0000		0.7000	U	200.00	100.0		P
Cobalt	75-125	482.4000		0.9000	U	500.00	96.5		P
Copper	75-125	251.0000		1.4630	B	250.00	99.8		P
Iron	75-125	1088.0000		60.0500	B	1000.00	102.8		P
Lead	75-125	18.6600		1.9000	U	20.00	93.3		P
Magnesium									NR
Manganese	75-125	489.9000		0.2000	U	500.00	98.0		P
Mercury	75-125	0.8660		0.1000	U	1.00	86.6		CV
Nickel	75-125	476.2000		1.6000	U	500.00	95.2		P
Potassium									NR
Selenium	75-125	9.6810		3.4000	U	10.00	96.8		P
Silver	75-125	53.3600		1.3000	U	50.00	106.7		P
Sodium									NR
Thallium	75-125	48.5000		4.7000	U	50.00	97.0		P
Vanadium	75-125	499.0000		1.2140	B	500.00	99.6		P
Zinc	75-125	490.8000		3.0170	B	500.00	97.6		P
Cyanide	75-125	54.0000		5.0000	U	100.00	54.0	N	AS

Comments:

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MW12A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Matrix (soil/water) : WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum		2195.00		48.22	B	2000.0	107.3		P
Antimony		551.50		1.00	U	500.0	110.3		P
Arsenic		50.51		5.10	B	40.0	113.5		P
Barium		2087.00		83.42	B	2000.0	100.2		P
Beryllium		52.31		0.10	U	50.0	104.6		P
Cadmium		50.82		0.30	U	50.0	101.6		P
Calcium									NR
Chromium		207.30		0.70	U	200.0	103.6		P
Cobalt		496.80		0.90	U	500.0	99.4		P
Copper		258.70		1.46	B	250.0	102.9		P
Iron		1138.00		60.05	B	1000.0	107.8		P
Lead		20.21		1.90	U	20.0	101.0		P
Magnesium									NR
Manganese		504.50		0.20	U	500.0	100.9		P
Mercury									NR
Nickel		491.90		1.60	U	500.0	98.4		P
Potassium									NR
Selenium		13.50		3.40	U	10.0	135.0		P
Silver									NR
Sodium									NR
Thallium		52.35		4.70	U	50.0	104.7		P
Vanadium		515.60		1.21	B	500.0	102.9		P
Zinc		508.80		3.02	B	500.0	101.2		P
Cyanide		16.30		10.00	U	20.0	81.5		AS

Comments:

6
DUPLICATES

EPA SAMPLE NO.

MW12D

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Matrix (soil/water): WATER Level (low/med): _LOW__

% Solids for Sample: __0.0 % Solids for Duplicate: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		48.2200	B	52.3800	B	8.3		P
Antimony		1.0000	U	1.0000	U			P
Arsenic		5.0950	B	4.0000	U	200.0		P
Barium		83.4200	B	84.6600	B	1.5		P
Beryllium		0.1000	U	0.1000	U			P
Cadmium		0.3000	U	0.3000	U			P
Calcium		79280.0000		80340.0000		1.3		P
Chromium		0.7000	U	0.7000	U			P
Cobalt		0.9000	U	0.9000	U			P
Copper		1.4630	B	1.6250	B	10.5		P
Iron		60.0500	B	44.5600	B	29.6		P
Lead		1.9000	U	1.9000	U			P
Magnesium		60690.0000		61410.0000		1.2		P
Manganese		0.2000	U	0.2000	U			P
Mercury		0.1000	U	0.1000	U			CV
Nickel		1.6000	U	1.6000	U			P
Potassium	5000.0	7788.0000		7417.0000		4.9		P
Selenium		3.4000	U	3.4000	U			P
Silver		1.3000	U	1.3000	U			P
Sodium	5000.0	15030.0000		15160.0000		0.9		P
Thallium		4.7000	U	4.7000	U			P
Vanadium		1.2140	B	1.2160	B	0.2		P
Zinc		3.0170	B	1.2880	B	80.3		P
Cyanide		5.0000	U	5.0000	U			AS

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LABORATORY CONTROL SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Solid LCS Source: _____

Aqueous LCS Source: VENTURES____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	51250.00	100.5						
Antimony	2000.0	2068.00	103.4						
Arsenic	1050.0	1087.00	103.5						
Barium	500.0	469.30	93.9						
Beryllium	500.0	483.60	96.7						
Cadmium	525.0	487.00	92.8						
Calcium	50000.0	50670.00	101.3						
Chromium	500.0	475.90	95.2						
Cobalt	500.0	465.80	93.2						
Copper	500.0	478.60	95.7						
Iron	50500.0	51090.00	101.2						
Lead	1015.0	981.70	96.7						
Magnesium	50000.0	49750.00	99.5						
Manganese	500.0	471.20	94.2						
Mercury	1.0	0.95	95.1						
Nickel	500.0	464.80	93.0						
Potassium	50000.0	49440.00	98.9						
Selenium	25.0	26.56	106.2						
Silver	500.0	503.00	100.6						
Sodium	50000.0	49980.00	100.0						
Thallium	50.0	46.52	93.0						
Vanadium	500.0	477.20	95.4						
Zinc	500.0	478.80	95.8						
Cyanide									

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STANDARD ADDITION RESULTS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract:93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.:______ SDG No.:57313_

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MW12L

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

Matrix (soil/water): WATER Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	48.22	B	172.50	U	100.0		P
Antimony	1.00	U	8.52	B			P
Arsenic	5.10	B	20.00	U	100.0		P
Barium	83.42	B	82.36	B	1.3		P
Beryllium	0.10	U	0.50	U			P
Cadmium	0.30	U	1.50	U			P
Calcium	79280.00		77830.00		1.8		P
Chromium	0.70	U	3.50	U			P
Cobalt	0.90	U	4.50	U			P
Copper	1.46	B	10.62	B	627.4		P
Iron	60.05	B	114.70	B	91.0		P
Lead	1.90	U	9.50	U			P
Magnesium	60690.00		59010.00		2.8		P
Manganese	0.20	U	7.26	B			P
Mercury							NR
Nickel	1.60	U	8.00	U			P
Potassium	7788.00		7756.00	B	0.4		P
Selenium	3.40	U	19.77	B			P
Silver	1.30	U	9.54	B			P
Sodium	15030.00		16040.00	B	6.7		P
Thallium	4.70	U	23.50	U			P
Vanadium	1.21	B	7.30	B	503.3		P
Zinc	3.02	B	20.67	B	584.4		P

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Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

ICP ID Number: ICP4_TJA61E_ Date: 04/01/96

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	34.5	P
Antimony	206.84		60	1.0	P
Arsenic	189.04		10	4.0	P
Barium	493.41		200	1.2	P
Beryllium	313.04		5	0.1	P
Cadmium	226.50		5	0.3	P
Calcium	317.93		5000	42.2	P
Chromium	267.72		10	0.7	P
Cobalt	228.62		50	0.9	P
Copper	324.75		25	1.0	P
Iron	271.44		100	21.7	P
Lead	220.35		3	1.9	P
Magnesium	279.08		5000	40.0	P
Manganese	257.61		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	1.6	P
Potassium	766.49		5000	39.3	P
Selenium	196.03		5	3.4	P
Silver	328.07		10	1.3	P
Sodium	330.23		5000	218.8	P
Thallium	190.86		10	4.7	P
Vanadium	292.40		50	1.1	P
Zinc	213.86		20	0.3	P

Comments:

10
Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

ICP ID Number: _____ Date: 04/01/96

Flame AA ID Number : PS200_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

ICP ID Number: _____ Date: 01/01/96

Flame AA ID Number : PS1214_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

ICP ID Number: ICP4 TJA61E_ Date: 01/01/96

Analyte	Wave-length (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	CO_
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000390	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000400	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001035	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0000596	-0.0000184	0.0000823	0.0000111	-0.0048710
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.0011240
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0001999	0.0000000	-0.0000465
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	-0.0000100	0.0000000	-0.0000800	0.0000000	0.0049700
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

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11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

ICP ID Number: ICP4 TJA61E_ Date: 01/01/96

Analyte	Wavelength (nm)	Interelement Correction Factors for : CR_	MN_	NI_	V__	___
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0264000	
Antimony	206.84	0.0055040	0.0000000	-0.0002668	-0.0036670	
Arsenic	189.04	-0.0029900	0.0000000	0.0000000	0.0000000	
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0011400	
Cadmium	226.50	0.0000000	0.0000000	-0.0000329	0.0000000	
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	267.72	0.0000000	0.0000704	0.0000000	-0.0000540	
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	-0.0001864	0.0000279	0.0002131	-0.0006255	
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	-0.0001310	0.0000000	0.0000000	
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.03	0.0000000	0.0002108	0.0000000	0.0000188	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.86	0.0003750	-0.0005820	0.0000000	0.0036030	
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57313_

ICP ID Number: ICP4 TJA61E_ Date: 04/01/96

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	10000.0	P
Calcium	10.00	1000000.0	P
Chromium	10.00	50000.0	P
Cobalt	10.00	50000.0	P
Copper	10.00	100000.0	P
Iron	10.00	500000.0	P
Lead	10.00	50000.0	P
Magnesium	10.00	1000000.0	P
Manganese	10.00	20000.0	P
Mercury			NR
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	50000.0	P
Zinc	10.00	5000.0	P

Comments:

13
PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57313_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	04/08/96		100
MW12	04/08/96		100
MW12D	04/08/96		100
MW12S	04/08/96		100
PBW1	04/08/96		100

13
PREPARATION LOC

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57313_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	04/10/96		100
MW12	04/10/96		100
MW12D	04/10/96		100
MW12S	04/10/96		100
PBW1	04/10/96		100

13
PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57313_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	03/25/96		250
ICV	03/25/96		250
MW12	03/25/96		250
MW12D	03/25/96		250
MW12S	03/25/96		250
PBW1	03/25/96		250

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57313_

Instrument ID Number: ICP4 TJA61E__ Method: P_

Start Date: 04/12/96 End Date: 04/12/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1219		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.00	1223					X	X	X		X	X	X				X		X			X			X	X	
S	1.00	1227		X						X				X		X				X			X				
S	1.00	1231			X	X									X						X			X			
ICV	1.00	1238		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICB	1.00	1243		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	1247		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1252		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1256			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1301		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1306		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1310																									
ZZZZZZ	1.00	1315																									
ZZZZZZ	1.00	1319																									
ZZZZZZ	1.00	1324																									
ZZZZZZ	5.00	1328																									
ZZZZZZ	1.00	1332																									
ZZZZZZ	1.00	1337																									
PBW1	1.00	1341		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSW1	1.00	1346		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW12	1.00	1350		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1355		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1359		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW12L	5.00	1404		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW12A	1.00	1408		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW12S	1.00	1413		X	X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
MW12D	1.00	1417		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1422																									
ZZZZZZ	1.00	1426																									
ZZZZZZ	1.00	1431																									
ZZZZZZ	5.00	1435																									
ZZZZZZ	1.00	1440																									

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14
ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:57313_

Instrument ID Number: ICP4 TJA61E__ Method: P_

Start Date: 04/12/96 End Date: 04/12/96

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1444																									
CCV	1.00	1451		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1500																									
ZZZZZZ	1.00	1505																									
ZZZZZZ	1.00	1509																									
ZZZZZZ	1.00	1514																									
ZZZZZZ	1.00	1518																									
ZZZZZZ	5.00	1523																									
ZZZZZZ	1.00	1527																									
ZZZZZZ	1.00	1532																									
ZZZZZZ	1.00	1536																									
CCV	1.00	1541		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1545		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	1550		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1554		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1559			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1603		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1608		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57313_

Instrument ID Number: PS200_____ Method: CV

Start Date: 04/11/96 End Date: 04/11/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1508																X								
S0	1.00	1508																X								
S0.2	1.00	1508																X								
S0.5	1.00	1508																X								
S1	1.00	1508																X								
S3	1.00	1508																X								
S5	1.00	1508																X								
ICV	1.00	1508																X								
ICB	1.00	1508																X								
CRA	1.00	1508																X								
CCV	1.00	1508																X								
CCB	1.00	1508																X								
PBW1	1.00	1508																X								
LCSW1	1.00	1508																X								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1509																								
ZZZZZZ	1.00	1509																								
CCV	1.00	1509																X								
CCB	1.00	1509																X								
ZZZZZZ	1.00	1509																								
ZZZZZZ	1.00	1509																								
ZZZZZZ	1.00	1509																								
ZZZZZZ	1.00	1509																								
ZZZZZZ	1.00	1509																								
MW12	1.00	1509																X								
MW12S	1.00	1509																X								
MW12D	1.00	1509																X								
ZZZZZZ	1.00	1509																								

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57313_

Instrument ID Number: PS200_____ Method: CV

Start Date: 04/11/96 End Date: 04/11/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1509																X									
CCB	1.00	1509																X									

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57313_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2048																								X
S10	1.00	2051																								X
S50	1.00	2053																								X
S100	1.00	2055																								X
S200	1.00	2057																								X
S300	1.00	2059																								X
ICV	1.00	2102																								X
ICB	1.00	2104																								X
CCV	1.00	2106																								X
CCB	1.00	2108																								X
ZZZZZZ	1.00	2110																								
PBW1	1.00	2113																								X
ZZZZZZ	1.00	2115																								
ZZZZZZ	5.00	2117																								
ZZZZZZ	1.00	2119																								
ZZZZZZ	1.00	2121																								
ZZZZZZ	1.00	2123																								
ZZZZZZ	1.00	2125																								
ZZZZZZ	1.00	2127																								
ZZZZZZ	1.00	2129																								
ZZZZZZ	1.00	2132																								
CCV	1.00	2134																								X
CCB	1.00	2136																								X
ZZZZZZ	1.00	2138																								
ZZZZZZ	1.00	2140																								
ZZZZZZ	1.00	2142																								
ZZZZZZ	5.00	2144																								
CCV	1.00	2146																								X
CCB	1.00	2148																								X
ZZZZZZ	1.00	2150																								
ZZZZZZ	1.00	2153																								
MW12	1.00	2155																								X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:57313_

Instrument ID Number: PS1214_______ Method: AS

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MW12D	1.00	2157																									X
MW12S	1.00	2159																									X
ZZZZZZ	1.00	2201																									
ZZZZZZ	1.00	2203																									
ZZZZZZ	1.00	2205																									
CCV	1.00	2207																									X
CCB	1.00	2209																									X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _______ SDG No.:57313_

Instrument ID Number: PS1214_______ Method: AS

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2255																									X
S10	1.00	2258																									X
S50	1.00	2300																									X
S100	1.00	2302																									X
S200	1.00	2304																									X
S300	1.00	2307																									X
ICV	1.00	2309																									X
ICB	1.00	2311																									X
CCV	1.00	2313																									X
CCB	1.00	2315																									X
ZZZZZZ	1.00	2317																									
ZZZZZZ	1.00	2320																									
ZZZZZZ	1.00	2322																									
ZZZZZZ	5.00	2324																									
ZZZZZZ	1.00	2326																									
MW12A	1.00	2328																									X
CCV	1.00	2330																									X
CCB	1.00	2332																									X

3. Sample Delivery Group No. 57371

Inchcape Testing Services
Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57371
Project No.: 93206
No. Samples: 39
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57371

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294679	MW14B:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1060
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.24
9060	Total Organic Carbon	0.9
294679R1	MW14B:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294679R2	MW14B:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294679R3	MW14B:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294680	MW14C:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	1050
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.24
9060	Total Organic Carbon	1.1
294680R1	MW14C:03/19/96 (Water)	
9060	Total Organic Carbon	1.0
294680R2	MW14C:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294680R3	MW14C:03/19/96 (Water)	
9060	Total Organic Carbon	0.9

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Inchcape Testing Services
Environmental Laboratories

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Analytical Report

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Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57371
Project No.: 93206
No. Samples: 39
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57371

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294681	MW14D:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	995
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.21
9060	Total Organic Carbon	0.9
294681R1	MW14D:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294681R2	MW14D:03/19/96 (Water)	
9060	Total Organic Carbon	0.9
294681R3	MW14D:03/19/96 (Water)	
9060	Total Organic Carbon	0.8
294682	MW14R:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	4.4
9020	Total Organic Halides	<0.02
9040	pH (std. units)	6.39
9060	Total Organic Carbon	<0.5
294682R1	MW14R:03/19/96 (Water)	
9060	Total Organic Carbon	<0.5
294682R2	MW14R:03/19/96 (Water)	
9060	Total Organic Carbon	<0.5
294682R3	MW14R:03/19/96 (Water)	
9060	Total Organic Carbon	<0.5

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Inchcape Testing Services
Environmental Laboratories

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South Burlington, VT 05403

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57371
Project No.: 93206
No. Samples: 39
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57371

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294684	MW454A:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	830
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.23
9060	Total Organic Carbon	0.6
294684R1	MW454A:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294684R2	MW454A:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294684R3	MW454A:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294685	MW454B:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	841
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.19
9060	Total Organic Carbon	0.5
294685R1	MW454B:03/19/96 (Water)	
9060	Total Organic Carbon	0.5
294685R2	MW454B:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294685R3	MW454B:03/19/96 (Water)	
9060	Total Organic Carbon	0.6

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Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 04/19/96
ETR Number : 57371
Project No.: 93206
No. Samples: 39
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57371

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294686	MW454C:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	842
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.19
9060	Total Organic Carbon	0.6
294686R1	MW454C:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294686R2	MW454C:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294686R3	MW454C:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294687	MW454D:03/19/96 (Water)	
9050	Conductivity (umhos/cm)	830
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.10
9060	Total Organic Carbon	0.6
294687MS	MW454DMS:[MS]03/19/96 (Water)	
9020	Total Organic Halides	0.10
9060	Total Organic Carbon	1.6
294687DP	MW454DREP:[REP]03/19/96 (Water)	
9050	Conductivity (umhos/cm)	821
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.6

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Date : 04/19/96
ETR Number : 57371
Project No.: 93206
No. Samples: 39
Arrived : 03/21/96
P.O. Number: *

Case:OBASH SDG:57371

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.
All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
294687R1	MW454D:03/19/96 (Water)	
9060	Total Organic Carbon	0.6
294687R2	MW454D:03/19/96 (Water)	
9060	Total Organic Carbon	0.7
294687R3	MW454D:03/19/96 (Water)	
9060	Total Organic Carbon	0.6

< Last Page > Submitted By : Aquatec Inc.

Quality Control Summary

Project No: 93206
ETR No: 57371
SDG No: 57371
Units: mg/L

Parameter	Method Preparation Blank	Laboratory Control Sample Reported Value	Laboratory Control Sample True Value	Laboratory Control Sample Percent Recovery
Conductivity (umhos/cm)	NA	1419	1413	100.4
pH (Std Units)	NA	5.99	6.00	99.8
Total Organic Carbon	< 0.5	47.7	49.2	97.0
Total Organic Halides	< 0.02	0.099	0.100	99.0

Quality Control Summary

Project No: 93206
ETR No: 57371
SDG No: 57371
Sample No: 294687
Units: mg/L

Parameter	Sample Result	Duplicate Sample Result	Relative Percent Difference	Spiked Sample Result	Spike Added	Percent Spike Recovery
Conductivity (umhos/cm)	830	821	1.1	NA	NA	NA
Total Organic Carbon	0.6	0.6	0.0	1.6	1.0	100.0
Total Organic Halides	< 0.02	< 0.02	NA	0.10	0.10	100.0

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH SAS No.: _____ SDG No.:57371_

S W No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MW114_____	_294688_____
_MW14R_____	_294682_____
_MW454_____	_294683_____
_MW114S_____	_294688MS_____
_MW114D_____	_294688DP_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

W re ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before
application of background corrections ? Yes/No NO_

C mments:

- _____
_____
- _____
- _____

I certify that this data package is in compliance with the terms and c nditions of the contract, both technically and for completeness, for c her than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the M nager's designee, as verified by the following signature.

Signature: _____ Name: _____

D te: _____ Title: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW114

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water): WATER Lab Sample ID: 294688

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1110		N*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	4.0	B		P
7440-39-3	Barium	46.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	167000			P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	568		*	P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	33900			P
7439-96-5	Manganese	5.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	U		P
7440-09-7	Potassium	1350	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.6	B		P
7440-23-5	Sodium	30800			P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	10.6	B		P
	Cyanide	5.0	U	N	AS

Color Before: GRAY_____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW14R

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water): WATER Lab Sample ID: 294682

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.5	U	N*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	4.0	B		P
7440-39-3	Barium	1.2	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	42.2	U		P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	21.7	U	*	P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	40.0	U		P
7439-96-5	Manganese	0.20	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	U		P
7440-09-7	Potassium	39.3	U		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	219	U		P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	3.4	B		P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW454

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water): WATER Lab Sample ID: 294683

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	40.8	B	N*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	4.6	B		P
7440-39-3	Barium	19.4	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.34	B		P
7440-70-2	Calcium	131000			P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	52.8	B	*	P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	29000			P
7439-96-5	Manganese	7.9	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	U		P
7440-09-7	Potassium	2150	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	12100			P
7440-28-0	Thallium	4.7	U		P
7440-62-2	Vanadium	1.7	B		P
7440-66-6	Zinc	2.5	B		P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	26000.0	25900.00	99.6	30200.0	29980.00	99.3	30060.00	99.5	P
Antimony	250.0	253.70	101.5	300.0	307.80	102.6	308.20	102.7	P
Arsenic	250.0	260.40	104.2	100.0	101.90	101.9	101.90	101.9	P
Barium	500.0	487.80	97.6	200.0	200.20	100.1	200.60	100.3	P
Beryllium	500.0	503.20	100.6	100.0	99.52	99.5	99.59	99.6	P
Cadmium	500.0	486.70	97.3	100.0	97.41	97.4	98.04	98.0	P
Calcium	25000.0	25080.00	100.3	30200.0	30100.00	99.7	30120.00	99.7	P
Chromium	500.0	496.50	99.3	200.0	200.80	100.4	201.40	100.7	P
Cobalt	500.0	487.10	97.4	200.0	196.10	98.0	197.70	98.8	P
Copper	500.0	496.00	99.2	200.0	200.70	100.4	202.00	101.0	P
Iron	25500.0	25920.00	101.6	30200.0	30170.00	99.9	30150.00	99.8	P
Lead	1000.0	1014.00	101.4	400.0	404.30	101.1	404.40	101.1	P
Magnesium	25000.0	24630.00	98.5	30200.0	29940.00	99.1	30010.00	99.4	P
Manganese	500.0	492.20	98.4	200.0	196.30	98.2	196.70	98.4	P
Mercury	1.8	1.77	98.3	3.0	3.11	103.7	2.99	99.7	CV
Nickel	500.0	485.00	97.0	200.0	198.10	99.0	197.40	98.7	P
Potassium	25000.0	25740.00	103.0	30200.0	30660.00	101.5	30750.00	101.8	P
Selenium	250.0	256.30	102.5	100.0	99.63	99.6	99.56	99.6	P
Silver	500.0	520.80	104.2	100.0	100.40	100.4	101.80	101.8	P
Sodium	25000.0	24150.00	96.6	30200.0	29300.00	97.0	29330.00	97.1	P
Thallium	250.0	237.20	94.9	100.0	95.76	95.8	99.95	100.0	P
Vanadium	500.0	502.30	100.5	200.0	198.80	99.4	199.70	99.8	P
Zinc	500.0	497.90	99.6	200.0	201.70	100.8	202.00	101.0	P
Cyanide	120.0	121.50	101.2	150.0	143.00	95.3	143.00	95.3	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	29970.00	99.2	29960.00	99.2	P
Antimony				300.0	309.20	103.1	308.60	102.9	P
Arsenic				100.0	99.24	99.2	103.70	103.7	P
Barium				200.0	200.60	100.3	200.60	100.3	P
Beryllium				100.0	99.79	99.8	99.49	99.5	P
Cadmium				100.0	97.68	97.7	97.23	97.2	P
Calcium				30200.0	30180.00	99.9	30100.00	99.7	P
Chromium				200.0	201.50	100.8	200.80	100.4	P
Cobalt				200.0	197.30	98.6	196.60	98.3	P
Copper				200.0	202.00	101.0	202.20	101.1	P
Iron				30200.0	30170.00	99.9	30050.00	99.5	P
Lead				400.0	402.60	100.6	404.20	101.0	P
Magnesium				30200.0	29960.00	99.2	29900.00	99.0	P
Manganese				200.0	196.60	98.3	196.10	98.0	P
Mercury				3.0	2.86	95.3	3.09	103.0	CV
Nickel				200.0	198.40	99.2	196.80	98.4	P
Potassium				30200.0	30670.00	101.6	30710.00	101.7	P
Selenium				100.0	103.40	103.4	99.76	99.8	P
Silver				100.0	100.80	100.8	100.60	100.6	P
Sodium				30200.0	29260.00	96.9	29360.00	97.2	P
Thallium				100.0	99.81	99.8	96.13	96.1	P
Vanadium				200.0	199.30	99.6	199.20	99.6	P
Zinc				200.0	202.20	101.1	202.10	101.0	P
Cyanide				150.0	142.00	94.7	145.00	96.7	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

nitial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	29870.00	98.9			P
Antimony				300.0	303.40	101.1			P
Arsenic				100.0	100.70	100.7			P
Barium				200.0	198.90	99.4			P
Beryllium				100.0	99.08	99.1			P
Cadmium				100.0	97.16	97.2			P
Calcium				30200.0	30060.00	99.5			P
Chromium				200.0	200.20	100.1			P
Cobalt				200.0	194.90	97.4			P
Copper				200.0	200.40	100.2			P
Iron				30200.0	29980.00	99.3			P
Lead				400.0	401.50	100.4			P
Magnesium				30200.0	29860.00	98.9			P
Manganese				200.0	195.50	97.8			P
Mercury									NR
Nickel				200.0	197.70	98.8			P
Potassium				30200.0	30430.00	100.8			P
Selenium				100.0	99.46	99.5			P
Silver				100.0	100.10	100.1			P
Sodium				30200.0	29070.00	96.3			P
Thallium				100.0	96.56	96.6			P
Vanadium				200.0	198.30	99.2			P
Zinc				200.0	200.50	100.2			P
Cyanide	120.0	112.00	93.3	150.0	143.00	95.3	141.00	94.0	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide	120.0	111.00	92.5	150.0	146.00	97.3	145.00	96.7	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

iitial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide				150.0	146.00	97.3	146.00	97.3	AS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

A CRDL Standard Source: VENTURES____

CP CRDL Standard Source: VENTURES____

Concentration Units: ug/L

	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
Analyte	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	126.10	105.1	127.20	106.0
Arsenic				20.0	24.69	123.4	26.29	131.4
Barium								
Beryllium				10.0	10.29	102.9	10.41	104.1
Cadmium				10.0	10.22	102.2	10.24	102.4
Calcium								
Chromium				20.0	20.16	100.8	20.31	101.6
Cobalt				100.0	100.50	100.5	100.30	100.3
Copper				50.0	51.55	103.1	51.86	103.7
Iron								
Lead				6.0	5.50	91.7	6.85	114.2
Magnesium								
Manganese				30.0	30.51	101.7	30.61	102.0
Mercury	0.2	0.21	105.0					
Nickel				80.0	80.01	100.0	79.80	99.8
Potassium								
Selenium				10.0	8.24	82.4	10.11	101.1
Silver				20.0	22.59	113.0	22.14	110.7
Sodium								
Thallium				20.0	17.96	89.8	16.28	81.4
Vanadium				100.0	104.40	104.4	104.70	104.7
Zinc				40.0	40.19	100.5	40.61	101.5

3
BLANKS

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

reparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	34.5	U	34.5	U	34.5	U	34.5	U	34.500	U	P
Antimony	-1.1	B	-1.4	B	1.0	U	1.0	U	1.018	B	P
Arsenic	4.5	B	4.0	U	4.1	B	4.0	U	4.000	U	P
Barium	1.2	U	1.2	U	1.2	U	1.2	U	1.200	U	P
Beryllium	0.1	U	0.1	U	0.1	B	0.1	U	0.100	U	P
Cadmium	0.3	U	0.3	U	0.3	U	0.5	B	0.300	U	P
Calcium	42.2	U	42.2	U	42.2	U	42.2	U	42.200	U	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cobalt	0.9	U	0.9	U	0.9	U	0.9	U	0.906	B	P
Copper	1.7	B	1.1	B	1.0	U	1.0	U	1.230	B	P
Iron	21.7	U	21.7	U	21.7	U	21.7	U	21.700	U	P
Lead	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Magnesium	40.0	U	40.0	U	40.0	U	40.0	U	40.000	U	P
Manganese	0.2	B	0.2	U	0.2	U	0.2	U	0.200	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Potassium	39.3	U	39.3	U	39.3	U	39.3	U	39.300	U	P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U	3.400	U	P
Silver	1.3	U	1.3	U	1.3	U	1.3	U	1.719	B	P
Sodium	218.8	U	218.8	U	218.8	U	218.8	U	218.800	U	P
Thallium	4.7	U	4.7	U	4.7	U	4.7	U	4.700	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.154	B	P
Zinc	2.9	B	-0.3	B	0.3	U	0.3	U	0.300	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			34.5	U	34.5	U					P
Antimony			1.0	U	1.0	U					P
Arsenic			4.0	U	4.0	U					P
Barium			1.2	U	1.2	U					P
Beryllium			0.1	U	0.1	B					P
Cadmium			0.3	U	0.3	U					P
Calcium			42.2	U	42.2	U					P
Chromium			0.7	U	0.7	U					P
Cobalt			0.9	U	1.0	B					P
Copper			1.0	U	1.8	B					P
Iron			21.7	U	22.8	B					P
Lead			1.9	U	1.9	U					P
Magnesium			40.0	U	40.0	U					P
Manganese			0.2	U	0.2	B					P
Mercury											NR
Nickel			1.6	U	1.6	U					P
Potassium			-57.2	B	39.3	U					P
Selenium			3.4	U	3.4	U					P
Silver			1.4	B	2.1	B					P
Sodium			218.8	U	218.8	U					P
Thallium			4.7	U	4.7	U					P
Vanadium			1.1	U	1.1	U					P
Zinc			0.3	U	0.3	U					P
Cyanide			10.0	U					5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide	10.0	U	10.0	U	10.0	U			5.000	U	AS

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U			AS

3
BLANKS

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

reparation Blank Matrix (soil/water): _____

reparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide			10.0	U							AS

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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No: _____ SDG No.: 57371_

ICP ID Number: ICP4 TJA 61E ICS Source: VENTURES____

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	481743	487700	494000.0	102.5	490500	493900.0	102.5
Antimony	0	639	-4	649.0	101.6	3	647.1	101.3
Arsenic	0	97	5	98.7	101.8	4	91.4	94.2
Barium	0	500	2	498.6	99.7	2	498.2	99.6
Beryllium	0	497	0	496.3	99.9	0	497.9	100.2
Cadmium	0	960	2	942.0	98.1	2	942.1	98.1
Calcium	500000	494457	499700	513100.0	103.8	506000	515600.0	104.3
Chromium	0	493	4	490.7	99.5	5	492.2	99.8
Cobalt	0	473	1	467.3	98.8	1	468.1	99.0
Copper	0	539	4	524.1	97.2	4	524.7	97.3
Iron	200000	194543	193100	197700.0	101.6	194200	197700.0	101.6
Lead	0	50	4	50.8	101.6	1	50.0	100.0
Magnesium	500000	514557	511300	520700.0	101.2	515800	520300.0	101.1
Manganese	0	493	2	487.8	98.9	2	487.4	98.9
Mercury								
Nickel	0	929	2	1063.0	114.4	2	1065.0	114.6
Potassium	0	0	-2	24.8		-31	-9.3	
Selenium	0	50	0	53.2	106.4	0	56.5	113.0
Silver	0	213	2	212.3	99.7	1	212.0	99.5
Sodium	0	0	18	181.7		64	87.8	
Thallium	0	84	0	84.1	100.1	3	93.0	110.7
Vanadium	0	494	4	490.5	99.3	5	492.8	99.8
Zinc	0	1016	18	1004.0	98.8	18	1001.0	98.5

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW114S

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2438.0000		1113.0000		2000.00	66.2	N	P
Antimony	75-125	530.6000		1.0000	U	500.00	106.1		P
Arsenic	75-125	47.7800		4.0000	B	40.00	119.4		P
Barium	75-125	2031.0000		46.0400	B	2000.00	99.2		P
Beryllium	75-125	52.4600		0.1000	U	50.00	104.9		P
Cadmium	75-125	50.0100		0.3000	U	50.00	100.0		P
Calcium									NR
Chromium	75-125	203.4000		0.7000	U	200.00	101.7		P
Cobalt	75-125	491.8000		0.9000	U	500.00	98.4		P
Copper	75-125	258.8000		1.4250	B	250.00	103.0		P
Iron	75-125	1415.0000		568.1000		1000.00	84.7		P
Lead	75-125	19.3100		1.9000	U	20.00	96.6		P
Magnesium									NR
Manganese	75-125	504.7000		5.2420	B	500.00	99.9		P
Mercury	75-125	0.9970		0.1000	U	1.00	99.7		CV
Nickel	75-125	486.3000		1.6000	U	500.00	97.3		P
Potassium									NR
Selenium	75-125	10.6600		3.4000	U	10.00	106.6		P
Silver	75-125	54.1500		1.6460	B	50.00	105.0		P
Sodium									NR
Thallium	75-125	48.2700		4.7000	U	50.00	96.5		P
Vanadium	75-125	508.1000		2.3900	B	500.00	101.1		P
Zinc	75-125	510.1000		10.6200	B	500.00	99.9		P
Cyanide	75-125	86.6000		5.0000	U	200.00	43.3	N	AS

Comments:

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MW114A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water) : WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum		3714.00		1113.00		2000.0	130.0		P
Antimony		536.10		1.00	U	500.0	107.2		P
Arsenic		50.40		4.00	B	40.0	126.0		P
Barium		2020.00		46.04	B	2000.0	98.7		P
Beryllium		52.03		0.10	U	50.0	104.1		P
Cadmium		49.74		0.30	U	50.0	99.5		P
Calcium									NR
Chromium		201.60		0.70	U	200.0	100.8		P
Cobalt		487.20		0.90	U	500.0	97.4		P
Copper		256.10		1.42	B	250.0	101.9		P
Iron		1745.00		568.10		1000.0	117.7		P
Lead		20.47		1.90	U	20.0	102.4		P
Magnesium									NR
Manganese		501.10		5.24	B	500.0	99.2		P
Mercury									NR
Nickel		481.00		1.60	U	500.0	96.2		P
Potassium									NR
Selenium		11.30		3.40	U	10.0	113.0		P
Silver									NR
Sodium									NR
Thallium		52.27		4.70	U	50.0	104.5		P
Vanadium		504.70		2.39	B	500.0	100.5		P
Zinc		504.10		10.62	B	500.0	98.7		P
Cyanide									NR

Comments:

6
DUPLICATES

EPA SAMPLE NO.

MW114D

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water): WATER Level (low/med): _LOW__

Solids for Sample: __0.0 % Solids for Duplicate: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	1113.0000		528.7000		71.2	*	P
Antimony		1.0000	U	1.4230	U	200.0		P
Arsenic		4.0000	B	6.4990	B	200.0		P
Barium		46.0400	B	45.0300	B	2.2		P
Beryllium		0.1000	U	0.1260	B	200.0		P
Cadmium		0.3000	U	0.3000	U			P
Calcium		167100.0000		165500.0000		1.0		P
Chromium		0.7000	U	0.7000	U			P
Cobalt		0.9000	U	0.9210	U	200.0		P
Copper		1.4250	B	1.8230	B	24.5		P
Iron	100.0	568.1000		400.2000		34.7	*	P
Lead		1.9000	U	1.9000	U			P
Magnesium		33920.0000		33570.0000		1.0		P
Manganese		5.2420	B	4.9690	B	5.3		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		1.6000	U	1.6000	U			P
Potassium		1347.0000	B	1284.0000	B	4.8		P
Selenium		3.4000	U	3.5930	B	200.0		P
Silver		1.6460	B	1.8890	B	13.7		P
Sodium		30760.0000		30290.0000		1.5		P
Thallium		4.7000	U	4.7000	U			P
Vanadium		2.3900	B	1.7040	B	33.5		P
Zinc		10.6200	B	10.0700	B	5.3		P
Cyanide		5.0000	U	10.0000	U			AS

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LABORATORY CONTROL SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Solid LCS Source: _____

Aqueous LCS Source: VENTURES____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	51250.00	100.5						
Antimony	2000.0	2068.00	103.4						
Arsenic	1050.0	1087.00	103.5						
Barium	500.0	469.30	93.9						
Beryllium	500.0	483.60	96.7						
Cadmium	525.0	487.00	92.8						
Calcium	50000.0	50670.00	101.3						
Chromium	500.0	475.90	95.2						
Cobalt	500.0	465.80	93.2						
Copper	500.0	478.60	95.7						
Iron	50500.0	51090.00	101.2						
Lead	1015.0	981.70	96.7						
Magnesium	50000.0	49750.00	99.5						
Manganese	500.0	471.20	94.2						
Mercury	1.0	0.92	91.5						
Nickel	500.0	464.80	93.0						
Potassium	50000.0	49440.00	98.9						
Selenium	25.0	26.56	106.2						
Silver	500.0	503.00	100.6						
Sodium	50000.0	49980.00	100.0						
Thallium	50.0	46.52	93.0						
Vanadium	500.0	477.20	95.4						
Zinc	500.0	478.80	95.8						
Cyanide									

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STANDARD ADDITION RESULTS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract:93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.:______ SDG No.:57371_

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MW114L

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

Matrix (soil/water): WATER Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1113.00		1123.00		0.9		P
Antimony	1.00	U	5.00	U			P
Arsenic	4.00	B	23.88	B			P
Barium	46.04	B	47.45	B	3.1		P
Beryllium	0.10	U	0.50	U			P
Cadmium	0.30	U	1.70	B			P
Calcium	167100.00		165900.00		0.7		P
Chromium	0.70	U	3.64	B			P
Cobalt	0.90	U	4.67	U			P
Copper	1.42	B	11.82	B	732.4		P
Iron	568.10		603.10		6.2		P
Lead	1.90	U	9.50	U			P
Magnesium	33920.00		33790.00		0.4		P
Manganese	5.24	B	11.68	B	122.9		P
Mercury							NR
Nickel	1.60	U	8.00	U			P
Potassium	1347.00	B	1666.00	B	23.7		P
Selenium	3.40	U	17.00	B			P
Silver	1.65	B	9.08	B	450.3		P
Sodium	30760.00		30310.00		1.5		P
Thallium	4.70	U	23.50	U			P
Vanadium	2.39	B	9.50	B	297.5		P
Zinc	10.62	B	20.16	B	89.8		P

10
Instrument Detection Limits (Quarterly)

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: ICP4_TJA_61E Date: 04/01/96

lame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	34.5	P
Antimony	206.84		60	1.0	P
Arsenic	189.04		10	4.0	P
Barium	493.41		200	1.2	P
Beryllium	313.04		5	0.1	P
Cadmium	226.50		5	0.3	P
Calcium	317.93		5000	42.2	P
Chromium	267.72		10	0.7	P
Cobalt	228.62		50	0.9	P
Copper	324.75		25	1.0	P
Iron	271.44		100	21.7	P
Lead	220.35		3	1.9	P
Magnesium	279.08		5000	40.0	P
Manganese	257.61		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	1.6	P
Potassium	766.49		5000	39.3	P
Selenium	196.03		5	3.4	P
Silver	328.07		10	1.3	P
Sodium	330.23		5000	218.8	P
Thallium	190.86		10	4.7	P
Vanadium	292.40		50	1.1	P
Zinc	213.86		20	0.3	P

ɔmments:

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10

Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: _____ Date: 04/01/96

Flame AA ID Number : PS200_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

10

Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: _____ Date: 01/01/96

Flame AA ID Number : PS1214_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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10
Instrument Detection Limits (Quarterly)

ab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: _____ Date: 04/01/96

lame AA ID Number : PS1214_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

omments:

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11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: ICP4 TJA 61E Date: 01/01/96

Analyte	Wavelength (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	CO_
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000390	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000400	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001035	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0000596	-0.0000184	0.0000823	0.0000111	-0.0048710
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.0011240
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0001999	0.0000000	-0.0000465
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	-0.0000100	0.0000000	-0.0000800	0.0000000	0.0049700
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

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11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: ICP4 TJA 61E Date: 01/01/96

Analyte	Wave-length (nm)	Interelement Correction Factors for : CR_	MN_	NI_	V__	___
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0264000	
Antimony	206.84	0.0055040	0.0000000	-0.0002668	-0.0036670	
Arsenic	189.04	-0.0029900	0.0000000	0.0000000	0.0000000	
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0011400	
Cadmium	226.50	0.0000000	0.0000000	-0.0000329	0.0000000	
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	267.72	0.0000000	0.0000704	0.0000000	-0.0000540	
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	-0.0001864	0.0000279	0.0002131	-0.0006255	
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	-0.0001310	0.0000000	0.0000000	
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.03	0.0000000	0.0002108	0.0000000	0.0000188	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.86	0.0003750	-0.0005820	0.0000000	0.0036030	
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

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12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 57371_

ICP ID Number: ICP4 TJA 61E Date: 04/01/96

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	10000.0	P
Calcium	10.00	1000000.0	P
Chromium	10.00	50000.0	P
Cobalt	10.00	50000.0	P
Copper	10.00	100000.0	P
Iron	10.00	500000.0	P
Lead	10.00	50000.0	P
Magnesium	10.00	1000000.0	P
Manganese	10.00	20000.0	P
Mercury			NR
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	50000.0	P
Zinc	10.00	5000.0	P

Comments:

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57371_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	04/08/96		100
MW114	04/08/96		100
MW114D	04/08/96		100
MW114S	04/08/96		100
MW14R	04/08/96		100
MW454	04/08/96		100
PBW1	04/08/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57371_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	04/15/96		100
MW114	04/15/96		100
MW114D	04/15/96		100
MW114S	04/15/96		100
MW14R	04/15/96		100
MW454	04/15/96		100
PBW1	04/15/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57371_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	03/25/96		250
MW14R	03/25/96		250
MW454	03/25/96		250
PBW1	03/25/96		250

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57371_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	03/27/96		250
MW114	03/27/96		250
PBW2	03/27/96		250

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:57371_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	04/16/96		250
MW114D	04/16/96		250
MW114S	04/16/96		250
PBW3	04/16/96		250

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: ICP4 TJA 61E_ Method: P_

Start Date: 04/12/96 End Date: 04/12/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1219		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
S	1.00	1223			_	_	X	X	X	_	X	X	X	_	_	_	X	_	X	_	_	X	_	_	X	X	_
S	1.00	1227		X				_	_	X	_	_	_	X	_	X	_	_	_	X	_	_	X	_	_	_	_
S	1.00	1231			X	X		_	_		_	_	_		X		_	_	_		X	_		X	_	_	_
ICV	1.00	1238		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ICB	1.00	1243		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ICSA	1.00	1247		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ICSAB	1.00	1252		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
CRI	1.00	1256			X	X		X	X		X	X	X		X		X	_	X		X	X		X	X	X	_
CCV	1.00	1301		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
CCB	1.00	1306		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ZZZZZZ	1.00	1310		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1315		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1319		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1324		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	5.00	1328		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1332		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1337																									
PBW1	1.00	1341		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
LCSW1	1.00	1346		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ZZZZZZ	1.00	1350																									
CCV	1.00	1355		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
CCB	1.00	1359		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ZZZZZZ	5.00	1404																									
ZZZZZZ	1.00	1408		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1413		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1417		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
MW14R	1.00	1422		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
MW454	1.00	1426		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
MW114	1.00	1431		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
MW114L	5.00	1435		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
MW114A	1.00	1440		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: ICP4 TJA 61E_ Method: P_

Start Date: 04/12/96 End Date: 04/12/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MW114S	1.00	1444		X	X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
CCV	1.00	1451		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW114D	1.00	1500		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1505																									
ZZZZZZ	1.00	1509																									
ZZZZZZ	1.00	1514																									
ZZZZZZ	1.00	1518																									
ZZZZZZ	5.00	1523																									
ZZZZZZ	1.00	1527																									
ZZZZZZ	1.00	1532																									
ZZZZZZ	1.00	1536																									
CCV	1.00	1541		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1545		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	1550		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1554		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1559			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1603		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1608		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: PS200_____ Method: CV

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1213																X									
S0	1.00	1216																X									
S0.2	1.00	1219																X									
S0.5	1.00	1222																X									
S1	1.00	1226																X									
S3	1.00	1229																X									
S5	1.00	1232																X									
ICV	1.00	1235																X									
ICB	1.00	1238																X									
CRA	1.00	1242																X									
CCV	1.00	1245																X									
CCB	1.00	1248																X									
ZZZZZZ	1.00	1251																									
ZZZZZZ	1.00	1254																									
ZZZZZZ	1.00	1257																									
ZZZZZZ	1.00	1300																									
ZZZZZZ	1.00	1304																									
ZZZZZZ	1.00	1307																									
ZZZZZZ	1.00	1310																									
ZZZZZZ	1.00	1313																									
ZZZZZZ	1.00	1316																									
CCV	1.00	1319																X									
CCB	1.00	1322																X									
ZZZZZZ	1.00	1325																									
ZZZZZZ	1.00	1329																									
ZZZZZZ	1.00	1332																									
ZZZZZZ	1.00	1335																									
PBW1	1.00	1338																X									
LCSW1	1.00	1341																X									
ZZZZZZ	1.00	1344																									
ZZZZZZ	1.00	1347																									
ZZZZZZ	1.00	1350																									

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: PS200_____ Method: CV

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1353																X									
ZZZZZZ	1.00	1356																									
ZZZZZZ	1.00	1359																									
MW14R	1.00	1403																X									
MW454	1.00	1406																X									
MW114	1.00	1409																X									
MW114S	1.00	1412																X									
MW114D	1.00	1415																X									
ZZZZZZ	1.00	1418																									
ZZZZZZ	1.00	1421																									
ZZZZZZ	1.00	1424																									
CCV	1.00	1427																X									
CCB	1.00	1430																X									

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: PS1214_____ Method: AS

tart Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2048																								X
S10	1.00	2051																								X
S50	1.00	2053																								X
S100	1.00	2055																								X
S200	1.00	2057																								X
S300	1.00	2059																								X
ICV	1.00	2102																								X
ICB	1.00	2104																								X
CCV	1.00	2106																								X
CCB	1.00	2108																								X
ZZZZZZ	1.00	2110																								
PBW1	1.00	2113																								X
ZZZZZZ	1.00	2115																								
ZZZZZZ	5.00	2117																								
ZZZZZZ	1.00	2119																								
ZZZZZZ	1.00	2121																								
ZZZZZZ	1.00	2123																								
ZZZZZZ	1.00	2125																								
ZZZZZZ	1.00	2127																								
ZZZZZZ	1.00	2129																								
ZZZZZZ	1.00	2132																								
CCV	1.00	2134																								X
CCB	1.00	2136																								X
ZZZZZZ	1.00	2138																								
ZZZZZZ	1.00	2140																								
ZZZZZZ	1.00	2142																								
ZZZZZZ	5.00	2144																								
CCV	1.00	2146																								X
CCB	1.00	2148																								X
ZZZZZZ	1.00	2150																								
ZZZZZZ	1.00	2153																								
ZZZZZZ	1.00	2155																								

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:57371_

Instrument ID Number: PS1214_______ Method: AS

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2157																									
ZZZZZZ	1.00	2159																									
ZZZZZZ	1.00	2201																									
MW14R	1.00	2203																									X
MW454	1.00	2205																									X
CCV	1.00	2207																									X
CCB	1.00	2209																									X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: PS1214_____ Method: AS

tart Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2004																								X
S10	1.00	2006																								X
S50	1.00	2008																								X
S100	1.00	2010																								X
S200	1.00	2012																								X
S300	1.00	2014																								X
ICV	1.00	2016																								X
ICB	1.00	2019																								X
CCV	1.00	2021																								X
CCB	1.00	2023																								X
ZZZZZZ	1.00	2025																								
PBW2	1.00	2027																								X
ZZZZZZ	1.00	2029																								
ZZZZZZ	5.00	2032																								
MW114	1.00	2034																								X
ZZZZZZ	1.00	2036																								
ZZZZZZ	1.00	2038																								
ZZZZZZ	1.00	2040																								
ZZZZZZ	1.00	2042																								
ZZZZZZ	1.00	2045																								
CCV	1.00	2047																								X
CCB	1.00	2049																								X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

ab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: PS1214_____ Method: AS

tart Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0136																								X
S10	1.00	0138																								X
S50	1.00	0140																								X
S100	1.00	0142																								X
S200	1.00	0144																								X
S300	1.00	0147																								X
ICV	1.00	0149																								X
ICB	1.00	0151																								X
CCV	1.00	0153																								X
CCB	1.00	0156																								X
ZZZZZZ	1.00	0158																								X
PBW3	1.00	0200																								X
ZZZZZZ	1.00	0202																								
ZZZZZZ	5.00	0204																								
ZZZZZZ	1.00	0206																								
ZZZZZZ	1.00	0208																								
ZZZZZZ	1.00	0210																								
ZZZZZZ	1.00	0213																								
ZZZZZZ	1.00	0215																								
CCV	1.00	0217																								X
CCB	1.00	0219																								X
ZZZZZZ	1.00	0221																								
ZZZZZZ	1.00	0223																								
ZZZZZZ	1.00	0225																								
ZZZZZZ	1.00	0227																								
ZZZZZZ	1.00	0229																								
ZZZZZZ	1.00	0231																								
ZZZZZZ	1.00	0234																								
ZZZZZZ	1.00	0236																								
ZZZZZZ	1.00	0238																								
ZZZZZZ	1.00	0240																								
CCV	1.00	0242																								X

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:57371_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 04/17/96 End Date: 04/17/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	0244																								X
MW114S	1.00	0246																								X
MW114D	1.00	0248																								X
ZZZZZZ	1.00	0250																								
ZZZZZZ	1.00	0252																								
ZZZZZZ	1.00	0254																								
CCV	1.00	0256																								X
CCB	1.00	0259																								X