01554

1/6

GROUNDWATER MONITORING
VALIDATED ANALYTICAL RESULTS FOR THE FOURTH QUARTER 1995
OB/OD GROUND, SENECA ARMY DEPOT

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

PREPARED BY:

Parsons Engineering Science, Inc.
Boston, Massachusetts

March 1996
D#14

TABLES

TABLE 1

SENECA ARMY DEPOT ACTIVITY
1995 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		
		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-12	624.5	03/15/95	Not Measured		06/08/95	4.36	620.14	09/13/95	5.65	618.85	1/15/96	ice	NA
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
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	ice	NA
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
OD Grounds													
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
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
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
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

TABLE 2

SENECA ARMY DEPOT ACTIVITY
OB GROUNDS FOURTH QUARTER 1995 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	01/16/96		01/16/96		01/16/96		01/16/96		01/16/96		01/16/96		01/16/96		01/16/96	
	ES ID	MW12A		MW12B		MW12C		MW12D		MW13A		MW13B		MW13C		MW13D	
	LAB ID	286534		286535		286536		286537		286538		286539		286540		286541	
PARAMETER	**UNITS**																
pH	standard units	7.03		7.2		7.21		7.23		7.15		7.15		7.11		7.11	
Conductivity	umhos/cm	877		862		865		873		902		890		900		883	
Total Organic Carbon	mg/L	1.0		1.2		0.98		1.13		1.3		1.3		1.3		0.9	
Total Organic Halides	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U

TABLE 2

SENECA ARMY DEPOT ACTIVITY
OB GROUNDS FOURTH QUARTER 1995 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	01/15/96		01/15/96		01/15/96		01/15/96		01/15/96		01/15/96		01/15/96		01/15/96		01/15/96	
	ES ID	MW14A		MW14B		MW14C		MW14D		MW14R		MW27A		MW27B		MW27C		MW27D	
	LAB ID	286220		286221		286222		286223		286224		286543		286544		286545		286546	
PARAMETER	**UNITS**									Rinsate									
pH	standard units	6.78		6.69		6.75		6.78		7.6		7.17		7.26		7.3		7.32	
Conductivity	umhos/cm	1020		1040		1020		1020		4.5		945		952		938		940	
Total Organic Carbon	mg/L	1.1		1.1		1		0.8		0.5U		0.8		0.83		0.73		0.9	
Total Organic Halides	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U

TABLE 3

SENECA ARMY DEPOT ACTIVITY
OD GROUNDS FOURTH QUARTER 1995 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	01/16/96		01/17/96		01/16/96		01/16/96		01/16/96		01/16/96		01/16/96		01/16/96	
	ES ID	MW45-3A		MW45-3B		MW45-3C		MW45-3D		MW45-4A		MW45-4B		MW45-4C		MW45-4D	
	LAB ID	286548		286549		286550		286551		286553		286554		286555		286556	
PARAMETER	**UNITS**																
pH	standard units	7.23		7.24		7.25		7.25		7.27		7.25		7.22		7.15	
Conductivity	umhos/cm	1400		1340		1380		1290		NA		1000		978		993	
Total Organic Carbon	mg/L	0.7		0.6		0.6		0.6		0.6		0.7		1		0.7	
Total Organic Halides	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U

Table 4

OB/OD 1995 Fourth Quarter Groundwater Monitoring
Validated TAL Metals Analytical Results

ES ID		MW12	MW13A	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		01/18/96	01/18/96	01/16/96	01/18/96	01/16/96	01/16/96	01/18/96	01/18/96
LAB ID		56277	56277	56202	56277	56202	56202	56277	56277
COMPOUND	UNITS								
Aluminimum	ug/l	350	1210	56.5	11.3 U	138	11.3 U	26.4	71.2
Antimony	ug/l	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Arsenic	ug/l	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	3.7	2.8 U
Barium	ug/l	92.3	75.7	46.1	79.1	47.7	5.4 U	16.8	30.8
Beryllium	ug/l	0.27	0.36	0.17	0.29	0.23	0.16	0.34	0.34
Cadmium	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Calcium	ug/l	82500	140000	159000	87600	160000	143 U	184000	156000
Chromium	ug/l	0.64	1.9	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Cobalt	ug/l	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Copper	ug/l	1.7	3.8	1 U	1.2	1.6	1.4	1 U	1.6
Iron	ug/l	380	1850	92.4	18.8	206	10.6 U	69.2	81.9
Lead	ug/l	1.6 U	2.9	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Magnesium	ug/l	64300	27400	32800	65800	33100	137 U	69900	35000
Manganese	ug/l	5.4	49.3	1.2	32.4	5.1	0.5 U	31.7	4.8
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	2.1	3	1.4 U	3.3	2.8	1.4 U	5	2.5
Potassium	ug/l	8650 U	2190	1430	9600	1470	136 U	8970	3470
Selenium	ug/l	3.2	2.2 U	2.2 U	2.8	2.2 U	2.2 U	2.2 U	2.2 U
Silver	ug/l	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	ug/l	16200	26400	30200	19600	30300	187 U	16500	13800
Thallium	ug/l	7.5	3.7	2.3 U	2.3 U	6.3	2.3 U	2.3 U	4.5
Vanadium	ug/l	1.6 U	2	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Zinc	ug/l	17.6	50.1	3.8	2.7	4.3	0.99	6.1	5.3
Cyanide	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U

H:\eng\seneca\quartsmp\obod\4qtr95\Q495MET2.WK4

TABLE 5

SENECA ARMY DEPOT ACTIVITY
FOURTH QUARTER 1995 GROUNDWATER MONITORING PROGRAM
HISTORICAL SUMMARY OF OB GROUNDS INDICATOR PARAMETER DATA

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

TABLE 6

SENECA ARMY DEPOT ACTIVITY
FOURTH QUARTER 1995 GROUNDWATER MONITORING PROGRAM
HISTORICAL SUMMARY OF OD GROUNDS INDICATOR PARAMETER DATA

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

Table 7

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

Background Well MW-13	TOC	pH	Specific Cond.	TOX
Intital Mean =	1.2	7.019375	909.5	0.0090625
Initial Variance =	0.1	0.00425958	704.5	0.00026406
Sample Size =	16	16	16	16

TOTAL ORGANIC CARBON (TOC)							
Compliance Well MW -12		Background Well MW -13		Compliance Well MW -14		Compliance Well MW -27	
t*=	-1.03	t*=	0.09	t*=	-1.61	t*=	-3.76
tc=	3.08	tc=	3.65	tc=	3.32	tc=	2.85
	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*=	3.02	t*=	5.53	t*=	-10.07	t*=	6.56
tc=	5.52	tc=	3.01	tc=	4.77	tc=	5.28
	No Change		Increase		No Change		Increase
SPECIFIC CONDUCTANCE							
Compliance Well MW -12		Background Well MW -13		Compliance Well MW -14		Compliance Well MW -27	
t*=	-5.37	t*=	-1.97	t*=	13.90	t*=	4.67
tc=	3.02	tc=	3.20	tc=	3.30	tc=	2.95
	No Change		No Change		Increase		Increase
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	7.17583333	875.1	0.005
Initial Variance =	0.0	0.00462652	14375.9	1.957E-43
Sample Size =	12	12	12	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*=	-3.46	t*=	1.60
tc=	0.00	tc=	0.00	tc=	3.17	tc=	4.31
	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*=	0.12	t*=	-0.37
tc=	0.00	tc=	0.00	tc=	5.50	tc=	5.26
	Dry		Dry		No Change		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*=	11.29	t*=	-0.12
tc=	0.00	tc=	0.00	tc=	3.32	tc=	3.21
	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
- W-1 WETLAND & DESIGNATION
- UTILITY POLE
- TREE
- BRUSH
- MW-27 622.26 MONITORING WELL & DESIGNATION AND MSL ELEVATION DATUM
- 622 GROUNDWATER CONTOUR LINE (INFERRED) MSL DATUM
- ARROW INDICATES PREDOMINANT GROUNDWATER FLOW DIRECTION

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE

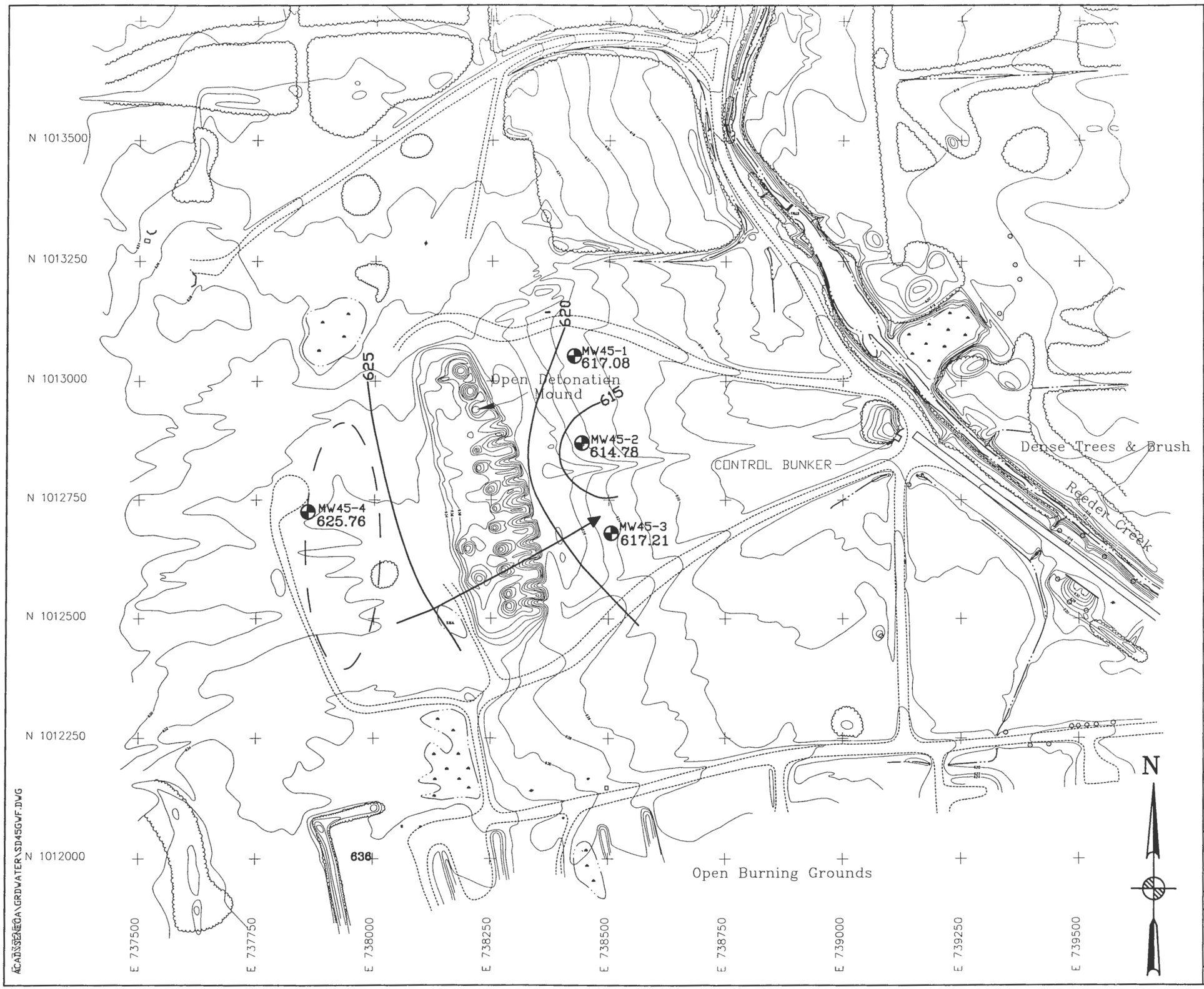
SENECA ARMY DEPOT ACTIVITY
OB GROUNDS
GROUNDWATER MONITORING PROGRAM

DEPT	Dwg. No.
ENVIRONMENTAL ENGINEERING	725980-01008

FIGURE 1
GROUNDWATER ELEVATION CONTOUR PLAN
JANUARY 15, 1996

SCALE	DATE	REV
1" = 200'	FEBRUARY 1996	A

R:\SENECA\GRDWATER\OBRDGWJ.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 | Dwg. No. 725980-01008

FIGURE 2
GROUNDWATER ELEVATION PLAN
JANUARY 15, 1996

SCALE 1" = 200' | DATE FEBRUARY 1996 | REV A

ACAD\SENECA\GRDWATER\SD45GWF.DWG

APPENDIX A

FIELD DATA

OB/OD Fourth Quarter 1995 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: January 15, 1996

PROJECT: Seneca - Quarterly monitoring | PROJECT NO: 725980-01008

LOCATION: OB/OD Grounds | INSPECTOR: Bowman Harvey, Annika Willis

MONITORING EQUIPMENT: NA

INSTRUMENT	DECTECTOR	BGD	TIME	REMARKS

WATER LEVEL INDICATOR:

INSTRUMENT	CORRECTION FACTOR

COMMENTS: Weather: 5°F, 5-10mph wind S-SW, Cloudy, flurries

MW 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	0945	9.24			14.09			
45-2	1042	11.98			12.42			
45-1	1053	8.00			8.63			
45-4	1335	7.28			9.75			
23	1528	4.04			NA			
15	1531	NA			NA			Well casing cover frozen.
12	1538	NA			~~NA~~ 9.11			Ice (at depth of 2.30')
27	1540	3.68			15.46			
24	1544	4.94			NA			Concrete pad has heaved a lot.
14	1651	NA			NA			Ice @ depth of 3.64'
16	1-16-96 1033	NA			NA			4" dia. well. PVC is heaved up inside well casing - can't get well
29	1035	4.66			NA			
25	1037	4.40			NA			
30	1358	3.91			NA			

(ALL DEPTH MEASUREMENTS FROM MARKED LOCATION ON RISER)

GROUNDWATER ELEVATION REPORT

PARSONS ENGINEERING-SCIENCE, INC. | CLIENT: | DATE: 1-16-96

PROJECT: | PROJECT NO:

LOCATION: 6610D | INSPECTOR:

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.)
13	1424	2.38						Removed ~ 1.5' of ice to get water level.
40	1540	5.40						
39	1543	5.59						
?	1555	3.91						Lock rusted badly (well located behind * moved across from 40, 39
7	1559	—						Can't open well; Well casing heaved
22	1602	—						Lock frozen, rusted
16	1605	4.30						
18	1610	—						Pad heaved; Frozen; ice at 2.5'
17	1612	2.31						~~Frozen; ice at 2.5'~~
11	1618	3.26						Lock rusted
9	1624	—						Frozen; ice at 2.66'.
25?	1626	3.38			needs lock	—		Well located next to MW-9. Maybe 31; 31 is. well inside casing
1	1634	8.30						
8	1640	3.62						No lock.
19	1644	—						Well frozen. Ice at 3.06'.

(ALL DEPTH MEASUREMENTS FROM MARKED LOCATION ON RISER)

SAMPLING RECORD FOR REPLICATES - GROUNDWATER

PARSONS ENGINEERING-SCI.,INC.	CLIENT: USACOE	DATE: 1-16-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: A. Willis, B. Harvey
LOCATION: OB GROUNDS		LABORATORY: Aquatec
		CHAIN OF CUSTODY #:
WELL NUMBER: MW-12		MONITORING: NA
SCREENED INTERVAL (TOC):		INSTRUMENT: OVM 580S / DETECTOR: PID

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): 2.38
WELL DEPTH (TOC): 9.11
FEET OF WATER IN WELL: 6.73
STANDING WATER VOLUME IN WELL (gallons): 1.10
THREE WELL VOLUMES (gallons): ONE: 1.10 TWO: 2.70 THREE: 3.30

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

Historic

TIME BEGIN PURGING: ~~1105~~ 1119 TIME END PURGING: 1136

TIME:	1124	1129	1135			
5.65 DEPTH TO WATER (ft)	3.04	3.04	3.07			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	9.11	8.10	8.10			
1L-870ml/min FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	1L/min	1L/min	1L/min			
3 vol-18 VOLUME OF WATER REMOVED (gals)	~~1.10~~ 1.10	1.25	1.10			
800 TEMPERATURE (deg. C)	4.5	4.8	5.0			
7.30 SPEC. COND (umhos)	500	500	500			
PH	7.31	7.35	7.34			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	1-16-96					
7 min. TIME	1140					
DEPTH TO WATER (ft)	2.50					
"AFTER PURGE" WATER COLUMN (ft)	6.61					
"STATIC" WATER COLUMN (ft)	6.73					
% 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: 1-16-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: A. Willis, B. Harvey
LOCATION: OB GROUNDS		LABORATORY: AQUATEC
		CHAIN OF CUSTODY #:
WELL NUMBER: MW-13		MONITORING: NA
		INSTRUMENT: OVM 580S / DETECTOR: PID
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): 2.38
WELL DEPTH (TOC): 10.14
FEET OF WATER IN WELL: 7.76
STANDING WATER VOLUME IN WELL (gallons): 1.26
THREE WELL VOLUMES (gallons):
ONE: TWO: 2.52 THREE: 3.8

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

Historic

TIME BEGIN PURGING: 1426 TIME END PURGING: 1451

TIME:	1433	1442	1450			
6.47 DEPTH TO WATER (ft)	3.26	3.26	3.24			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	10.14	~~7.64~~ 7.64	7.64			
600ml - 870ml/min FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	870 ml/min	870 ml/min	870 ml/min			
2 vol. VOLUME OF WATER REMOVED (gals)	1.3	1.3	1.3			
18 TEMPERATURE (deg. C)	5	4.5	4.5			
750 SPEC. COND (umhos)	600	550	560			
7.03 PH	7.10	7.03	7.02			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

5 min. DATE	1-16-96					
TIME	1455					
DEPTH TO WATER (ft)	2.53					
"AFTER PURGE" WATER COLUMN (ft)	7.61					
"STATIC" WATER COLUMN (ft)	7.76					
% 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: 1-15-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: B. Harvey, A. Willis
LOCATION: OB GROUNDS		LABORATORY: AQUATEC
WELL NUMBER: MW-14		CHAIN OF CUSTODY #:
		MONITORING: NA
SCREENED INTERVAL (TOC):		INSTRUMENT: OVM 580S / DETECTOR: PID

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): 3.68
WELL DEPTH (TOC): 10.58
FEET OF WATER IN WELL: 6.90
STANDING WATER VOLUME IN WELL (gallons): 1.12
THREE WELL VOLUMES (gallons): ONE: 1.12 TWO: 2.25 THREE: 3.37

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

TIME BEGIN PURGING: 1657 TIME END PURGING: 1722

TIME:	1704	1713	1721			
DEPTH TO WATER (ft)	5.22	5.52	5.59			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	10.58	8.58	7.58			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	660	660	660			
VOLUME OF WATER REMOVED (gals)	1.4	1.4	1.4			
TEMPERATURE (deg. C)	7	8	5			
SPEC. COND (umhos)	600	600	600			
PH	7.22	7.16	7.16			

870

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	1-15-96 1730 (am)					
TIME	1730					
DEPTH TO WATER (ft)	4.02					
"AFTER PURGE" WATER COLUMN (ft)	6.56					
"STATIC" WATER COLUMN (ft)	6.90					
% RECOVERY	95%					

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: 1-15-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: B. Harvey, A. Willis
LOCATION: OB GROUNDS		LABORATORY: AQUATEC
WELL NUMBER: MW-27		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT: OVM 580S; DETECTOR: PID (NA crossed out)

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): 3.68
WELL DEPTH (TOC): 15.46
FEET OF WATER IN WELL: 11.78
STANDING WATER VOLUME IN WELL (gallons): 1.92
THREE WELL VOLUMES (gallons):
ONE: 1.92 TWO: 3.84 THREE: 5.76

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

TIME BEGIN PURGING: 1600 TIME END PURGING: 1625

TIME:	1613	1620	1627			
DEPTH TO WATER (ft)	4.60	5.22	5.20			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	15.46	11.46	11.46			
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	660 ml/min	1 L/M	1 L/min			
VOLUME OF WATER REMOVED (gals)	1.92	2.00	2.0			
TEMPERATURE (deg. C)	7	7	7.5			
SPEC. COND (umhos)	600	600	600			
PH	7.36	7.22	7.25			
Turbidity			6.32			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	1-15-96					
TIME	1646					
DEPTH TO WATER (ft)	4.16					
"AFTER PURGE" WATER COLUMN (ft)	11.30					
"STATIC" WATER COLUMN (ft)	11.75					
% RECOVERY	96%					

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: 1-15-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: B. Harvey, A. Willis
LOCATION: OB GROUNDS		LABORATORY: NA
WELL NUMBER: MW45-1		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT: NA / 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): 8.00
WELL DEPTH (TOC): 8.63
FEET OF WATER IN WELL: 0.63'

STANDING WATER VOLUME IN WELL (gallons):
THREE WELL VOLUMES (gallons):
ONE: TWO: THREE:

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

TIME BEGIN PURGING: Dry well. TIME END PURGING:

TIME:						
DEPTH TO WATER (ft)						
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)						
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)						
VOLUME OF WATER REMOVED (gals)						
TEMPERATURE (deg. C)						
SPEC. COND (umhos)						
PH						

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	NA					
TIME						
DEPTH TO WATER (ft)						
"AFTER PURGE" WATER COLUMN (ft)						
"STATIC" WATER COLUMN (ft)						
% RECOVERY						

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: 1-15-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: B. Harvey, A. Willis
LOCATION: OB GROUNDS		LABORATORY: NA CHAIN OF CUSTODY #: NA
WELL NUMBER: MW45-3		MONITORING INSTRUMENT: NA 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): 11.98
WELL DEPTH (TOC): 12.42
FEET OF WATER IN WELL: 0.44
STANDING WATER VOLUME IN WELL (gallons): NA
THREE WELL VOLUMES (gallons):
ONE: TWO: THREE:

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

TIME BEGIN PURGING: Dry Well TIME END PURGING:

TIME:						
DEPTH TO WATER (ft)						
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)						
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)						
VOLUME OF WATER REMOVED (gals)						
TEMPERATURE (deg. C)						
SPEC. COND (umhos)						
PH						

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	NA					
TIME						
DEPTH TO WATER (ft)						
"AFTER PURGE" WATER COLUMN (ft)						
"STATIC" WATER COLUMN (ft)						
% RECOVERY						

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: 1-15-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: B. Harvey, A. Willis
LOCATION: OB GROUNDS		LABORATORY: AQUATEC
WELL NUMBER: MW45-3		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT: CVM 580S; DETECTOR: PID

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): 9.24
WELL DEPTH (TOC): 14.09
FEET OF WATER IN WELL: 4.85
STANDING WATER VOLUME IN WELL (gallons): 0.79
THREE WELL VOLUMES (gallons):
ONE:
TWO: 1.58
THREE: 2.37

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

Historic

TIME BEGIN PURGING: 1003
TIME END PURGING: 1037

TIME:	1015	1025	1036			
11.30 DEPTH TO WATER (ft)	12.12	11.00	11.93			
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	14.09	12.09	12.09			
350 - 100 ml/min FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	418	418	418			
2 1/4 vol. VOLUME OF WATER REMOVED (gals)	0.8	0.8	0.8			
16 TEMPERATURE (deg. C)	5	5	6			
1200 SPEC. COND (umhos)	750	~~845~~ 800 (aw)	850			
6.47 PH	~~7.03~~ 7.04	7.19	7.15			

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	1-15-96	1-15-96	1-16-96	1-17-96		
TIME	1059	1320	0943	0720		
DEPTH TO WATER (ft)	11.72	11.52	11.08	12.46		
"AFTER PURGE" WATER COLUMN (ft)	2.37	2.487	3.01			
"STATIC" WATER COLUMN (ft)	4.85	4.86	4.85	4.85		
% RECOVERY	49%	51%	62%			

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: 1-15-96
PROJECT: QUARTERLY MONITORING		INSPECTOR: B. Harvey, A. Willis
LOCATION: OB GROUNDS		LABORATORY: AQUATEC
WELL NUMBER: MW45-4		CHAIN OF CUSTODY #:
SCREENED INTERVAL (TOC):		MONITORING INSTRUMENT: OVM 585 DETECTOR: PID

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): 7.28
WELL DEPTH (TOC): 9.75
FEET OF WATER IN WELL: 2.47
STANDING WATER VOLUME IN WELL (gallons): 0.40
THREE WELL VOLUMES (gallons): 1.22
ONE: 0.40 TWO: 0.80 THREE: 1.22

PURGING WITH A PERISTALTIC PUMP OR BAILER

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

TIME BEGIN PURGING: 1402 TIME END PURGING: ~~1414~~ 1418

TIME:	1406	1410	1413	1417		
DEPTH TO WATER (ft)	7.62	7.60	7.67	7.60		
DEPTH TO BOTTOM OPENING OF TEFLON TUBE (TOC)	9.75	8.75	8.75	8.75		
FLOW RATE (ml/min.) or VOL. OF BAILER (gal.)	1L/min	1L/min	1L/min	1L/min		
VOLUME OF WATER REMOVED (gals)	0.40	~~0.40~~ 0.60	0.50	0.5		
TEMPERATURE (deg. C)	4½	5	5.5	5		
SPEC. COND (umhos)	600	600	600	600		
PH	7.26	7.16	7.13	7.13		

Twice = 9.63

DEPTH TO WATER MEASUREMENTS AFTER PURGING

DATE	1-15-96					
TIME	1425					
DEPTH TO WATER (ft)	7.75					
"AFTER PURGE" WATER COLUMN (ft)	2.47					
"STATIC" WATER COLUMN (ft)	2.47					
% 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.

Static: dry well.

2. Chain-of-Custody Forms

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 2

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

JOB NO. 125980-01008
PROJECT SEDA - Quarterly
CONTACT M. Duchesneau

LABORATORY AQUATEC
ADDRESS 55 So. Park St. 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	TOC	TOX	pH, Cond.	NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW-27		1-15-96	1645	—	Water			1		1						2	
MW-27a		1-15-96	1645	—									2	1	1	4	
MW-27b		1-15-96	1645	—									2	1	1	4	
MW-27c		1-15-96	1645	—									2	1	1	4	
MW-27d		1-15-96	1645	—									2	1	1	4	
MW45-3		1-16-96	1000	—				1		1						2	
MW45-3a		1-16-96	1000	—								(2)	2	1	1	2	
MW45-3b		1-16-96	1000	—								(2)	2	1	1	2	
MW45-3c		1-16-96	1000	—										1	1	2	
MW45-3d		1-16-96	1000	—										1	1	2	
MW45-3a		1-17-96	0740	—									2			2	
MW45-3b		1-17-96	0740	—									2			2	
					VOA Vial								X				
					Glass Bottle												
					Plastic Bottle			X		K							
					Preservative			A D		A F			A E	A E	A		
					Container Volume			1 L		1 L			40 mL	250 mL	1 L		

Sampled and Relinquished by
Sign Annika Willis
Print Annika Willis
Firm Parsons Eng. Sci.
Date 1-17-96 Time 1300

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)
OB/OD

Cooler #: 752

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

CHAIN-OF-CUSTODY RECORD

PAGE 2 OF 2

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

JOB NO. 725980-01008
PROJECT SEDA - Quarterly
CONTACT M. Duchesneau

LABORATORY AQUATEC
ADDRESS 55 So. Park Dr. 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	pH, Cond.	NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW-14a		1-15-96	1740	—	Water								1	2	1	4	
MW-14b		1-15-96	1740	—	Water								1	2	1	4	
MW-14c		1-15-96	1740	—	Water								1	2	1	4	
MW-14d		1-15-96	1740	—	Water								1	2	1	4	
MW-114		1-15-96	1740	—	Water			1		1						2	
MW-14		1-15-96	1740	—	Water			1		1						2	
MW-14R		1-15-96	0830	—	Water			1		1			1	2	1	6	Rinsate

Sampled and Relinquished by
Sign Annika Willis
Print Annika Willis
Firm Parsons Eng. Sci.
Date 1-15-96 Time 2100

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	pH, Cond.
VOA Vial									X	
Glass Bottle								X		
Plastic Bottle			X		X					X
Preservative			A D		A F			A E	A E	A
Container Volume			1 L		1 L			250 mL	40 mL	1 L

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)
OB/OD Grounds

Cooler #: NA

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. 725980-01008
PROJECT SEDA - Quarterly
CONTACT M. Duchesneau

LABORATORY AQuatec
ADDRESS 55 So. Park Dr. Colchester, VT
CONTACT Polly Madik

SAMPLE NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSES: VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH, Cond	NO. OF CONTAINERS	COMMENTS (Special Instructions, cautions, etc.)
MW45-4		1-15-96	1435	—	water			1		1						2	
MW45-4a		1-15-96	1435	—	water								2	1	1	4	
MW45-4b		1-15-96	1435	—	water								2	1	1	4	
MW45-4c		1-15-96	1435	—	water								2	1	1	4	
MW45-4d		1-15-96	1435	—	water								2	1	1	4	

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH, Cond	NO. OF CONTAINERS
VOA Vial								X			
Glass Bottle									X		
Plastic Bottle			X		X					X	
Preservative			A J		A F			A E	A E	A	
Container Volume			1 L		1 L			40 mL	250 mL	1 L	

Sampled and Relinquished by
Sign Annika Willis
Print Annika Willis
Firm Parsons Eng. Sci.
Date 1-17-96 Time 1206

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)
OB/OD

Cooler #: 42

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. 125980-01008
PROJECT SEDA - Quarterly
CONTACT M. Duchesneau

LABORATORY AQUATEC
ADDRESS 55 So. Park Dr. 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	TOC	TOX	oil, GRO	NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW-12		1-16-96	1150	—	water			1		1						2	
MW-12a		1-16-96	1150	—									2	1	1	4	
MW-12b		1-16-96	1150	—									2	1	1	4	
MW-12c		1-16-96	1150	—									2	1	1	4	
MW-12d		1-16-96	1150	—									2	1	1	4	
MW-12MS		1-16-96	1150	—				1		1						2	Matrix Spike
MW-12MSD		1-16-96	1150	—				1		1						2	Matrix Spike Dup.

Sampled and Relinquished by
Sign Annika Willis
Print Annika Willis
Firm Parsons Eng. Sci.
Date 1-17-96 Time 1200

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	TOC	TOX	oil, GRO
VOA Vial								K		
Glass Bottle									K	
Plastic Bottle			K		K					K
Preservative			A C		A F			A E	A E	A
Container Volume			1 L		1 L			40 ml	250 ml	1 L

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)
08/10D

Cooler #: 2

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. 125980-01008
PROJECT SEMA - Quarterly
CONTACT M. Duchesneau

LABORATORY AQUATEC
ADDRESS 55 So. Park Dr. 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	TOC	TOX	Hd. Cond.	NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW-13		1-16-96	1500	—	Water			1		1						2	
MW-13a		1-16-96	1500	—	↓								2	1	1	4	
MW-13b		1-16-96	1500	—									2	1	1	4	
MW-13c		1-16-96	1500	—									2	1	1	4	
MW-13d		1-16-96	1500	—	▽								2	1	1	4	

Sampled and Relinquished by
Sign Annika Willis
Print Annika Willis.
Firm Parsons Eng. Sci.
Date 1-17-96 Time 1200

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	TOC	TOX	Hd. Cond.	NO. OF CONTAINERS
VOA Vial								X			
Glass Bottle									X		
Plastic Bottle			X		X						X
Preservative			A C		A F			A E	A E		A
Container Volume			1 L		1 L			40 ml	250 ml		1 L

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)
OB/OD

Cooler #: ES-9

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

CHAIN-OF-CUSTODY RECORD

PAGE 2 OF 2

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

JOB NO. 725980-0100
PROJECT SEDA - Quarterly
CONTACT M. Duchesneau

LABORATORY Aquatec
ADDRESS 55 So. Park Dr. 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	TOC			NO. OF CONTAINERS	COMMENTS (Special instructions, cautions, etc.)
MW45-3C		1-17-96	0740	—	water								2			2	
MW45-3D		1-17-96	0740	—	water								2			2	

Sampled and Relinquished by
Sign Annika Willis
Print Annika Willis
Firm Parsons Eng. Sci
Date 1-17 Time 1200

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									X								
Glass Bottle																	
Plastic Bottle																	
Preservative									A E								
Container Volume									40 mL								

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

REMARKS: (Sample storage, nonstandard sample bottles)

OB/OD

Cooler #: 752

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. 56277

   A. TAL Metals Analysis
   B. Indicator Analysis Results

2. Sample Delivery Group No. 56202

   A. Indicator Analysis Results

1. Sample Delivery Group No. 56277

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 : 02/21/96
ETR Number : 56277
Project No.: 93206
No. Samples: 91
Arrived : 01/18/96
P.O. Number: *

Case:OBASH SDG:56277

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	
286534	MW12a:01/16/96 (Water)		
9050	Conductivity (umhos/cm)	877	
9020	Total Organic Halides	<0.02	
9040	pH (std. units)	7.03	o
9060	Total Organic Carbon	1.1	
286534R1	MW12a:01/16/96 (Water)		
9060	Total Organic Carbon	1.1	
286534R2	MW12a:01/16/96 (Water)		
9060	Total Organic Carbon	0.9	
286534R3	MW12a:01/16/96 (Water)		
9060	Total Organic Carbon	0.9	
286535	MW12b:01/16/96 (Water)		
9050	Conductivity (umhos/cm)	862	
9020	Total Organic Halides	<0.02	
9040	pH (std. units)	7.2	o
9060	Total Organic Carbon	1.0	
286535R1	MW12b:01/16/96 (Water)		
9060	Total Organic Carbon	1.0	

Comments/Notes

o = pH units

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Parsons Engineering Science
Prudential Center
Boston, MA 02199

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No. Samples: 91
Arrived : 01/18/96
P.O. Number: *

Case:OBASH SDG:56277

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Lab No./ Method No.	Sample Description/ Parameter	Result
286535R2	MW12b:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286535R3	MW12b:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286536	MW12c:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	865
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.21 o
9060	Total Organic Carbon	1.1
286536R1	MW12c:01/16/96 (Water)	
9060	Total Organic Carbon	1.0
286536R2	MW12c:01/16/96 (Water)	
9060	Total Organic Carbon	0.9
286536R3	MW12c:01/16/96 (Water)	
9060	Total Organic Carbon	0.9
286537	MW12d:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	873
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.23 o
9060	Total Organic Carbon	0.9

Comments/Notes

o = pH units

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Lab No./ Method No.	Sample Description/ Parameter	Result
286537R1	MW12d:01/16/96 (Water)	
9060	Total Organic Carbon	1.0
286537R2	MW12d:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286537R3	MW12d:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286538	MW13a:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	902
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.15 o
9060	Total Organic Carbon	1.3
286538R1	MW13a:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286538R2	MW13a:01/16/96 (Water)	
9060	Total Organic Carbon	1.5
286538R3	MW13a:01/16/96 (Water)	
9060	Total Organic Carbon	1.4

Comments/Notes

o = pH units

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All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
286539	MW13b:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	890
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.15 o
9060	Total Organic Carbon	1.3
286539R1	MW13b:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286539R2	MW13b:01/16/96 (Water)	
9060	Total Organic Carbon	1.4
286539R3	MW13b:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286540	MW13c:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	900
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.11 o
9060	Total Organic Carbon	1.6
286540R1	MW13c:01/16/96 (Water)	
9060	Total Organic Carbon	1.6

Comments/Notes

o = pH units

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Lab No./ Method No.	Sample Description/ Parameter	Result
286540R2	MW13c:01/16/96 (Water)	
9060	Total Organic Carbon	1.4
286540R3	MW13c:01/16/96 (Water)	
9060	Total Organic Carbon	1.3
286541	MW13d:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	883
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.11 o
9060	Total Organic Carbon	1.1
286541R1	MW13d:01/16/96 (Water)	
9060	Total Organic Carbon	1.2
286541R2	MW13d:01/16/96 (Water)	
9060	Total Organic Carbon	1.2
286541R3	MW13d:01/16/96 (Water)	
9060	Total Organic Carbon	1.2
286543	MW27a:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	945
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.17 o
9060	Total Organic Carbon	0.8

Comments/Notes

o = pH units

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All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
286543R1	MW27a:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286543R2	MW27a:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286543R3	MW27a:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286544	MW27b:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	952
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.26 o
9060	Total Organic Carbon	0.7
286544R1	MW27b:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286544R2	MW27b:01/15/96 (Water)	
9060	Total Organic Carbon	0.9
286544R3	MW27b:01/15/96 (Water)	
9060	Total Organic Carbon	0.9

Comments/Notes

o = pH units

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Project No.: 93206
No. Samples: 91
Arrived : 01/18/96
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Case:OBASH SDG:56277

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Lab No./ Method No.	Sample Description/ Parameter	Result
286545	MW27c:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	938
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.30 o
9060	Total Organic Carbon	0.8
286545R1	MW27c:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286545R2	MW27c:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286545R3	MW27c:01/15/96 (Water)	
9060	Total Organic Carbon	0.6
286546	MW27d:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	940
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.32 o
9060	Total Organic Carbon	0.8
286546R1	MW27d:01/15/96 (Water)	
9060	Total Organic Carbon	0.6

Comments/Notes

o = pH units

< Cont. Next Page >

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Prudential Center
Boston, MA 02199

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Date : 02/21/96
ETR Number : 56277
Project No.: 93206
No. Samples: 91
Arrived : 01/18/96
P.O. Number: *

Case:OBASH SDG:56277

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Lab No./ Method No.	Sample Description/ Parameter	Result
286546R2	MW27d:01/15/96 (Water)	
9060	Total Organic Carbon	1.1
286546R3	MW27d:01/15/96 (Water)	
9060	Total Organic Carbon	1.1
286548	MW453a:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	1400
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.23 o
286558	MW453a:01/17/96 (Water)	
9060	Total Organic Carbon	0.7
286558R1	MW453a:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286558R2	MW453a:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286558R3	MW453a:01/17/96 (Water)	
9060	Total Organic Carbon	0.7
286549	MW453b:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	1340
9020	Total Organic Halides	<0.02

Comments/Notes

o = pH units

< 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 : 02/21/96
ETR Number : 56277
Project No.: 93206
No. Samples: 91
Arrived : 01/18/96
P.O. Number: *

Case:OBASH SDG:56277

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
286549	MW453b:01/16/96 (Water)	
9040	pH (std. units)	7.24 o
286559	MW453b:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286559R1	MW453b:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286559R2	MW453b:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286559R3	MW453b:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286550	MW453c:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	1380
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.25 o
286560	MW453c:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286560R1	MW453c:01/17/96 (Water)	
9060	Total Organic Carbon	0.6

Comments/Notes

o = pH units

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All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
286560R2	MW453c:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286560R3	MW453c:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286551	MW453d:01/16/96 (Water)	
9050	Conductivity (umhos/cm)	1290
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.25 o
286561	MW453d:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286561R1	MW453d:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286561R2	MW453d:01/17/96 (Water)	
9060	Total Organic Carbon	0.7
286561R3	MW453d:01/17/96 (Water)	
9060	Total Organic Carbon	0.6
286553	MW454a:01/15/96 (Water)	
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.27 o

Comments/Notes

o = pH units

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All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
286553	MW454a:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286553R1	MW454a:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286553R2	MW454a:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286553R3	MW454a:01/15/96 (Water)	
9060	Total Organic Carbon	0.8
286554	MW454b:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	1000
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.25 o
9060	Total Organic Carbon	0.7
286554R1	MW454b:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286554R2	MW454b:01/15/96 (Water)	
9060	Total Organic Carbon	0.9

Comments/Notes

o = pH units

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Lab No./ Method No.	Sample Description/ Parameter	Result
286554R3	MW454b:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286555	MW454c:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	978
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.22 o
9060	Total Organic Carbon	0.7
286555R1	MW454c:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286555R2	MW454c:01/15/96 (Water)	
9060	Total Organic Carbon	1.2
286555R3	MW454c:01/15/96 (Water)	
9060	Total Organic Carbon	1.2
286556	MW454d:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	993
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.15 o
9060	Total Organic Carbon	0.8

Comments/Notes

o = pH units

< 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 : 02/21/96
ETR Number : 56277
Project No.: 93206
No. Samples: 91
Arrived : 01/18/96
P.O. Number: *

Case:OBASH SDG:56277

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
286556R1	MW454d:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286556R2	MW454d:01/15/96 (Water)	
9060	Total Organic Carbon	0.7
286556R3	MW454d:01/15/96 (Water)	
9060	Total Organic Carbon	0.7

< Last Page > Submitted By : Aquatec Inc.

Quality Control Summary

Project No: 93206
ETR No: 56277
SDG No: 56277
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	1343	1413	95.0
pH (Std Units)	NA	5.97	6.00	99.5
Total Organic Carbon	< 0.5	67.6	72.9	92.7
Total Organic Halides	< 0.02	5.11	5.00	102.2

Quality Control Summary

Project No: 93206
ETR No: 56277
SDG No: 56277
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	1343	1413	95.0
pH (Std Units)	NA	5.97	6.00	99.5
Total Organic Carbon	< 0.5	67.6	72.9	92.7
Total Organic Halides	< 0.02	5.11	5.00	102.2

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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.:56277_

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MW12_____	_286533_____
_MW13A_____	_286557_____
_MW27_____	_286542_____
_MW453_____	_286547_____
_MW454_____	_286552_____
_MW12S_____	_286533MS_____
_MW12D_____	_286533DP_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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.: 56277_

Matrix (soil/water): WATER Lab Sample ID: 286533

Level (low/med): LOW__ Date Received: 01/18/96

% 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_	350			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	92.3	B		P
7440-41-7	Beryllium	0.27	B		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	82500			P
7440-47-3	Chromium_	0.64	B		P
7440-48-4	Cobalt___	1.4	U		P
7440-50-8	Copper___	1.7	B		P
7439-89-6	Iron____	380			P
7439-92-1	Lead____	1.6	U		P
7439-95-4	Magnesium	64300			P
7439-96-5	Manganese	5.4	B		P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	B		P
7440-09-7	Potassium	8650			P
7782-49-2	Selenium_	3.2	B		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	16200			P
7440-28-0	Thallium_	7.5	B		P
7440-62-2	Vanadium_	1.6	U		P
7440-66-6	Zinc____	17.6	B		P
_____	Cyanide__	5.0	U		AS
_____	_____	_____	_	_____	__

Color Before: WHITE____ Clarity Befcre: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW13A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

Matrix (soil/water): WATER Lab Sample ID: 286557

Level (low/med): LOW__ Date Received: 01/18/96

% 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_	1210	_		P_
7440-36-0	Antimony_	2.5	U		P_
7440-38-2	Arsenic__	2.8	U		P_
7440-39-3	Barium___	75.7	B		P_
7440-41-7	Beryllium	0.36	B		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	140000			P_
7440-47-3	Chromium_	1.9	B		P_
7440-48-4	Cobalt___	1.4	U		P_
7440-50-8	Copper___	3.8	B		P_
7439-89-6	Iron____	1850			P_
7439-92-1	Lead____	2.9	B		P_
7439-95-4	Magnesium	27400			P_
7439-96-5	Manganese	49.3			P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	3.0	B		P_
7440-09-7	Potassium	2190	B		P_
7782-49-2	Selenium_	2.2	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	26400			P_
7440-28-0	Thallium_	3.7	B		P_
7440-62-2	Vanadium_	2.0	B		P_
7440-66-6	Zinc____	50.1			P_
_____	Cyanide__	5.0	U		AS
_____	_____	_____	_	_____	__

Color Before: WHITE____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MW27

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

Matrix (soil/water): WATER Lab Sample ID: 286542

Level (low/med): LOW__ Date Received: 01/18/96

% 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	11.3	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	79.1	B		P
7440-41-7	Beryllium	0.29	B		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	87600			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.4	U		P
7440-50-8	Copper	1.2	B		P
7439-89-6	Iron	18.8	B		P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	65800			P
7439-96-5	Manganese	32.4			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.3	B		P
7440-09-7	Potassium	9600			P
7782-49-2	Selenium	2.8	B		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	19600			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.6	U		P
7440-66-6	Zinc	2.7	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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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.: 56277_

Matrix (soil/water): WATER Lab Sample ID: 286547

Level (low/med): LOW__ Date Received: 01/18/96

% 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_	26.4	B		P_
7440-36-0	Antimony_	2.5	U		P_
7440-38-2	Arsenic__	3.7	B		P_
7440-39-3	Barium___	16.8	B		P_
7440-41-7	Beryllium	0.34	B		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	184000			P_
7440-47-3	Chromium_	0.60	U		P_
7440-48-4	Cobalt___	1.4	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron____	69.2	B		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	69900			P_
7439-96-5	Manganese	31.7			P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	5.0	B		P_
7440-09-7	Potassium	8970			P_
7782-49-2	Selenium_	2.2	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	16500			P_
7440-28-0	Thallium_	2.3	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc____	6.1	B		P_
_____	Cyanide__	5.0	U		AS
_____	_____	_____	_	_____	__

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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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.: 56277_

Matrix (soil/water): WATER Lab Sample ID: 286552

Level (low/med): LOW__ Date Received: 01/18/96

% 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_	71.2	B		P_
7440-36-0	Antimony_	2.5	U		P_
7440-38-2	Arsenic__	2.8	U		P_
7440-39-3	Barium___	30.8	B		P_
7440-41-7	Beryllium	0.34	B		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	156000			P_
7440-47-3	Chromium_	0.60	U		P_
7440-48-4	Cobalt___	1.4	U		P_
7440-50-8	Copper___	1.6	B		P_
7439-89-6	Iron____	81.9	B		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	35000			P_
7439-96-5	Manganese	4.8	B		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.5	B		P_
7440-09-7	Potassium	3470	B		P_
7782-49-2	Selenium_	2.2	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	13800			P_
7440-28-0	Thallium_	4.5	B		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc____	5.3	B		P_
_____	Cyanide__	5.0	U		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.: 56277_

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	25630.00	98.6	30200.0	30190.00	100.0	30330.00	100.4	P
Antimony	250.0	243.20	97.3	300.0	306.40	102.1	311.20	103.7	P
Arsenic	250.0	255.60	102.2	100.0	100.40	100.4	101.40	101.4	P
Barium	500.0	488.80	97.8	200.0	202.70	101.4	204.20	102.1	P
Beryllium	500.0	503.60	100.7	100.0	100.70	100.7	100.80	100.8	P
Cadmium	500.0	495.20	99.0	100.0	99.61	99.6	99.42	99.4	P
Calcium	25000.0	25360.00	101.4	30200.0	30450.00	100.8	30450.00	100.8	P
Chromium	500.0	495.30	99.1	200.0	202.70	101.4	203.30	101.6	P
Cobalt	500.0	494.90	99.0	200.0	199.60	99.8	199.80	99.9	P
Copper	500.0	496.70	99.3	200.0	204.50	102.2	206.90	103.4	P
Iron	25500.0	26380.00	103.5	30200.0	30480.00	100.9	30460.00	100.9	P
Lead	1000.0	1008.00	100.8	400.0	406.90	101.7	404.80	101.2	P
Magnesium	25000.0	24980.00	99.9	30200.0	30300.00	100.3	30530.00	101.1	P
Manganese	500.0	498.60	99.7	200.0	200.60	100.3	200.80	100.4	P
Mercury	1.8	1.88	104.4	3.0	3.04	101.3	3.04	101.3	CV
Nickel	500.0	492.70	98.5	200.0	201.40	100.7	204.20	102.1	P
Potassium	25000.0	26810.00	107.2	30200.0	31540.00	104.4	31850.00	105.5	P
Selenium	250.0	251.50	100.6	100.0	99.25	99.2	104.00	104.0	P
Silver	500.0	503.90	100.8	100.0	102.20	102.2	102.70	102.7	P
Sodium	25000.0	24440.00	97.8	30200.0	29580.00	97.9	29930.00	99.1	P
Thallium	250.0	234.40	93.8	100.0	104.70	104.7	102.50	102.5	P
Vanadium	500.0	499.90	100.0	200.0	200.30	100.2	201.00	100.5	P
Zinc	500.0	499.80	100.0	200.0	207.20	103.6	209.00	104.5	P
Cyanide	120.0	109.00	90.8	150.0	141.00	94.0	142.00	94.7	AS

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

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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.: 56277_

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	30530.00	101.1	30800.00	102.0	P
Antimony				300.0	311.70	103.9	312.00	104.0	P
Arsenic				100.0	98.36	98.4	104.40	104.4	P
Barium				200.0	204.80	102.4	205.30	102.6	P
Beryllium				100.0	100.90	100.9	101.60	101.6	P
Cadmium				100.0	98.64	98.6	99.68	99.7	P
Calcium				30200.0	30580.00	101.3	30820.00	102.1	P
Chromium				200.0	204.20	102.1	205.50	102.8	P
Cobalt				200.0	199.70	99.8	201.10	100.6	P
Copper				200.0	208.40	104.2	209.70	104.8	P
Iron				30200.0	30540.00	101.1	30690.00	101.6	P
Lead				400.0	405.20	101.3	411.30	102.8	P
Magnesium				30200.0	30650.00	101.5	30830.00	102.1	P
Manganese				200.0	200.50	100.2	201.70	100.8	P
Mercury				3.0	3.00	100.0	2.90	96.7	CV
Nickel				200.0	205.10	102.6	204.50	102.2	P
Potassium				30200.0	32060.00	106.2	32160.00	106.5	P
Selenium				100.0	99.53	99.5	100.80	100.8	P
Silver				100.0	103.20	103.2	103.90	103.9	P
Sodium				30200.0	30050.00	99.5	30130.00	99.8	P
Thallium				100.0	101.80	101.8	104.10	104.1	P
Vanadium				200.0	200.00	100.0	201.00	100.5	P
Zinc				200.0	210.90	105.4	212.30	106.2	P
Cyanide				150.0	140.00	93.3			AS

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

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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.: 56277_

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				3.0	2.84	94.7			CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide	120.0	116.00	96.7	150.0	140.00	93.3	142.00	94.7	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.: 56277_

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	128.80	107.3	129.70	108.1
Arsenic				20.0	20.25	101.2	20.11	100.6
Barium								
Beryllium				10.0	10.44	104.4	10.83	108.3
Cadmium				10.0	10.55	105.5	10.14	101.4
Calcium								
Chromium				20.0	21.04	105.2	20.79	104.0
Cobalt				100.0	102.30	102.3	102.70	102.7
Copper				50.0	51.40	102.8	53.16	106.3
Iron								
Lead				6.0	6.21	103.5	5.42	90.3
Magnesium								
Manganese				30.0	31.07	103.6	31.10	103.7
Mercury	0.2	0.20	100.0					
Nickel				80.0	82.69	103.4	83.02	103.8
Potassium								
Selenium				10.0	12.25	122.5	9.29	92.9
Silver				20.0	21.25	106.2	21.07	105.4
Sodium								
Thallium				20.0	21.95	109.8	21.21	106.0
Vanadium				100.0	104.50	104.5	104.90	104.9
Zinc				40.0	42.53	106.3	43.13	107.8

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

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	11.3	U	11.3	U	11.3	U	11.3	U	11.300	U	P
Antimony	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Arsenic	2.8	U	2.8	U	2.8	U	2.8	U	2.800	U	P
Barium	5.4	U	5.4	U	5.4	U	5.4	U	5.400	U	P
Beryllium	0.1	B	0.1	B	0.2	B	0.4	B	0.284	B	P
Cadmium	0.3	U	0.3	B	0.3	U	0.3	U	0.300	U	P
Calcium	142.8	U	142.8	U	142.8	U	142.8	U	142.800	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Cobalt	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Copper	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Iron	10.6	U	11.0	B	10.6	U	10.6	U	17.480	B	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Magnesium	136.8	U	136.8	U	136.8	U	136.8	U	136.800	U	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Potassium	136.4	U	136.4	U	136.4	U	136.4	U	136.400	U	P
Selenium	-2.9	B	2.2	U	2.2	U	2.2	U	2.200	U	P
Silver	0.7	U	0.7	B	-0.9	B	0.7	U	0.700	U	P
Sodium	186.9	U	186.9	U	186.9	U	186.9	U	186.900	U	P
Thallium	2.3	U	2.3	U	2.3	U	2.3	U	2.300	U	P
Vanadium	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Zinc	0.7	U	0.7	U	0.7	U	0.7	U	0.929	B	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.: 56277_

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			11.3	U							P
Antimony			2.5	U							P
Arsenic			2.8	U							P
Barium			5.4	U							P
Beryllium			0.5	B							P
Cadmium			0.3	U							P
Calcium			142.8	U							P
Chromium			0.6	U							P
Cobalt			1.4	U							P
Copper			1.0	U							P
Iron			10.6	U							P
Lead			1.6	U							P
Magnesium			136.8	U							P
Manganese			0.5	U							P
Mercury			0.1	U	0.1	U					CV
Nickel			1.4	U							P
Potassium			136.4	U							P
Selenium			2.2	U							P
Silver			0.7	U							P
Sodium			186.9	U							P
Thallium			2.3	U							P
Vanadium			1.6	U							P
Zinc			0.7	U							P
Cyanide	10.0	U	10.0	U	10.0	U			5.000	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.: 56277_

ICP ID Number: ICP 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	478686	466500	469900.0	98.2	472200	476500.0	99.5
Antimony	0	594	1	611.2	102.9	-3	620.1	104.4
Arsenic	0	99	5	102.6	103.6	5	102.6	103.6
Barium	0	494	1	494.2	100.0	1	500.4	101.3
Beryllium	0	478	0	483.1	101.1	0	483.8	101.2
Cadmium	0	907	6	919.5	101.4	7	917.3	101.1
Calcium	500000	478186	468200	472300.0	98.8	472100	476900.0	99.7
Chromium	0	472	4	474.1	100.4	3	480.7	101.8
Cobalt	0	463	0	468.7	101.2	0	471.0	101.7
Copper	0	530	3	526.7	99.4	4	538.4	101.6
Iron	200000	192186	188500	192500.0	100.2	189100	194400.0	101.2
Lead	0	53	7	53.7	101.3	6	56.9	107.4
Magnesium	500000	507629	507500	502500.0	99.0	513800	511600.0	100.8
Manganese	0	478	2	482.1	100.9	2	482.8	101.0
Mercury								
Nickel	0	904	3	910.8	100.8	3	931.2	103.0
Potassium	0	0	19	25.1		34	43.9	
Selenium	0	49	5	53.2	108.6	0	51.1	104.3
Silver	0	205	1	208.2	101.6	1	212.5	103.7
Sodium	0	0	54	231.1		2	200.3	
Thallium	0	96	0	101.3	105.5	3	105.5	109.9
Vanadium	0	479	2	479.7	100.1	2	484.7	101.2
Zinc	0	986	23	986.0	100.0	24	1009.0	102.3

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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.: 56277_

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	2368.0000		349.8000		2000.00	100.9		P
Antimony	75-125	520.2000		2.5000	U	500.00	104.0		P
Arsenic	75-125	41.9100		2.8000	U	40.00	104.8		P
Barium	75-125	2057.0000		92.3000	B	2000.00	98.2		P
Beryllium	75-125	52.1700		0.2730	B	50.00	103.8		P
Cadmium	75-125	50.0900		0.3000	U	50.00	100.2		P
Calcium									NR
Chromium	75-125	203.9000		0.6380	B	200.00	101.6		P
Cobalt	75-125	493.0000		1.4000	U	500.00	98.6		P
Copper	75-125	256.1000		1.6730	B	250.00	101.8		P
Iron	75-125	1451.0000		379.8000		1000.00	107.1		P
Lead	75-125	20.0400		1.6000	U	20.00	100.2		P
Magnesium									NR
Manganese	75-125	502.5000		5.3900	B	500.00	99.4		P
Mercury	75-125	0.9450		0.1000	U	1.00	94.5		CV
Nickel	75-125	494.4000		2.1430	B	500.00	98.5		P
Potassium									NR
Selenium	75-125	15.2600		3.2240	B	10.00	120.4		P
Silver	75-125	53.2000		0.7000	U	50.00	106.4		P
Sodium									NR
Thallium	75-125	56.7300		7.4980	B	50.00	98.5		P
Vanadium	75-125	504.2000		1.6000	U	500.00	100.8		P
Zinc	75-125	518.8000		17.6300	B	500.00	100.2		P
Cyanide	75-125	81.5000		5.0000	U	100.00	81.5		AS

Comments:

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW12A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

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		2441.00		349.80		2000.0	104.6		P
Antimony		539.50		2.50	U	500.0	107.9		P
Arsenic		45.60		2.80	U	40.0	114.0		P
Barium		2098.00		92.30	B	2000.0	100.3		P
Beryllium		53.31		0.27	B	50.0	106.1		P
Cadmium		51.05		0.30	U	50.0	102.1		P
Calcium									NR
Chromium		207.30		0.64	B	200.0	103.3		P
Cobalt		509.50		1.40	U	500.0	101.9		P
Copper		261.90		1.67	B	250.0	104.1		P
Iron		1472.00		379.80		1000.0	109.2		P
Lead		19.67		1.60	U	20.0	98.4		P
Magnesium									NR
Manganese		516.10		5.39	B	500.0	102.1		P
Mercury									NR
Nickel		505.60		2.14	B	500.0	100.7		P
Potassium									NR
Selenium		15.34		3.22	B	10.0	121.2		P
Silver									NR
Sodium									NR
Thallium		56.32		7.50	B	50.0	97.6		P
Vanadium		514.60		1.60	U	500.0	102.9		P
Zinc		536.00		17.63	B	500.0	103.7		P
Cyanide									NR

Comments:

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6
DUPLICATES

EPA SAMPLE NO.

MW12D

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

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	349.8000		329.1000		6.1		P
Antimony		2.5000	U	2.5000	U			P
Arsenic		2.8000	U	2.8000	U			P
Barium		92.3000	B	92.7100	B	0.4		P
Beryllium		0.2730	B	0.3200	B	15.9		P
Cadmium		0.3000	U	0.3000	U			P
Calcium		82460.0000		82840.0000		0.5		P
Chromium		0.6380	B	0.7460	B	15.6		P
Cobalt		1.4000	U	1.4000	U			P
Copper		1.6730	B	1.6760	B	0.2		P
Iron	100.0	379.8000		380.5000		0.2		P
Lead		1.6000	U	1.6000	U			P
Magnesium		64320.0000		64680.0000		0.6		P
Manganese		5.3900	B	5.2910	B	1.9		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		2.1430	B	2.7880	B	26.2		P
Potassium	5000.0	8652.0000		8687.0000		0.4		P
Selenium		3.2240	B	2.3250	B	32.4		P
Silver		0.7000	U	0.7000	U			P
Sodium	5000.0	16240.0000		16280.0000		0.2		P
Thallium		7.4980	B	2.3000	U	200.0		P
Vanadium		1.6000	U	1.6000	U			P
Zinc		17.6300	B	18.5500	B	5.1		P
Cyanide		5.0000	U	5.0000	U			AS

7
LABORATORY CONTROL SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

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	50800.00	99.6						
Antimony	2000.0	2151.00	107.6						
Arsenic	1050.0	1127.00	107.3						
Barium	500.0	494.90	99.0						
Beryllium	500.0	511.00	102.2						
Cadmium	525.0	516.20	98.3						
Calcium	50000.0	51170.00	102.3						
Chromium	500.0	505.40	101.1						
Cobalt	500.0	496.50	99.3						
Copper	500.0	508.90	101.8						
Iron	50500.0	52050.00	103.1						
Lead	1015.0	1032.00	101.7						
Magnesium	50000.0	50640.00	101.3						
Manganese	500.0	501.10	100.2						
Mercury	1.0	0.95	95.2						
Nickel	500.0	497.70	99.5						
Potassium	50000.0	50060.00	100.1						
Selenium	25.0	27.13	108.5						
Silver	500.0	513.80	102.8						
Sodium	50000.0	50890.00	101.8						
Thallium	50.0	51.38	102.8						
Vanadium	500.0	501.20	100.2						
Zinc	500.0	523.70	104.7						
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.:56277_

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

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9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MW12L

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56277_

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	349.80		335.70	B	4.0		P
Antimony	2.50	U	12.50	U			P
Arsenic	2.80	U	14.00	U			P
Barium	92.30	B	91.60	B	0.8		P
Beryllium	0.27	B	1.40	B	418.5		P
Cadmium	0.30	U	1.50	U			P
Calcium	82460.00		82440.00		0.0		P
Chromium	0.64	B	3.00	U	100.0		P
Cobalt	1.40	U	7.00	U			P
Copper	1.67	B	5.00	U	100.0		P
Iron	379.80		430.30	B	13.3		P
Lead	1.60	U	8.00	U			P
Magnesium	64320.00		63090.00		1.9		P
Manganese	5.39	B	5.58	B	3.5		P
Mercury							NR
Nickel	2.14	B	7.00	U	100.0		P
Potassium	8652.00		8675.00	B	0.3		P
Selenium	3.22	B	11.00	U	100.0		P
Silver	0.70	U	3.50	U			P
Sodium	16240.00		15720.00	B	3.2		P
Thallium	7.50	B	11.50	U	100.0		P
Vanadium	1.60	U	8.00	U			P
Zinc	17.63	B	19.88	B	12.8		P

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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.: 56277_

ICP ID Number: ICP_TJA_61E_ Date: 01/01/96

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	11.3	P
Antimony	206.84		60	2.5	P
Arsenic	189.04		10	2.8	P
Barium	493.41		200	5.4	P
Beryllium	313.04		5	0.1	P
Cadmium	226.50		5	0.3	P
Calcium	317.93		5000	142.8	P
Chromium	267.72		10	0.6	P
Cobalt	228.62		50	1.4	P
Copper	324.75		25	1.0	P
Iron	271.44		100	10.6	P
Lead	220.35		3	1.6	P
Magnesium	279.08		5000	136.8	P
Manganese	257.61		15	0.5	P
Mercury			0.2		NR
Nickel	231.60		40	1.4	P
Potassium	766.49		5000	136.4	P
Selenium	196.03		5	2.2	P
Silver	328.07		10	0.7	P
Sodium	330.23		5000	186.9	P
Thallium	190.86		10	2.3	P
Vanadium	292.40		50	1.6	P
Zinc	213.86		20	0.7	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.: 56277_

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

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.: 56277_

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.: 56277_

ICP ID Number: ICP TJA 61E_ 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.: 56277_

ICP ID Number: ICP 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.: 56277_

ICP ID Number: ICP TJA 61E_ Date: 01/01/96

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	50000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	50000.0	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	50000.0	P
Iron	10.00	500000.0	P
Lead	10.00	100000.0	P
Magnesium	10.00	1000000.0	P
Manganese	10.00	20000.0	P
Mercury			NR
Nickel	10.00	100000.0	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.:56277_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	01/25/96		100
MW12	01/25/96		100
MW12D	01/25/96		100
MW12S	01/25/96		100
MW13A	01/25/96		100
MW27	01/25/96		100
MW453	01/25/96		100
MW454	01/25/96		100
PBW1	01/25/96		100

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13
PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:56277_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	01/25/96		100
MW12	01/25/96		100
MW12D	01/25/96		100
MW12S	01/25/96		100
MW13A	01/25/96		100
MW27	01/25/96		100
MW453	01/25/96		100
MW454	01/25/96		100
PBW1	01/25/96		100

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13
PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:56277_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	01/24/96		250
MW13A	01/24/96		250
MW27	01/24/96		250
MW453	01/24/96		250
MW454	01/24/96		250
PBW1	01/24/96		250

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13
PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:56277_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	01/29/96		250
MW12	01/29/96		250
MW12D	01/29/96		250
MW12S	01/29/96		250
PBW2	01/29/96		250

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14
ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:56277_

Instrument ID Number: ICP TJA 61E__ Method: P_

Start Date: 02/05/96 End Date: 02/05/96

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	1106		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	1110		_	_	_	X	X	X	_	X	X	X	_	_	_	X	_	X	_	_	_	_	_	X	X	_
S	1.00	1114		X	_	_	_	_	_	X	_	_	_	X	_	X	_	_	_	X	_	X	_	X	_	_	_	_
S	1.00	1119		_	X	X	_	_	_	_	_	_	_	_	X	_	_	_	_	_	X	_	X	_	X	_	_	_
ICV	1.00	1125		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	1130		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	1135		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	1139		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	1144		_	X	X	_	X	X	_	X	X	X	_	X	_	X	_	_	X	_	X	X	_	X	X	X	_
CCV	1.00	1149		X	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	1154		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
ZZZZZZ	100.00	1159		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1204		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1209		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1213		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	5.00	1218		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1223		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1228		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
PBW1	1.00	1233		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	1237		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	1242		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	1247		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	1252		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	1257		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	1301		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	1306		X	X	X	X	X	X	_	X	X	X	X	X	_	X	_	X	_	X	X	_	X	X	X	_
MW12D	1.00	1311		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
MW27	1.00	1316		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	1321		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	1325		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X	_
MW13A	1.00	1330		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	1335		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.:56277_

Instrument ID Number: ICP TJA 61E__ Method: P_

Start Date: 02/05/96 End Date: 02/05/96

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
CCB	1.00	1340		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	1345		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	1350		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	1355			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	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	
CCB	1.00	1404		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.:56277_

Instrument ID Number: PS200_____ Method: CV

Start Date: 01/26/96 End Date: 01/26/96

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	1542																X									
S0	1.00	1545																X									
S0.2	1.00	1549																X									
S0.5	1.00	1552																X									
S1	1.00	1555																X									
S3	1.00	1558																X									
S5	1.00	1602																X									
ICV	1.00	1605																X									
ICB	1.00	1608																X									
CRA	1.00	1611																X									
CCV	1.00	1614																X									
CCB	1.00	1617																X									
ZZZZZZ	1.00	1620																									
ZZZZZZ	1.00	1623																									
ZZZZZZ	1.00	1627																									
ZZZZZZ	1.00	1630																									
ZZZZZZ	1.00	1633																									
ZZZZZZ	1.00	1636																									
ZZZZZZ	1.00	1639																									
ZZZZZZ	1.00	1642																									
ZZZZZZ	1.00	1645																									
CCV	1.00	1648																X									
CCB	1.00	1651																X									
ZZZZZZ	1.00	1655																									
ZZZZZZ	1.00	1658																									
ZZZZZZ	1.00	1701																									
ZZZZZZ	1.00	1704																									
ZZZZZZ	1.00	1707																									
ZZZZZZ	1.00	1710																									
ZZZZZZ	1.00	1713																									
ZZZZZZ	1.00	1716																									
ZZZZZZ	1.00	1720																									

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14
ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:56277_

Instrument ID Number: PS200_____ Method: CV

Start Date: 01/26/96 End Date: 01/26/96

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	1723																X									
CCB	1.00	1726																X									
ZZZZZZ	1.00	1729																									
ZZZZZZ	1.00	1732																									
ZZZZZZ	1.00	1735																									
ZZZZZZ	1.00	1738																									
PBW1	1.00	1741																X									
LCSW1	1.00	1744																X									
ZZZZZZ	1.00	1747																									
ZZZZZZ	1.00	1750																									
ZZZZZZ	1.00	1753																									
CCV	1.00	1756																X									
CCB	1.00	1800																X									
ZZZZZZ	1.00	1803																									
MW12	1.00	1806																X									
MW12S	1.00	1809																X									
MW12D	1.00	1812																X									
MW13A	1.00	1815																X									
MW27	1.00	1818																X									
MW453	1.00	1821																X									
MW454	1.00	1824																X									
ZZZZZZ	1.00	1827																									
CCV	1.00	1830																X									
CCB	1.00	1833																X									

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14
ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:56277_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 01/26/96 End Date: 01/26/96

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	1807																								X
S50	1.00	1809																								X
S100	1.00	1811																								X
S200	1.00	1813																								X
S300	1.00	1816																								X
ICV	1.00	1818																								X
ICB	1.00	1820																								X
ZZZZZZ	1.00	1822																								
CCV	1.00	1824																								X
CCB	1.00	1826																								X
PBW1	1.00	1829																								X
ZZZZZZ	1.00	1831																								
ZZZZZZ	5.00	1833																								
ZZZZZZ	1.00	1835																								
ZZZZZZ	1.00	1837																								
ZZZZZZ	1.00	1839																								
ZZZZZZ	1.00	1841																								
ZZZZZZ	1.00	1843																								
ZZZZZZ	1.00	1845																								
ZZZZZZ	1.00	1847																								
CCV	1.00	1849																								X
CCB	1.00	1851																								X
MW13A	1.00	1854																								X
MW27	1.00	1856																								X
MW453	1.00	1858																								X
MW454	1.00	1900																								X
ZZZZZZ	1.00	1902																								
ZZZZZZ	1.00	1904																								
CCV	1.00	1906																								X
CCB	1.00	1908																								X

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ANALYSJS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:56277_

Instrument ID Number: PS1214_______ Method: AS

Start Date: 01/31/96 End Date: 01/31/96

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	1249																									X
S10	1.00	1251																									X
S50	1.00	1253																									X
S100	1.00	1256																									X
S200	1.00	1258																									X
S300	1.00	1300																									X
ICV	1.00	1302																									X
ICB	1.00	1305																									X
CCV	1.00	1307																									X
CCB	1.00	1309																									X
ZZZZZZ	1.00	1311																									
PBW2	1.00	1313																									X
ZZZZZZ	5.00	1315																									
MW12	1.00	1317																									X
MW12D	1.00	1319																									X
MW12S	5.00	1321																									X
ZZZZZZ	1.00	1323																									
ZZZZZZ	1.00	1326																									
ZZZZZZ	1.00	1328																									
CCV	1.00	1330																									X
CCB	1.00	1332																									X

2. Sample Delivery Group No. 56202

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 : 02/14/96
ETR Number : 56240
Project No.: 93206
No. Samples: 31
Arrived : 01/16/96
P.O. Number: *

Case:OBASH SDG:56202

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
286220	MW14a:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	1020
9020	Total Organic Halides	<0.02
9040	pH (std. units)	6.78 o
9060	Total Organic Carbon	1.1
286220R1	MW14a:01/15/96 (Water)	
9060	Total Organic Carbon	1.0
286220R2	MW14a:01/15/96 (Water)	
9060	Total Organic Carbon	1.0
286220R3	MW14a:01/15/96 (Water)	
9060	Total Organic Carbon	1.0
286221	MW14b:01/15/96 (Water)	
9050	Conductivity (umhos/cm)	1040
9020	Total Organic Halides	<0.02
9040	pH (std. units)	6.69 o
9060	Total Organic Carbon	1.1
286221R1	MW14b:01/15/96 (Water)	
9060	Total Organic Carbon	1.2

Comments/Notes

o = pH units

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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 : 02/14/96
ETR Number : 56240
Project No.: 93206
No. Samples: 31
Arrived : 01/16/96
P.O. Number: *

Case:OBASH SDG:56202

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	
286221R2	MW14b:01/15/96 (Water)		
9060	Total Organic Carbon	1.0	
286221R3	MW14b:01/15/96 (Water)		
9060	Total Organic Carbon	1.1	
286222	MW14c:01/15/96 (Water)		
9050	Conductivity (umhos/cm)	1020	
9020	Total Organic Halides	<0.02	
9040	pH (std. units)	6.75	o
9060	Total Organic Carbon	1.0	
286222R1	MW14c:01/15/96 (Water)		
9060	Total Organic Carbon	1.0	
286222R2	MW14c:01/15/96 (Water)		
9060	Total Organic Carbon	1.0	
286222R3	MW14c:01/15/96 (Water)		
9060	Total Organic Carbon	0.9	
286223	MW14d:01/15/96 (Water)		
9050	Conductivity (umhos/cm)	1020	
9020	Total Organic Halides	<0.02	
9040	pH (std. units)	6.78	o
9060	Total Organic Carbon	0.8	

Comments/Notes

o = pH units

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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 : 02/14/96
ETR Number : 56240
Project No.: 93206
No. Samples: 31
Arrived : 01/16/96
P.O. Number: *

Case:OBASH SDG:56202

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	
286223R1	MW14d:01/15/96 (Water)		
9060	Total Organic Carbon	0.8	
286223R2	MW14d:01/15/96 (Water)		
9060	Total Organic Carbon	0.8	
286223R3	MW14d:01/15/96 (Water)		
9060	Total Organic Carbon	0.8	
286224	MW14R:01/15/96 (Water)		
9050	Conductivity (umhos/cm)	4.5	
9020	Total Organic Halides	<0.02	
9040	pH (std. units)	7.60	o
9060	Total Organic Carbon	<0.5	
286224R1	MW14R:01/15/96 (Water)		
9060	Total Organic Carbon	<0.5	
286224R2	MW14R:01/15/96 (Water)		
9060	Total Organic Carbon	<0.5	
286224R3	MW14R:01/15/96 (Water)		
9060	Total Organic Carbon	<0.5	

Comments/Notes

o = pH units

< Last Page > Submitted By : Aquatec Inc.

Quality Control Summary

Project No: 93206
ETR No: 56240
SDG No: 56202
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	1425	1413	100.8
pH (Std Units)	NA	5.97	6.00	99.5
Total Organic Carbon	< 0.5	69.2	72.9	94.9
Total Organic Halides	< 0.02	4.81	5.00	96.2

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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.:56202_

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MW114_____	_286231_____
_MW14_____	_286219_____
_MW14R_____	_286224_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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.

MW114

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56202_

Matrix (soil/water): WATER Lab Sample ID: 286231

Level (low/med): LOW__ Date Received: 01/16/96

% 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	138	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	47.7	B		P
7440-41-7	Beryllium	0.23	B		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	160000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.4	U		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	206			P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	33100			P
7439-96-5	Manganese	5.1	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium	1470	B		P
7782-49-2	Selenium	2.2	U		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	30300			P
7440-28-0	Thallium	6.3	B		P
7440-62-2	Vanadium	1.6	U		P
7440-66-6	Zinc	4.3	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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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.: 56202_

Matrix (soil/water): WATER Lab Sample ID: 286219

Level (low/med): LOW__ Date Received: 01/16/96

% 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_	56.5	B		P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	46.1	B		P
7440-41-7	Beryllium	0.17	B		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	159000			P
7440-47-3	Chromium_	0.60	U		P
7440-48-4	Cobalt___	1.4	U		P
7440-50-8	Copper___	1.0	U		P
7439-89-6	Iron_____	92.4	B		P
7439-92-1	Lead_____	1.6	U		P
7439-95-4	Magnesium	32800			P
7439-96-5	Manganese	1.2	B		P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	1.4	U		P
7440-09-7	Potassium	1430	B		P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	30200			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	1.6	U		P
7440-66-6	Zinc_____	3.8	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.

MW14R

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56202_

Matrix (soil/water): WATER Lab Sample ID: 286224

Level (low/med): LOW__ Date Received: 01/16/96

% 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	11.3	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	5.4	U		P
7440-41-7	Beryllium	0.16	B		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	143	U		P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.4	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	10.6	U		P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	137	U		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	136	U		P
7782-49-2	Selenium	2.2	U		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	187	U		P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.6	U		P
7440-66-6	Zinc	0.99	B		P
	Cyanide	5.0	U		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.: 56202_

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	25630.00	98.6	30200.0	30190.00	100.0	30330.00	100.4	P
Antimony	250.0	243.20	97.3	300.0	306.40	102.1	311.20	103.7	P
Arsenic	250.0	255.60	102.2	100.0	100.40	100.4	101.40	101.4	P
Barium	500.0	488.80	97.8	200.0	202.70	101.4	204.20	102.1	P
Beryllium	500.0	503.60	100.7	100.0	100.70	100.7	100.80	100.8	P
Cadmium	500.0	495.20	99.0	100.0	99.61	99.6	99.42	99.4	P
Calcium	25000.0	25360.00	101.4	30200.0	30450.00	100.8	30450.00	100.8	P
Chromium	500.0	495.30	99.1	200.0	202.70	101.4	203.30	101.6	P
Cobalt	500.0	494.90	99.0	200.0	199.60	99.8	199.80	99.9	P
Copper	500.0	496.70	99.3	200.0	204.50	102.2	206.90	103.4	P
Iron	25500.0	26380.00	103.5	30200.0	30480.00	100.9	30460.00	100.9	P
Lead	1000.0	1008.00	100.8	400.0	406.90	101.7	404.80	101.2	P
Magnesium	25000.0	24980.00	99.9	30200.0	30300.00	100.3	30530.00	101.1	P
Manganese	500.0	498.60	99.7	200.0	200.60	100.3	200.80	100.4	P
Mercury	1.8	1.89	105.0	3.0	3.06	102.0	3.05	101.7	CV
Nickel	500.0	492.70	98.5	200.0	201.40	100.7	204.20	102.1	P
Potassium	25000.0	26810.00	107.2	30200.0	31540.00	104.4	31850.00	105.5	P
Selenium	250.0	251.50	100.6	100.0	99.25	99.2	104.00	104.0	P
Silver	500.0	503.90	100.8	100.0	102.20	102.2	102.70	102.7	P
Sodium	25000.0	24440.00	97.8	30200.0	29580.00	97.9	29930.00	99.1	P
Thallium	250.0	234.40	93.8	100.0	104.70	104.7	102.50	102.5	P
Vanadium	500.0	499.90	100.0	200.0	200.30	100.2	201.00	100.5	P
Zinc	500.0	499.80	100.0	200.0	207.20	103.6	209.00	104.5	P
Cyanide	120.0	109.00	90.8	150.0	141.00	94.0	142.00	94.7	AS

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

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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.: 56202_

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	30530.00	101.1	30800.00	102.0	P
Antimony				300.0	311.70	103.9	312.00	104.0	P
Arsenic				100.0	98.36	98.4	104.40	104.4	P
Barium				200.0	204.80	102.4	205.30	102.6	P
Beryllium				100.0	100.90	100.9	101.60	101.6	P
Cadmium				100.0	98.64	98.6	99.68	99.7	P
Calcium				30200.0	30580.00	101.3	30820.00	102.1	P
Chromium				200.0	204.20	102.1	205.50	102.8	P
Cobalt				200.0	199.70	99.8	201.10	100.6	P
Copper				200.0	208.40	104.2	209.70	104.8	P
Iron				30200.0	30540.00	101.1	30690.00	101.6	P
Lead				400.0	405.20	101.3	411.30	102.8	P
Magnesium				30200.0	30650.00	101.5	30830.00	102.1	P
Manganese				200.0	200.50	100.2	201.70	100.8	P
Mercury				3.0	2.99	99.7	3.05	101.7	CV
Nickel				200.0	205.10	102.6	204.50	102.2	P
Potassium				30200.0	32060.00	106.2	32160.00	106.5	P
Selenium				100.0	99.53	99.5	100.80	100.8	P
Silver				100.0	103.20	103.2	103.90	103.9	P
Sodium				30200.0	30050.00	99.5	30130.00	99.8	P
Thallium				100.0	101.80	101.8	104.10	104.1	P
Vanadium				200.0	200.00	100.0	201.00	100.5	P
Zinc				200.0	210.90	105.4	212.30	106.2	P
Cyanide									NR

(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.: 56202_

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	128.80	107.3	129.70	108.1
Arsenic				20.0	20.25	101.2	20.11	100.6
Barium								
Beryllium				10.0	10.44	104.4	10.83	108.3
Cadmium				10.0	10.55	105.5	10.14	101.4
Calcium								
Chromium				20.0	21.04	105.2	20.79	104.0
Cobalt				100.0	102.30	102.3	102.70	102.7
Copper				50.0	51.40	102.8	53.16	106.3
Iron								
Lead				6.0	6.21	103.5	5.42	90.3
Magnesium								
Manganese				30.0	31.07	103.6	31.10	103.7
Mercury	0.2	0.12	60.0					
Nickel				80.0	82.69	103.4	83.02	103.8
Potassium								
Selenium				10.0	12.25	122.5	9.29	92.9
Silver				20.0	21.25	106.2	21.07	105.4
Sodium								
Thallium				20.0	21.95	109.8	21.21	106.0
Vanadium				100.0	104.50	104.5	104.90	104.9
Zinc				40.0	42.53	106.3	43.13	107.8

3
BLANKS

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56202_

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	11.3	U	11.3	U	11.3	U	11.3	U	11.300	U	P
Antimony	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Arsenic	2.8	U	2.8	U	2.8	U	2.8	U	3.648	B	P
Barium	5.4	U	5.4	U	5.4	U	5.4	U	5.400	U	P
Beryllium	0.1	B	0.1	B	0.2	B	0.4	B	0.102	B	P
Cadmium	0.3	U	0.3	B	0.3	U	0.3	U	0.300	U	P
Calcium	142.8	U	142.8	U	142.8	U	142.8	U	142.800	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Cobalt	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Copper	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Iron	10.6	U	11.0	B	10.6	U	10.6	U	10.600	U	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Magnesium	136.8	U	136.8	U	136.8	U	136.8	U	136.800	U	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Mercury	0.1	U	0.1	U	0.1	U	-0.1	B	0.100	U	CV
Nickel	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Potassium	136.4	U	136.4	U	136.4	U	136.4	U	136.400	U	P
Selenium	-2.9	B	2.2	U	2.2	U	2.2	U	2.200	U	P
Silver	0.7	U	0.7	B	-0.9	B	0.7	U	0.700	U	P
Sodium	186.9	U	186.9	U	186.9	U	186.9	U	186.900	U	P
Thallium	2.3	U	2.3	U	2.3	U	2.3	U	2.718	B	P
Vanadium	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Zinc	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
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.: 56202_

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			11.3	U							P
Antimony			2.5	U							P
Arsenic			2.8	U							P
Barium			5.4	U							P
Beryllium			0.5	B							P
Cadmium			0.3	U							P
Calcium			142.8	U							P
Chromium			0.6	U							P
Cobalt			1.4	U							P
Copper			1.0	U							P
Iron			10.6	U							P
Lead			1.6	U							P
Magnesium			136.8	U							P
Manganese			0.5	U							P
Mercury			0.1	U							CV
Nickel			1.4	U							P
Potassium			136.4	U							P
Selenium			2.2	U							P
Silver			0.7	U							P
Sodium			186.9	U							P
Thallium			2.3	U							P
Vanadium			1.6	U							P
Zinc			0.7	U							P
Cyanide											NR

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No: _____ SDG No.: 56202_

ICP ID Number: ICP 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	478686	466500	469900.0	98.2	472200	476500.0	99.5
Antimony	0	594	1	611.2	102.9	-3	620.1	104.4
Arsenic	0	99	5	102.6	103.6	5	102.6	103.6
Barium	0	494	1	494.2	100.0	1	500.4	101.3
Beryllium	0	478	0	483.1	101.1	0	483.8	101.2
Cadmium	0	907	6	919.5	101.4	7	917.3	101.1
Calcium	500000	478186	468200	472300.0	98.8	472100	476900.0	99.7
Chromium	0	472	4	474.1	100.4	3	480.7	101.8
Cobalt	0	463	0	468.7	101.2	0	471.0	101.7
Copper	0	530	3	526.7	99.4	4	538.4	101.6
Iron	200000	192186	188500	192500.0	100.2	189100	194400.0	101.2
Lead	0	53	7	53.7	101.3	6	56.9	107.4
Magnesium	500000	507629	507500	502500.0	99.0	513800	511600.0	100.8
Manganese	0	478	2	482.1	100.9	2	482.8	101.0
Mercury								
Nickel	0	904	3	910.8	100.8	3	931.2	103.0
Potassium	0	0	19	25.1		34	43.9	
Selenium	0	49	5	53.2	108.6	0	51.1	104.3
Silver	0	205	1	208.2	101.6	1	212.5	103.7
Sodium	0	0	54	231.1		2	200.3	
Thallium	0	96	0	101.3	105.5	3	105.5	109.9
Vanadium	0	479	2	479.7	100.1	2	484.7	101.2
Zinc	0	986	23	986.0	100.0	24	1009.0	102.3

7
LABORATORY CONTROL SAMPLE

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56202_

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	50550.00	99.1						
Antimony	2000.0	2113.00	105.6						
Arsenic	1050.0	1105.00	105.2						
Barium	500.0	487.90	97.6						
Beryllium	500.0	503.40	100.7						
Cadmium	525.0	509.80	97.1						
Calcium	50000.0	50310.00	100.6						
Chromium	500.0	493.80	98.8						
Cobalt	500.0	487.10	97.4						
Copper	500.0	501.20	100.2						
Iron	50500.0	51410.00	101.8						
Lead	1015.0	1013.00	99.8						
Magnesium	50000.0	49860.00	99.7						
Manganese	500.0	493.40	98.7						
Mercury	1.0	0.92	92.2						
Nickel	500.0	488.90	97.8						
Potassium	50000.0	49740.00	99.5						
Selenium	25.0	25.52	102.1						
Silver	500.0	497.20	99.4						
Sodium	50000.0	50450.00	100.9						
Thallium	50.0	50.40	100.8						
Vanadium	500.0	491.40	98.3						
Zinc	500.0	501.60	100.3						
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.:56202_

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

9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MW14L

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56202_

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	56.50	B	66.06	B	16.9		P
Antimony	2.50	U	12.50	U			P
Arsenic	2.80	U	14.00	U			P
Barium	46.06	B	45.43	B	1.4		P
Beryllium	0.17	B	0.93	B	447.1		P
Cadmium	0.30	U	1.50	U			P
Calcium	158600.00		159700.00		0.7		P
Chromium	0.60	U	3.00	U			P
Cobalt	1.40	U	7.00	U			P
Copper	1.00	U	5.00	U			P
Iron	92.44	B	131.60	B	42.4		P
Lead	1.60	U	8.00	U			P
Magnesium	32770.00		32380.00		1.2		P
Manganese	1.20	B	2.50	U	100.0		P
Mercury							NR
Nickel	1.40	U	7.86	B			P
Potassium	1427.00	B	1540.00	B	7.9		P
Selenium	2.20	U	11.00	U			P
Silver	0.70	U	3.50	U			P
Sodium	30170.00		28900.00		4.2		P
Thallium	2.30	U	11.50	U			P
Vanadium	1.60	U	8.00	U			P
Zinc	3.84	B	8.64	B	125.0		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.: 56202_

ICP ID Number: ICP_TJA_61E_ Date: 01/01/96

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	11.3	P
Antimony	206.84		60	2.5	P
Arsenic	189.04		10	2.8	P
Barium	493.41		200	5.4	P
Beryllium	313.04		5	0.1	P
Cadmium	226.50		5	0.3	P
Calcium	317.93		5000	142.8	P
Chromium	267.72		10	0.6	P
Cobalt	228.62		3	1.4	P
Copper	324.75		25	1.0	P
Iron	271.44		100	10.6	P
Lead	220.35		3	1.6	P
Magnesium	279.08		5000	136.8	P
Manganese	257.61		15	0.5	P
Mercury			0.2		NR
Nickel	231.60		40	1.4	P
Potassium	766.49		5000	136.4	P
Selenium	196.03		5	2.2	P
Silver	328.07		10	0.7	P
Sodium	330.23		5000	186.9	P
Thallium	190.86		10	2.3	P
Vanadium	292.40		50	1.6	P
Zinc	213.86		20	0.7	P

Comments:

10
Instrument Detection Limits (Quarterly)

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 56202_

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

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			3		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.: 56202_

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			3		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.: 56202_

ICP ID Number: ICP 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.: 56202_

ICP ID Number: ICP 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__	0.0050400	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.: 56202_

ICP ID Number: ICP TJA 61E_ Date: 01/01/96

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	50000.0	P
Arsenic	10.00	10000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	50000.0	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	50000.0	P
Iron	10.00	500000.0	P
Lead	10.00	100000.0	P
Magnesium	10.00	1000000.0	P
Manganese	10.00	20000.0	P
Mercury			NR
Nickel	10.00	100000.0	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.:56202_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	01/31/96		100
MW114	01/31/96		100
MW14	01/31/96		100
MW14R	01/31/96		100
PBW1	01/31/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:56202_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW1	02/08/96		100
MW114	02/08/96		100
MW14	02/08/96		100
MW14R	02/08/96		100
PBW1	02/08/96		100

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PREPARATION LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:56202_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	01/24/96		250
MW114	01/24/96		250
MW14	01/24/96		250
MW14R	01/24/96		250
PBW1	01/24/96		250

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:56202_

Instrument ID Number: ICP TJA 61E__ Method: P_

Start Date: 02/05/96 End Date: 02/05/96

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	1106		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	1110					X	X	X		X	X	X				X		X		X			X	X	
S	1.00	1114		X						X				X		X				X		X				
S	1.00	1119			X	X									X						X		X			
ICV	1.00	1125		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	1130		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	1135		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	1139		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	1144			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1149		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	1154		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	100.00	1159																									
PBW1	1.00	1204		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	1209		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	1213		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	1218		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MW14R	1.00	1223		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	1228		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	1233																									
ZZZZZZ	1.00	1237																									
ZZZZZZ	1.00	1242																									
CCV	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	
CCB	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	
ZZZZZZ	5.00	1257																									
ZZZZZZ	1.00	1301																									
ZZZZZZ	1.00	1306																									
ZZZZZZ	1.00	1311																									
ZZZZZZ	1.00	1316																									
ZZZZZZ	1.00	1321																									
ZZZZZZ	1.00	1325																									
ZZZZZZ	1.00	1330																									
CCV	1.00	1335		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.:56202_

Instrument ID Number: ICP TJA 61E__ Method: P_

Start Date: 02/05/96 End Date: 02/05/96

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
CCB	1.00	1340		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	1345		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	1350		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	1355			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	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	
CCB	1.00	1404		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.:56202_

Instrument ID Number: PS200_____ Method: CV

Start Date: 02/10/96 End Date: 02/10/96

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	1406																X								
S0	1.00	1409																X								
S0.2	1.00	1412																X								
S0.5	1.00	1416																X								
S1	1.00	1419																X								
S3	1.00	1422																X								
S5	1.00	1425																X								
ICV	1.00	1428																X								
ICB	1.00	1432																X								
CRA	1.00	1435																X								
CCV	1.00	1438																X								
CCB	1.00	1441																X								
ZZZZZZ	1.00	1444																								
ZZZZZZ	1.00	1447																								
ZZZZZZ	1.00	1450																								
ZZZZZZ	1.00	1453																								
ZZZZZZ	1.00	1457																								
ZZZZZZ	1.00	1500																								
ZZZZZZ	1.00	1503																								
ZZZZZZ	1.00	1506																								
ZZZZZZ	1.00	1509																								
CCV	1.00	1512																X								
CCB	1.00	1515																X								
ZZZZZZ	1.00	1518																								
ZZZZZZ	1.00	1521																								
ZZZZZZ	1.00	1524																								
ZZZZZZ	1.00	1528																								
ZZZZZZ	1.00	1531																								
ZZZZZZ	1.00	1534																								
ZZZZZZ	1.00	1537																								
PBW1	1.00	1540																X								
LCSW1	1.00	1543																X								

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:56202_

Instrument ID Number: PS200_____ Method: CV

Start Date: 02/10/96 End Date: 02/10/96

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	1546																X								
CCB	1.00	1549																X								
ZZZZZZ	1.00	1552																								
ZZZZZZ	1.00	1555																								
ZZZZZZ	1.00	1558																								
ZZZZZZ	1.00	1602																								
ZZZZZZ	1.00	1605																								
ZZZZZZ	1.00	1608																								
MW14	1.00	1611																X								
MW14R	1.00	1614																X								
MW114	1.00	1617																X								
CCV	1.00	1620																X								
CCB	1.00	1623																X								

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ANALYSIS RUN LOG

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:56202_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 01/26/96 End Date: 01/26/96

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	1807																								X
S50	1.00	1809																								X
S100	1.00	1811																								X
S200	1.00	1813																								X
S300	1.00	1816																								X
ICV	1.00	1818																								X
ICB	1.00	1820																								X
ZZZZZZ	1.00	1822																								
CCV	1.00	1824																								X
CCB	1.00	1826																								X
PBW1	1.00	1829																								X
ZZZZZZ	1.00	1831																								
ZZZZZZ	5.00	1833																								
ZZZZZZ	1.00	1835																								
MW14	1.00	1837																								X
MW14R	1.00	1839																								X
MW114	1.00	1841																								X
ZZZZZZ	1.00	1843																								
ZZZZZZ	1.00	1845																								
ZZZZZZ	1.00	1847																								
CCV	1.00	1849																								X
CCB	1.00	1851																								X