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

PREPARED FOR:
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TABLES

Table 1

SENECA ARMY DEPOT ACTIVITY
1996 GROUNDWATER MONITORING PROGRAM
GROUNDWATER ELEVATION DATA
OB/OD GROUNDS

onitoring Well	Elevation at Top of Riser (MSL)	First Quarter 1996			Second Quarter 1996			Third Quarter 1996			Fourth Quarter 1996		
		Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation of Water Level (ft.)	Date	Depth from Top of Riser (ft.)	Elevation o Water Level
Grounds													
/-1	634.22	03/18/96	6.24	627.98	06/24/96	9.43	624.79	09/23/96	9.49	624.73	12/28/96	**7.52**	**626.7**
/-4	NA	03/18/96	6.74	NA	06/24/96	8.87	NA	09/23/96	8.84	NA	12/28/96	**7.27**	**NA**
/-5	637.99	03/18/96	Frozen	Frozen	06/24/96	4.47	633.52	09/23/96	5.73	632.26	12/28/96	**3.07**	**634.92**
/-6	630.31	03/18/96	Not Measured	Not Measured	06/24/96	5.37	624.94	09/23/96	6.15	624.16	12/28/96	**Not Measured**	**Not Measu**
/-7	622.94	03/18/96	Not Measured	Not Measured	06/24/96	6.51	616.43	09/23/96	5.42	617.52	12/28/96	**5.42**	**617.52**
/-8	638.78	03/18/96	2.76	636.02	06/24/96	5.02	633.76	09/23/96	4.85	633.93	12/28/96	**3.14**	**635.64**
/-9	634.95	03/18/96	Frozen	Frozen	06/24/96	3.38	631.57	09/23/96	3.18	631.77	12/28/96	**Not Measured**	**Not Measu**
/-10	638.62	03/18/96	Frozen	Frozen	06/24/96	4.38	634.24	09/23/96	3.96	634.66	12/28/96	**2.30**	**636.32**
/-11	630.65	03/18/96	Frozen	Frozen	06/24/96	3.69	626.96	09/23/96	3.72	626.93	12/28/96	**2.85**	**627.8**
/-12	624.50	03/18/96	Frozen	Frozen	06/24/96	2.86	621.64	09/23/96	2.94	621.56	12/28/96	**2.25**	**622.25**
/-13	627.09	03/18/96	2.26	624.83	06/24/96	2.83	624.26	09/23/96	2.88	624.21	12/28/96	**2.38**	**624.71**
/-14	624.51	03/18/96	Frozen	Frozen	06/24/96	4.24	620.27	09/23/96	4.14	620.37	12/28/96	**3.15**	**621.36**
/-15	621.99	03/18/96	Frozen	Frozen	06/24/96	3.55	618.44	09/23/96	3.25	618.74	12/28/96	**2.78**	**619.21**
/-16	622.60	03/18/96	Frozen	Frozen	06/24/96	4.69	617.91	09/23/96	3.56	619.04	12/28/96	**2.22**	**620.38**
/-17	624.53	03/18/96	2.82	621.71	06/24/96	2.84	621.69	09/23/96	3.26	621.27	12/28/96	**1.73**	**622.8**
/-18	623.95	03/18/96	Frozen	Frozen	06/24/96	3.22	620.73	09/23/96	3.17	620.78	12/28/96	**2.38**	**621.57**
/-19	636.34	03/18/96	Frozen	Frozen	06/24/96	4.83	631.51	09/23/96	3.78	632.56	12/28/96	**2.89**	**633.45**
/-21	637.88	03/18/96	2.90	634.98	06/24/96	4.26	633.62	09/23/96	4.70	633.18	12/28/96	**2.89**	**634.99**
/-22	623.15	03/18/96	Frozen	Frozen	06/24/96	Lock Frozen	Lock Frozen	09/23/96	Lock Frozen	Lock Frozen	12/28/96	**Lock Frozen**	**Lock Froze**
/-23	622.87	03/18/96	3.56	619.31	06/24/96	4.84	618.03	09/23/96	4.57	618.3	12/28/96	**3.83**	**619.04**
/-24	627.33	03/18/96	3.45	623.88	06/24/96	5.74	621.59	09/23/96	6.00	621.33	12/28/96	**4.08**	**623.25**
/-25	623.80	03/18/96	4.64	619.16	06/24/96	8.46	615.34	09/23/96	9.32	614.48	12/28/96	**4.38**	**619.42**
/-26	624.31	03/18/96	4.88	619.43	06/24/96	7.22	617.09	09/23/96	7.34	616.97	12/28/96	**3.54**	**620.77**
/-27	625.94	03/18/96	2.93	623.01	06/24/96	4.20	621.74	09/23/96	4.36	621.58	12/28/96	**3.31**	**622.63**
/-28	631.90	03/18/96	3.66	628.24	06/24/96	5.10	626.8	09/23/96	5.99	625.91	12/28/96	**3.77**	**628.13**
/-29	632.07	03/18/96	3.86	628.21	06/24/96	5.31	626.76	09/23/96	6.19	625.88	12/28/96	**2.98**	**629.09**
/-30	628.12	03/18/96	3.67	624.45	06/24/96	4.37	623.75	09/23/96	4.29	623.83	12/28/96	**3.80**	**624.32**
/-31	634.57	03/18/96	Not Measured	Not Measured	06/24/96	4.44	630.13	09/23/96	3.28	631.29	12/28/96	**Not Measured**	**Not Measu**
/-32	634.81	03/18/96	Frozen	Frozen	06/24/96	4.64	630.17	09/23/96	4.31	630.5	12/28/96	**2.61**	**632.2**
/-36	640.55	03/18/96	5.67	634.88	06/24/96	7.23	633.32	09/23/96	7.81	632.74	12/28/96	**5.81**	**634.74**
/-37	640.81	03/18/96	5.58	635.23	06/24/96	6.92	633.89	09/23/96	Not Measured	Not Measured	12/28/96	**5.83**	**634.98**
/-38	620.67	03/18/96	2.64	618.03	06/24/96	5.36	615.31	09/23/96	5.20	615.47	12/28/96	**2.71**	**617.96**
/-39	620.14	03/18/96	3.60	616.54	06/24/96	6.55	613.59	09/23/96	5.73	614.41	12/28/96	**3.73**	**616.41**
/-40	620.46	03/18/96	3.50	616.96	06/24/96	6.88	613.58	09/23/96	5.85	614.61	12/28/96	**3.66**	**616.8**
Grounds - SEAD-45 wells													
V45-1	625.08	03/18/96	7.95	617.13	06/24/96	7.95	617.13	09/23/96	7.99	617.09	12/28/96	**7.26**	**617.82**
V45-2	626.76	03/18/96	11.51	615.25	06/24/96	11.14	615.62	09/23/96	11.58	615.18	12/28/96	**8.95**	**617.81**
V45-3	626.45	03/18/96	7.83	618.62	06/24/96	8.41	618.04	09/23/96	10.49	615.96	12/28/96	**7.50**	**618.95**
V45-4	633.04	03/18/96	5.34	627.7	06/24/96	7.65	625.39	09/23/96	7.58	625.46	12/28/96	**5.87**	**627.17**

TABLE 2

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

	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WA
	DATE SAMPLED	12/30/96	12/30/96	12/30/96	12/30/96	12/30/96	12/30/96	12/30/96	12/
	ES ID	OB065	OB066	OB067	OB068	OB061	OB062	OB063	OI
	WELL ID	**MW12A**	**MW12B**	**MW12C**	**MW12D**	**MW13A**	**MW13B**	**MW13C**	**MW**
	LAB ID	322971	322972	322973	322974	322963	322964	322965	32
ETER	**UNITS**								
	standard units	7.52	7.45	7.48	7.49	7.11	7.1	7.1	7
tivity	umhos/cm	725	747	688	729	870	861	850	8
ganic Carbon	mg/L	1.4	1.4	1.3	1.3	1	1	1	
ganic Halides	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<

TABLE 2

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

	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WA
	DATE SAMPLED	12/29/96	12/29/96	12/29/96	12/29/96	09/25/96	09/25/96	09/25/96	09/
	ES ID	OB056	OB058	OB059	OB060	OBO69	OBO70	OBO71	OB
	WELL ID	MW14A	MW14B	MW14C	MW14D	MW27A	MW27B	MW27C	MW
	LAB ID	322962	322958	322959	322960	322967	322968	322969	32
ER	UNITS								
	standard units	7.23	7.2	7.28	7.28	7.41	7.39	7.41	7
y	umhos/cm	919	946	922	929	844	841	753	8
nic Carbon	mg/L	0.8	0.8	0.9	0.8	1.2	1.1	1.1	1
nic Halides	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<

TABLE 3

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

	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	DATE SAMPLED	12/28/96	12/28/96	12/28/96	12/28/96	12/28/96	12/28/96	12/28/96	1
	ES ID	OB042A	OB042B	OB042C	OB042D	OB043	OB044	OB045	
	WELL ID	MW45-3A	MW45-3B	MW45-3C	MW45-3D	MW45-4A	MW45-4B	MW45-4C	M
	LAB ID	314322	314299	314298	314297	322827	322828	322829	
ER	UNITS								
	standard units	7.36	7.28	7.3	7.18	7.27	7.25	7.27	
y	umhos/cm	1160	1230	1340	1370	604	681	716	
nic Carbon	mg/L	1.2	1.2	1.6	1.1	1	1	1	
nic Halides	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	

TABLE 3

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

	MATRIX	WATER	WATER	WATER	WATER
	DATE SAMPLED	12/29/96	12/29/96	12/29/96	12/29/96
	ES ID	OB048	OB049	OB050	OB051
	WELL ID	MW45-2A	MW45-2B	MW45-2C	MW45-2D
	LAB ID	322953	322954	322955	322956
AMETER	UNITS				
	standard units	7.12	7.14	7.12	7.21
uctivity	umhos/cm	1190	1250	1270	1300
Organic Carbon	mg/L	1.2	0.9	0.8	1
Organic Halides	mg/L	<0.02	<0.02	<0.02	<0.02

Table 4

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

WELL ID		MW12	MW13	MW14	MW27	MW14(DU)	MW14(R)	MW45-2	MW45-3	MW45-
ES ID		OB065	OB061	OB056	OB069	OB057	0B047	OB048	OB052	OB04
SITE		OB	OB	OB	OB	OB	OB	OD	OD	OI
MATRIX		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATE
SAMPLED		12/30/96	12/30/96	12/29/96	12/30/96	12/29/96	12/28/96	12/29/96	12/29/96	12/29/9
LAB ID		322971	322963	322962	322967	322961 Duplicate	322957 Rinsate	322953	322949	32282
ND	UNITS									
imum	ug/l	133	11.8	226	13.5	171	19.8	45.9	45.9	10.3
ny	ug/l	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	2 U	2 U	2
	ug/l	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	2.7
	ug/l	92.4	81	45.8	86.7	44.5	2.3 U	18.4	18.4	22.4
m	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	.3 U	.3 U	0.1
um	ug/l	.3 U	.3 U	.3 U	.3 U	.3 U	0.3 U	.4 U	.4 U	0.3
n	ug/l	79500	154000	164000	104000	159000	92.8 U	196000	196000	113000
ium	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	.6 U	.6 U	1
	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	1.2
	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2
	ug/l	109	17.9	124	23.3	94.2	17.9 U	220	220	23.4
	ug/l	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	1.5 U	1.5 U	1.7
sium	ug/l	60300	29100	32200	51200	31300	68.7 U	75100	75100	24600
nese	ug/l	0.5	4.1	0.68	50	0.49	0.3	11.7	11.7	4.7
y	ug/l	.1 U	.1 U	.1 U	.1 U	.1 U	0.1 U	.1 U	.1 U	0.1
	ug/l	2.1	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.1	4.1	1.6
ium	ug/l	8880	1630	1550	7570	1490	99.7 U	8100	8100	2380
um	ug/l	2.7 U	3 U	2.7 U	2.7 U	2.7 U	2.7 U	3.6 U	3.6 U	2.4
	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.3
n	ug/l	15000	15100	31200	16400	30100	282 U	17600	17600	10900
m	ug/l	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.9 U	3.9 U	4.2
um	ug/l	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	.9 U	.9 U	1.2
	ug/l	12.3 J	8.5 J	5.7 J	5.9 J	9.4 J	6.3 J	8.6 J	8.6 J	6.7
e	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5

TABLE 5

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

Well		Dec 1994	June 1995	January 1996	March 1996	June 1996	September 1996	Decemb
t Well:	MW-13	7.04	7.14	7.13	7.1	6.95	7	7
ient Wells:	MW-12	7.37	7.4	7.18	7.39	7.33	7.4	7
	MW-14	7.11	7.18	6.75	7.19	7.1	7.2	7
	MW-27	7.34	7.4	7.26	7.32	7.28	7.2	7
ity								
t Well:	MW-13	886	838	894	920	943	867	72
ient Wells:	MW-12	911	892	869	844	854	879	85
	MW-14	1082	1090	1025	1047	1070	1070	92
	MW-27	953	912	944	889	877	877	81
anic Carbon								
t Well:	MW-13	1.2	1.2	1.2	1.1	1.7	1.9	1
ient Wells:	MW-12	1.2	1.3	1.1	1.1	1.3	1.6	1
	MW-14	1	1.1	1.0	0.95	1.6	2.1	0
	MW-27	1	1.1	0.8	0.95	1.3	1.1	1
anic Halides								
t Well:	MW-13	0.03	0.02U	0.02U	<0.02	<0.02	<0.02	<0
ient Wells:	MW-12	0.04	0.02U	0.02U	<0.02	<0.02	<0.02	<0
	MW-14	0.02U	0.02U	0.02U	<0.02	<0.02	<0.02	<0
	MW-27	0.03	0.02U	0.02U	<0.02	<0.02	<0.02	<0

TABLE 6

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

Well		Dec 1994	June 1995	January 1996	March 1996	June 1996	September 1996	Decem
t Well:	MW45-4	7.1	7.24	7.16	7.18	7.2	7.2	7.
ient Wells:	MW45-1	-	-	-	-	-	-	
	MW45-2	-	-	-	-	-	-	7.
	MW45-3	7.19	7.38	7.18	7.28	7.13	7.3	7.
vity								
t Well:	MW45-4	1030	829	891	836	793	892	6
ient Wells:	MW45-1	-	-	-	-	-	-	
	MW45-2	-	-	-	-	-	-	12
	MW45-3	1430	1335	1325	1213	1350	1275	12
anic Carbon								
t Well:	MW45-4	1	0.9	1.1	0.58	0.925	1.2	
ient Wells:	MW45-1	-	-	-	-	-	-	
	MW45-2	-	-	-	-	-	-	1
	MW45-3	0.8	0.9	0.65	0.78	1.1	1.3	1
anic Halides								
t Well:	MW45-4	0.02U	0.02U	0.02U	<0.02	<0.02	<0.02	<0
ient Wells:	MW45-1	-	-	-	-	-	-	
	MW45-2	-	-	-	-	-	-	<0
	MW45-3	0.02U	0.02U	0.02U	<0.02	<0.02	<0.02	<0

Table 7

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

ound Well MW-13				
	TOC	pH	Specific Cond.	TOX
lean =	1.19	7.02	909.50	0.01
ariance =	0.14	0.00	704.53	0.00
Size =	16.00	16.00	16.00	16.00

ORGANIC CARBON (TOC)

ance Well MW -12	Background Well MW -13		Compliance Well MW -14		Compliance Well MW -
4.04	t*=	-2.03	t*=	-3.78	t*=
2.73	tc=	2.60	tc=	2.73	tc=
Increase		**No Change**		**No Change**	**No Cha**

ance Well MW -12	Background Well MW -13		Compliance Well MW -14		Compliance Well MW -
20.18	t*=	4.79	t*=	8.91	t*=
3.18	tc=	3.01	tc=	4.67	tc=
Increase		**Increase**		**Increase**	**Increas**

FIC CONDUCTANCE

ance Well MW -12	Background Well MW -13		Compliance Well MW -14		Compliance Well MW -
-3.80	t*=	-4.60	t*=	2.17	t*=
3.21	tc=	4.03	tc=	3.48	tc=
No Change		**No Change**		**No Change**	**No Cha**

ORGANIC HALIDES (TOX)

ance Well MW -12	Background Well MW -13		Compliance Well MW -14		Compliance Well MW -
-1.00	t*=	-1.00	t*=	-1.00	t*=
2.60	tc=	2.60	tc=	2.60	tc=
No Change		**No Change**		**No Change**	**No Cha**

Indicates a statistically significant increase in the indicator parameter
Indicates no statistically significant change in the indicator parameter

Table 7

OD GroundsSecond Quarter 1996 Monitoring Program
Students t-Test Statistical Analysis Results

ound Well MW45-4				
	TOC	pH	Spec Cond.	TOX
lean =	0.85	7.18	875.08	0.005
ariance =	0.03	0.00	14375.90	0.000
Size =	12.00	12.00	12.00	12

L ORGANIC CARBON (TOC)

ance Well MW 45-1	Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW
0.00	t*=	1.26	t*=	3.49	t*=
0.00	tc=	4.08	tc=	4.23	tc=
Dry		No Change		No Change	Increas

ance Well MW 45-1	Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW
0.00	t*=	-0.98	t*=	2.47	t*=
0.00	tc=	4.59	tc=	5.25	tc=
Dry		No Change		No Change	No Cha

FIC CONDUCTANCE

iance Well MW 45-1	Compliance Well MW 45-2		Compliance Well MW 45-3		Background Well MW
0.00	t*=	9.05	t*=	6.69	t*=
0.00	tc=	3.28	tc=	3.93	tc=
Dry		Increase		Increase	No Cha

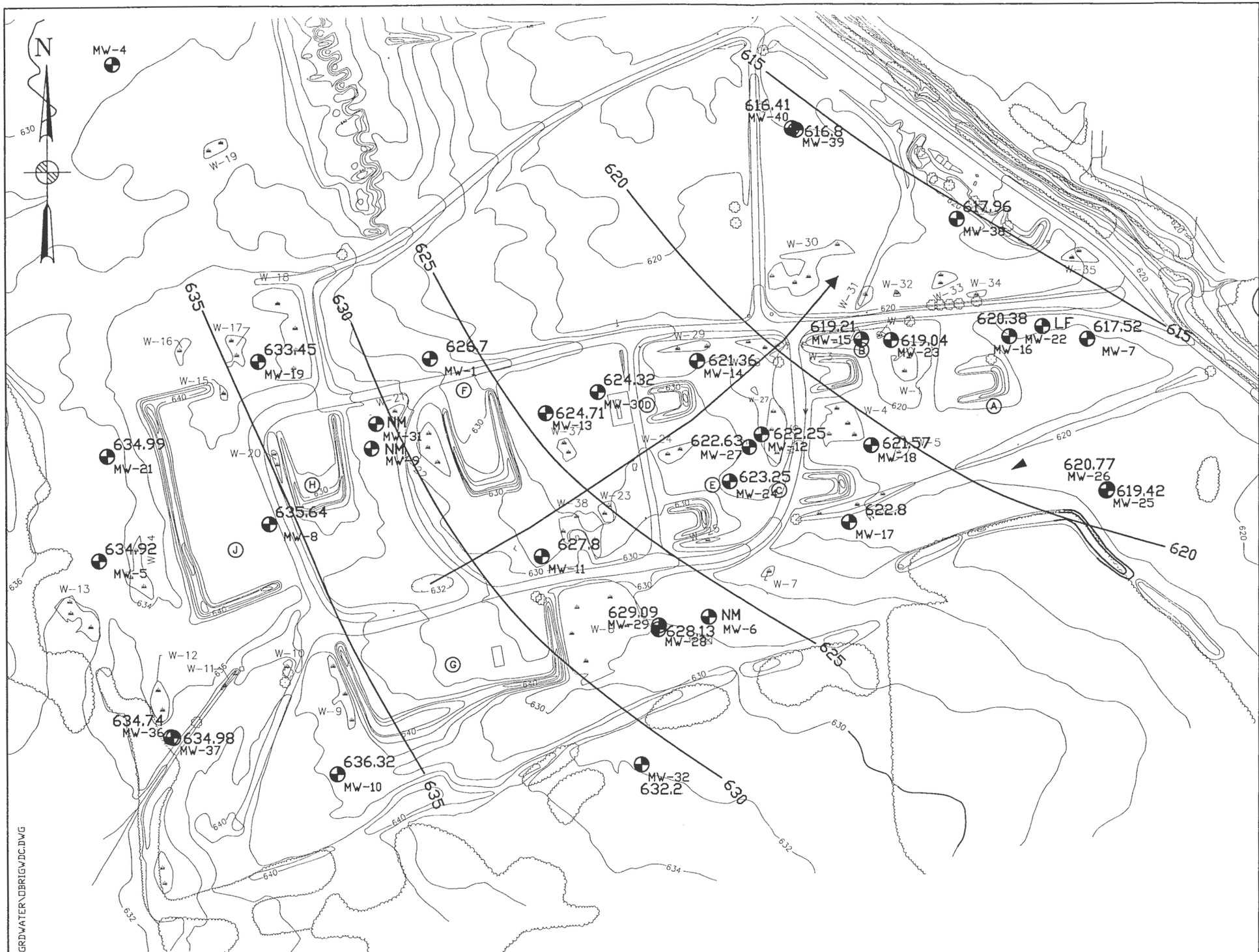
L ORGANIC HALIDES (TOX)

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

Indicates a statistically significant increase in the indicator parameter
Indicates no statistically significant change in the indicator parameter

uartsmp\obod\3q96\T_TEST.WK4

FIGURES



LEGEND:

- BURNING PAD DESIGNATION
- PAD OR GRID BORING
- GROUND CONTOUR AND ELEVATION
- W-1 WETLAND & DESIGNATION
- UTILITY POLE
- TREE
- BRUSH
- MW-14 620.27 MONITORING WELL & DESIGNATION AND MSL ELEVATION DATUM
- 635 GROUNDWATER CONTOUR LINE (DASHED WHERE INFERRED) MSL DATUM
- ARROW INDICATES PREDOMINANT GROUNDWATER FLOW DIRECTION

100 0 100 200
(feet)

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

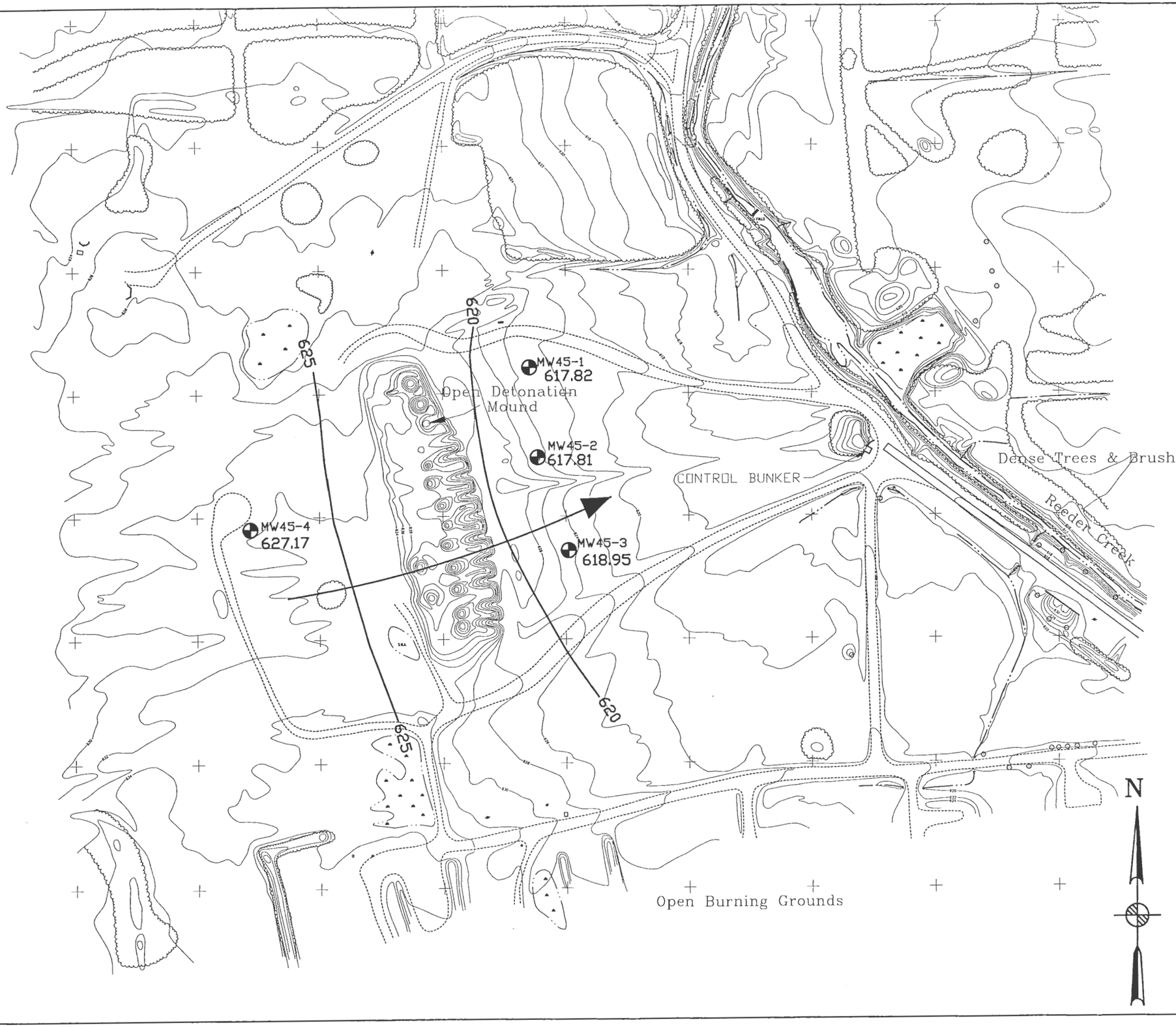
CLIENT/PROJECT TITLE

SENECA ARMY DEPOT ACTIVITY
OB GROUNDS
GROUNDWATER MONITORING PROGRAM

DEPT.	Dwg. No.
ENVIRONMENTAL ENGINEERING	730769-01001

FIGURE 1
GROUNDWATER ELEVATION PLAN
DECEMBER 28, 1996

SCALE	DATE	REV
1" = 200'	MARCH 1997	A



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
- 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.	Dwg. No.
ENVIRONMENTAL ENGINEERING	730769-01001

FIGURE 2
GROUNDWATER ELEVATION PLAN
DECEMBER 28, 1997

SCALE	DATE	REV
1" = 200'	MARH 1997	A

ACAD\SENECA\GRDWATER\SD45GW0C.DWG

APPENDIX A

FIELD DATA

OB/OD Fourth Quarter 1996 Groundwater Monitoring Program

1. **Groundwater Sampling Field Notes**

2. **Chain-of-Custody Forms**

1. Groundwater Sampling Field Data

12-28-96

0800 On Site

Calibration - Hydrolab Multi probe
Model H20 SN# 24085
Scout Display SN 30972

Parameter	Standard Parameters	Reading	Set to	Reading	
pH	7.00	6.98	7.00	7.00	
	10.00	10.37	10.00	10.00	
Spec. Cond. (mS/cm)	1.015	1.118	1.015	1.014	
Turbidity (NTUs)	0.0	1.8	0.0	0.1	
	4.4	1.3	4.4	4.2	
	41.3	89.4	41.3	41.2	
Redox (mV)	pH4 20°C/470	463	470	470	Quinhydrone in pH Buffer
	pH7 20°C/295	295	—	—	
	Zobel/16.5°C	449	—	—	Zobel Solution

Redox Probe has silver-silver chloride reference electrode.

DO (mV)
DO mg/L 10.54 (13°C) 10.54 — —

802 655 - 1203

12-28-96

Water Levels - OB/OD (TOR)

1024	MW-16	2.22'	rusty lock
1026	MW-22	—	lock rusty - cannot open
	Pad heaved .5' - radial cracks		
1029	MW-7	3.47'	Top of riser broken
	measure at top most part.		Casing sunk
1038	MW-18	2.38'	pad heaved .6
			broken apart.
1042	MW-17	1.73	OK
1045	MW-24	4.08	Pad heaved - .7' broken apart
1049	MW-27	3.31	OK
1051	MW-12	2.25	pad heaved .3'
1056	MW-32	2.61	OK
1100	MW-11	2.85	Heaved .2'
1106	MW-5	3.07	Protective casing settled
1111	MW-	2.91'	abandoned - improperly sealed with gravel
	not locked -		
1112	MW-21	2.89	Pad broken apart
	protective casing heaved + loose		
1118	MW-19	2.89	Pad broken apart
	protective casing heaved		
1124	MW-37	5.83'	OK

KKS 12-28-96

Water Levels OB/OD Cont'd

1125	MW-36	5.81	OK
1138	MW-13	2.38	Pad ~~heaved~~ settled - tipped
	TOR above Top of protective casing .1'		
1142	MW-14	3.15'	Pad + Riser badly heaved - no pressure cap TOR and TOC same height.
1147	MW-39	3.73	Pad broken in pieces
1152	MW-2	6.32	Ready to fill over 4" dia. Riser broken just below G.S. Protective casing very loose.
1201	MW-38	2.91'	
1211	MW45-4	5.87'	OK
1213	MW-4	7.27'	Protective ~~casing~~ casing sunk. - .4'
1217	Setup @ MW45-4		
	POW = 9.75' Static = 5.87'		
	Water column = 3.88' Volume = .63 gal.		
	Pump Intake @ 8.5'		
1245	Start Pump		
	Parameters on next page		

Turbidity - 10% over 1N
DO = 10%
Cond = 3%

pH = ± .1
Eh = ± 10 mV

MW45-4 Parameters

Time	Rate	Volume Removed	Temp	Cond	DO	pH	Redox	Turbidity
1255	360	.5	7.92	.793	1.11	7.03	325	11.1
1258	366	1.25	8.10	.781	.66	7.02	327	6.0
1303	360	1.5	8.20	.772	.50	7.02	329	3.0
1306	360	1.75	8.22	.769	.45	7.02	330	2.4
1309	360	2.0	8.26	.767	.43	7.03	331	2.2
1312	360	2.3	8.27	.765	.41	7.02	331	1.7

1330 Sample MW45-4

Sample #'s	Metals/CN	TOX	TOC	pH & Cond
08043 MW45-4-1	X	X	X	X
08044 MW45-4-2		X	X	X
08045 MW45-4-3		X	X	X
08046 MW45-4-4		X	X	X

Return to trailer - pack samples

1530 Drive to Syracuse Fed Ex

1700 Leave Fed Ex

End of Day

12-28-96

45-1	8.63	
45-2	12.43	
45-3	14.09	
MW 12	9.11	
MW-13	10.49	
MW-14	10.51	
MW 27	15.16	

tm ... 40 -
windy - Showers

12-29-96

0730 On Site

Hydrolab H20 Calibration

Parameter	Standard	Reading	Set to	Reading
pH	7.00	7.10	7.00	7.00
	10.00	9.95	10.00	10.00
Cond. (mS/cm)	1015	1.034	1.015	1.014
Turbidity (NTU's)	0.10	0.0	0.10	0.1
	4.41	2.5	4.4	4.3
	41.3	77.6	41.3	
	4.41	4.5	-	-
Redox (mV)	pH 4 470/20°C	468	—	—
	pH 7 295/20°C	288 7	295	
DO mg/L	Air Calibration 18.25°C/9.42	9.42	—	—

0900 Rinsate Split MW-14 MW-14 MRD
Sample # 08047

0956 Set up @ MW45-1
Static = 7.26' POW = 8.63
1.37' Column 0.22 gal.

1003 0.1 gal. 7.45' 1045 7.38
Recovery rate too slow to sample - well was never developed

12-29-96

1010 Setup MW45-2 Static 18.95
POW = 12.42 Column = 3.47' Volume = 0.56gal
Pump Intake = 11.5'
1026 WL after Pump inserted 8.78'
340 ml/min - slight draw down

MW45-2 Parameters

Time	Rate	Volume Removed	Temp	Cond	DO	pH	Redox	Turb
1036	360 to 180	.55	9.28	1.462	8.76	6.86	306	0.0
1040	180	.75	9.22	1.464	8.66	6.84	307	0.0
043	180	.85	9.31	1.470	8.49	6.82	308	0.0
048	180	1.1	9.40	1.477	7.99	6.77	310	0.0
051	180	1.25	9.49	1.473	7.72	6.75	311	0.0
054	180	1.35	9.58	1.464	7.40	6.73	312	0.0

Temp is increasing due to a 50°F ambient air temp and low flow thru cell.

1100 Sample MW45-2
Sample # OB048 MW45-2-1
OB049 MW45-2-2
OB050 MW45-2-3
OB051 MW45-2-4

KKS 12-29-96

12-29-96

Setup @ MW45-3
Static = 7.50' POW = 14.09
6.59' Column Volume = 1 gallon
~~1134~~ Intake @ 12.0'
1134 W.L after setting pump 7.05'
1138 Start pump

MW45-3 Parameters

Time	Rate	Volume Removed	Temp	Cond	DO	pH	Redox	Turbidity
1144	220	.25	9.07	1.188	3.85	6.99	307	0.0
1147	300	.45	9.02	1.199	3.81	6.99	308	0.0
1150	300	.61	9.01	1.200	3.86	6.99	309	0.0
1153	320	.80	9.04	1.206	4.03	6.98	309	0.0
1156	320	1.20	8.95	1.222	4.27	6.98	309	0.0
1159	320	1.60	8.91	1.235	4.44	6.98	309	0.0
1202	320	2.0	8.88	1.245	4.54	6.98	309	0.0
1205	320	2.4	8.88	1.248	4.57	6.97	309	0.0
1208	320	2.8	8.93	1.248	4.60	6.97	309	0.0
1211	320	3.2	8.95	1.245	4.65	6.97	306	

1230 Sample MW45-3-1 OB052
-2 OB053
-3 OB054
-4 OB055

KKS 12-29-96

12-29-96 S

1330 Setup at MW-14 5' Screen
Static = 3.13' PDW = 10.58
Column = 7.45 Volume 1.2
Pump Intake @ 8.0'
(TOC, TOX) Sample to be taken
MS MSD MW-14-1 = 08056 split w/ MRD
MW-14-1-Dup = 08057 Metals + CN Only
MW-14-2 = 08058
MW-14-3 = 08059
MW-14-4 = 08060
Matrix Spike triplicate TOC + TOX
1400 Start Pump
Parameter for MW-14

Time	Rate	Vol	Temp	Cond	DO	pH	Redox	Turbidity
1411	470	.75	6.31	1.007	1.47	6.84	310	125
416	500	1.3	6.66	1.008	1.15	6.83	310	66
21	600	2.25	6.79	1.008	1.13	6.84	309	36.7
426	600	2.80	6.87	1.007	1.07	6.83	309	22.6
133	600	3.50	6.90	1.007	.87	6.83	308	14.3
38	500	4.5	7.00	1.004	.82	6.83	309	8.7
141	500	4.75	6.92	1.006	.85	6.83	309	6.0

1445 Sample MW-14

12-29-96

1520 Return to MW-45-2
Continue sampling
2 TOX + rest of samples
1620 Leave OB/QD
1635 At Trailer
Check NTU Calibration
Std 4.4 = 3.5
Pack Samples on ice
0630 Leave Site

Parameter	Standard	Reading	Set to	Reading
pH	7.00	7.06	7.00	7.00
	10.00	10.01	—	—
Cond. (mS/cm)	1.015	1.039	1.015	
Turbidity (NTU's)	0.16	0.0	0.1	0.1
	4.64	7.8	4.6	4.5
	40.5	28.0	40.5	40.5
Redox mV	25°C/pH 4 462	470	462	462
	25°C/pH 7 285	278	285	285
	Zobel/17°C 448	448	—	—
DO mg/l	16°C/9.87	9.84	9.87	9.87

12-30-96

0710 On Site

Hydro lab calibration

PROJECT NO. ...769 ...001/...

27 Dec 96

QUARTERLY
4TH 1996 (CW)

Kerry Smith + Carl Wolff

07^{00} - 14^{00} - Drive to SEAD.

14^{30} - Arrive onsite. Visit BLDG 323. Drop supplies at 1st trailer. Inspect equipment. Call Rob K. to get sequence + LIMS No.

15^{00} - 17^{00}

Mob for site work on Saturday. Prep bottles: Check inventory.

17^{00} - Prep calibration solutions + standards

(1) Turbidity (from 4000NTU stock)
40 = 41.3 NTU ✓
4 = 4.41 NTU ✓

27 Dec 96

CAW, KS

also prepped pH, COND STANDARDS.

1830 - Leave Site

---

28 Dec 96

40s, cloudy

→ 0800 - Enter Site

→ 0810 - Mob for field work.

→ 0815 - 0930

↳ Calibrate Hydrolab (KS)

De-Con Pumps + WL Probes (CAW)

Park Truck

930 - Enter Post 5

945 - Enter OB/OD. Do water levels

* MW-25	4.38'	
MW-26	3.54'	
MW-38	2.78'	
MW-23	3.83'	
MW-15	2.78'	- Riser exposed.
MW-6	- Could not access	- Riser blocked casing cap.
MW-28	3.77'	
MW-29	2.98'	
MW-9	2.83'	
MW-31	2.82'	- No lock

* all levels are to below top of riser.

28 Dec 96

MW-1 7.52'
MW-8 3.14' - NO LOCK
MW-10 2.30'
MW-30 3.80' - LOCK DOES NOT CLOSE
MW-40 3.66'

MW-45-1 7.36' - ~~[illegible]~~
MW-45-2 9.10'
MW-45-3 7.62'

12~~15~~ - SAMPLE MW 45-4
13~~3~~30 - Fill MW 45-4 Bottles

~~[illegible]~~

14[10] - Leave OB/OD.
14[20] - Rtn to Trailer.
Recieve Phone Message

OB043 = MW 45-4
AL040 = 1st Ash Sample

28 Dec 96

→ 14[20] - 15[30]
Pack Samples / Decon Equip.
Prep for Sunday

29 Dec 96 Cloud, min 40s

0730 – Enter Site. Go to Trailer.

0730 - 0900 – Prep for wells. ORGANIZE BOTTLES. CALIBRATE HYDRO LAB.

0900 - TAKE RINSATE SAMPLE MW-114R.

0930 – Enter POST 5

0940 – Enter [redacted] OB/OD. GW

0940 - 0800 SAMPLE
MW 45-1 – DRY
MW 45-2 - SAMPLED
MW 45-3 – SAMPLED
MW 14 – SAMPLED, QC
- See KS notes -

1600 - 1830 PACK SAMPLES, ORGANIZE, DECON, C-O-C.

30 Dec 96 Cloudy, 30s

0715 - Arrive @ Trailer. Prep for sampling

0910 Setup @ MW-13 OB/OD
Static - 2.48 POW = 10.00
Column = 7.52' Volume = 1.2 gal
Pump Intake = 8'

0928 Start Pump 600 ml/min
Fast Recovering well - no drawdown
Parameters @ MW-13

Time	Rate	Vol	Temp	Cond	DO	pH	Redox	Turbidity
0938	600	1.2	7.02	.920	.72	6.62	315	3.5
0943	600	2.2	7.05	.920	.61	6.62	315	1.3
0948	500	2.9	7.16	.916	.43	6.61	319	0.9
0951	500	3.25	7.15	.917	.48	6.62	320	1.0
0954	500	3.7	7.15	.917	.45	6.61	320	0.9

Sample @ MW-13 1000
Sample #'s OB061
OB062
OB063
OB064

12-30-96

Time	Rate	Vol	T	Cond	DO	pH	Redox	Turb
1308	500	0.5	8.38	0.806	0.71	6.86	302	2.2
1315	500	1.3	8.67	0.812	0.36	6.87	304	1.5
1320	500	2.0	8.80	0.818	0.22	6.89	304	1.4
1325	500	2.7	8.86	0.825	0.21	6.91	304	1.5
1330	500	3.3	8.81	0.831	0.16	6.92	304	1.6
1334	500	3.7	8.73	0.834	0.16	6.93	304	1.6
1337	500	4.0	8.81	0.834	0.17	6.94	304	1.6

1345 Sample MW-27 OB/OD
Sample #'s OB069
OB070
OB071
OB072

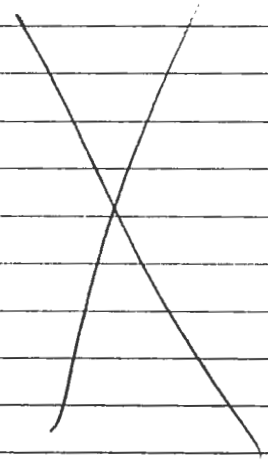
12-30-96

1400 Left OB/OD

1430 Left @ Post 5

1430-1830 C-O-C, Pack Samples for Shipment to ITS

1830-1930 Transport to FedEx Syracuse



12-31-96

0700 - 1400 Drive from Syracuse, NY to Boston, MA.

2. Chain-of-Custody Forms

CHAIN-OF-CUSTODY RECORD

...SONS
...ING-SCIENCE, INC.
Phone: 617-859-2000
...99 Fax: 617-859-2043

JOB NO. 730769-01001
PROJECT SEAD 4th 1/4 '96 OB/OD
CONTACT Mike Duchesneau

LABORATORY ITS
ADDRESS Chris Oulbette
CONTACT Colchester, [illegible]

NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH + Spec. Cond.	NO. OF CONTAINERS	COMMENTS (Special instructions, ca...)
[illegible]3		12-28-96	1330		water			X		X			X	X	X	6	
[illegible]4		↓	↓		↓								X	X	X	4	
[illegible]5		↓	↓		↓								X	X	X	4	
[illegible]6		↓	↓		↓								X	X	X	4	

KKS

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH + Spec. 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			40 ml	250 ml	1L

Relinquished by: [illegible] ...y Smith ...ons ES [illegible]8-96 Time 1500

Received by
Sign
Print
Firm
Date Time

...y
Received by
Sign
Print
Firm
Time Date Time

...mples tampered with? ☐ No ☐ Yes
...in 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... nonstandard sample...)
Keep Coole[d]

Cooler #:

White - return with data Yellow - lab copy Pink - Sampler copy

CHAIN-OF-CUSTODY RECORD

SONS
ING-SCIENCE, INC.
Phone: 617-859-2000
99 Fax: 617-859-2043

JOB NO. 730769 - 01001
PROJECT SEAD 4th Quarterly Monitoring '96 - 08/OD
CONTACT M. Duchesneau

LABORATORY ITS
ADDRESS Colchester, VT
CONTACT Chris Oullette

NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB		TOC	TOX	pH and Sp. Cond.	NO. OF CONTAINERS	COMMENTS (Special Instructions)
69		12-30-96	1345		water			X		X			X	X	X	6	
70		↓	↓		↓								X	X	X	4	
71													X	X	X	4	
72													X	X	X	4	
65			1145					X		X			X	X	X	6	
6			↓										X	X	X	4	
67													X	X	X	4	
8		↓	↓		↓								X	X	X	4	

KKS

	VOA	SVOC	METALS	PEST/PCB	CN	HERB		TOC	TOX	pH and Sp. 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			40 ml	250 ml	1 L

Relinquished by
... Smith
... Engineering Science
...96 Time 1600

Received by
Sign
Print
Firm
Date Time

...by

Received by
Sign
Print
Firm
Time Date Time

...mples tampered with? ☐ No ☒ Yes
...in 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: (Sampl... nonstandard sample...
Keep Cooler ...
Sample #OB07...
last sample in ...
OB/OD SDG...
(Numerically ...

Cooler #:

...1 White - return with data Yellow - lab copy Pink - Sampler copy

CHAIN-OF-CUSTODY RECORD

...RSONS
...RING-SCIENCE, INC.
Phone: 617-859-2000
Fax: 617-859-2043

JOB NO. 730769 - 01001
PROJECT SEAD 4th Quarterly Monitoring '96 - OB/OD
CONTACT Mike Duchesneau

LABORATORY ITS
ADDRESS Colchester VT
CONTACT Chris Oullette

...NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH + Spec. Cond.	NO. OF CONTAINERS	COMMENT... (Special instructions, ...)
...		12-29-96	1445		Water			X		X			X	X	X	12	Matrix Spi...

KS

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH + Spec. 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			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

Relinquished by [signature]
...ry Smith
...s Engineering Science
...-96 Time 16:00

Received by
Sign
Print
Firm
Date Time

...by
Time

Received by
Sign
Print
Firm
Date Time

...amples tampered with? ☐ No ☐ Yes
...ain in remarks.

REMARKS: (Sampl... nonstandard sampl...
Keep Coole...

Cooler #:

...C1 White - return with data Yellow - lab copy Pink - Sampler copy

CHAIN-OF-CUSTODY RECORD

PAGE 2 OF 2

SONS
ING-SCIENCE, INC.
Phone: 617-859-2000
99 Fax: 617-859-2043

JOB NO. 730769-0100
PROJECT SEAD 4th Quarterly Monitoring '96 - 98/00
CONTACT Mike Duchesneau

LABORATORY ITS
ADDRESS Colchester, VT
CONTACT Chris Ouellette

NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSES VOC	SVOC	METALS	PESTICIDES	CN	HERB	TPH	TOC	TOX	pH and Specific Conductance	NO. OF CONTAINERS	COMMENT (Special instructions, ca
1		12-30-96	1000		water			X		X			X	X	X	6	
2		↓	↓		↓								X	X	X	4	
3													X	X	X	4	
4													X	X	X	4	

VOA Vial	X
Glass Bottle	X
Plastic Bottle	X X X
Preservative	A A A A E A E
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

Relinquished by
Sign
Print
Firm
Date -96 Time 1600

Received by
Sign
Print
Firm
Date Time

Relinquished by
Time

Received by
Sign
Print
Firm
Date Time

mples tampered with? ☐ No ☐ Yes
in in remarks.

REMARKS: (Sample nonstandard sample
Keep the co

Cooler #:

White - return with data Yellow - lab copy Pink - Sampler copy

CHAIN-OF-CUSTODY RECORD

...SONS
...ING-SCIENCE, INC.
Phone: 617-859-2000
Fax: 617-859-2043

JOB NO. 730769-01001
PROJECT SEAD 4th Quarterly Monitoring 96 - 08/OD
CONTACT Mike Duchesneau

LABORATORY ITS
ADDRESS Colchester VT
CONTACT Chris Oullette

NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH and Spec Cond	NO. OF CONTAINERS	COMMENTS (Special instructions, ca...)
[illegible]		6-29-96	0900		water			X		X			X	X	X	6	Rinsate
[illegible]		↓	1445		↓								X	X	X	4	
[illegible]		↓	↓		↓								X	X	X	4	
[illegible]		↓	↓		↓								X	X	X	4	
[illegible]		↓	↓		↓			X		X						2	

KS

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH and Spec Cond
VOA Vial								X		
Glass Bottle									X	
Plastic Bottle			X		X					X
Preservative			A D		A F			* 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... nonstandard sample...)
Keep cooler

Cooler #:

Relinquished by ... Smith ... Engineering Science ...-96 Time 1600

Received by Sign Print Firm Date Time

... Time

Received by Sign Print Firm Date Time

...mples tampered with? ☐ No ☐ Yes
...n in remarks.

CHAIN-OF-CUSTODY RECORD

PAGE 2 OF 2

…SONS
…ING-SCIENCE, INC.
Phone: 617-859-2000
…99 Fax: 617-859-2043

JOB NO. 730769-01001
PROJECT SEAD 4th Quarterly Monitoring 1996 OB Ø D
CONTACT Mike Duchesneau

LABORATORY ITS
ADDRESS Colchester, VT
CONTACT Chris Oullette

…NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH and Spec. Cond.	NO. OF CONTAINERS	COMMENTS (Special Instructions, ca…
…8		12-29-96	1100		Water			X		X			X	X	X	6	
…9		↓	↓		↓								X	X	X	4	
…50		↓	↓		↓								X	X	X	4	
…51		↓	↓		↓								X	X	X	4	

KS

	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH and Spec. 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			40 ml	250 ml	1 L

Relinquished by
Sign … Smith
Print
Firm …s Engineering Science
Date …-96 Time 1600

Received by
Sign
Print
Firm
Date Time

Relinquished by…
Time

Received by
Sign
Print
Firm
Date Time

…mples tampered with? ☐ No ☐ Yes
…n 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… nonstandard sample…
pH and Spec. Co…
filled 1/2 full
OB048 - 51
Keep Cooler

Cooler #:

CHAIN-OF-CUSTODY RECORD

SONS
ING-SCIENCE, INC.
99
Phone: 617-859-2000
Fax: 617-859-2043

JOB NO. 730769-01001
PROJECT SEAD 4+6 Quarterly Monitoring '96 - OB/OD
CONTACT M. Duchesneau

LABORATORY MRD
ADDRESS Omaha, NB
CONTACT Sample Custodian

NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PESTICIDES	CN	HERB	TPH	TOC	TOX	pH & Spec. Cond.	NO. OF CONTAINERS	COMMENTS (Special Instructions, ca...)
		12-29-96	1445		water			X		X			X	X	X	6	sample split fr...
		12-29-96	0900		water			X		X			X	X	X	6	Rinsate

	VOA	SVOC	METALS	PESTICIDES	CN	HERB	TPH	TOC	TOX	pH & Spec. 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			3 x 40 ml	1 L	1 L

Relinquished by
Sign
Print ...y Smith
Firm ...s Engineering Science
Date ...-96 Time 1600

Received by
Sign
Print
Firm
Date Time

Relinquished by
Sign
Print
Firm
Date Time

Received by
Sign
Print
Firm
Date Time

...mples tampered with? ☐ No ☐ Yes
...in 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... nonstandard sample...)
LIMS # 430...
Return cooler
ITS
55 South Park
Colchester, VT

Cooler #:

...SONS
...NG-SCIENCE, INC.
Phone: 617-859-2000
...9 Fax: 617-859-2043

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 1

JOB NO. 730765-01001	LABORATORY ITS
PROJECT SEAD 4th Quarterly Monitoring '95 - 08/OD	ADDRESS Colchester Vt
CONTACT Mike Duchesneau	CONTACT Chris Ouellette

...NO.	LABORATORY SAMPLE NO.	SAMPLING DATE	SAMPLING TIME	SAMPLE DEPTH	SAMPLE MATRIX	VOA	SVOC	METALS	PEST/PCB	CN	HERB	TPH	TOC	TOX	pH + Spec. Cond.	NO. OF CONTAINERS	COMMENTS (Special Instructions, ca...
...052		12-24-96	1230	water			X		X			X	X	X	6	
...053		↓	↓		↓			~~X~~ KKS		~~X~~ KKS			X	X	X	4	
...054		↓	↓		↓			~~X~~ KKS		~~X~~ KKS			X	X	X	4	
...055		↓	↓		↓			~~X~~ KKS		~~X~~ KKS			X	X	X	4	

KKS

Relinquished by	Received by
...y Smith	Sign
...s ES	Print
	Firm
Time 12-30-96	Date Time
	Received by
	Sign
	Print
	Firm
Time	Date Time

VOA Vial	
Glass Bottle	
Plastic Bottle	
Preservative	
Container Volume	

...mples tampered with? ☐ No ☐ Yes
...n 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... nonstandard sample...
pH/Conductivit...
for 08052 – 55...
1/2 full - slo...
Keep Cooler...

Cooler #:

APPENDIX B

Laboratory Analytical Packages with QA/QC Data

1. Sample Delivery Group No. 63260

   A. Indicator Analysis Results
   B. TAL Metals Analysis

1. Sample Delivery Group No. 63260

SAMPLE DATA SUMMARY PACKAGE
LAB CODE: INCHVT
CONTRACT NO.: 93206
CASE NO.: OBBH
SDG NO.: 63260

Inchcape Testing Services

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446
Tel. 802-655-1203
Fax. 802-655-1248

January 30, 1997

Mr. Mike Duchesneau
Parsons Engineering Science
Prudential Center
Boston, MA 02199

Re: Laboratory Project No. 93206
Case No.93206; SDG 63260

Dear Mr. Duchesneau:

Enclosed are the analytical results of samples received intact by ITS Environmental Laboratories on December 30, 1996. Laboratory numbers and quality control samples have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 12/30/96	ETR No: 63260	
322827	OB043	12/28/96	Water
322828	OB044	12/28/96	Water
322829	OB045	12/28/96	Water
322830	OB046	12/28/96	Water
	Received: 12/31/96	ETR No: 63272	
322949	OB052	12/29/96	Water
322950	OB053	12/29/96	Water
322951	OB054	12/29/96	Water
322952	OB055	12/29/96	Water
322953	OB048	12/29/96	Water
322954	OB049	12/29/96	Water
322955	OB050	12/29/96	Water
322956	OB051	12/29/96	Water

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 12/31/96	ETR No: 63272 (continued)	
322957	OB047	12/29/96	Water
322958	OB058	12/29/96	Water
322959	OB059	12/29/96	Water
322960	OB060	12/29/96	Water
322961	OB057	12/29/96	Water
322962	OB056	12/29/96	Water
322962MS	OB056MS	12/29/96	Water
322962DP	OB056REP	12/29/96	Water
322963	OB061	12/30/96	Water
322964	OB062	12/30/96	Water
322965	OB063	12/30/96	Water
322966	OB064	12/30/96	Water
322967	OB069	12/30/96	Water
322968	OB070	12/30/96	Water
322969	OB071	12/30/96	Water
322970	OB072	12/30/96	Water
322971	OB065	12/30/96	Water
322972	OB066	12/30/96	Water
322973	OB067	12/30/96	Water
322974	OB068	12/30/96	Water

The metals analysis of sample labeled OB056 exhibited zinc matrix spike recoveries outside method advisory limits. All data has been flagged to contract specifications.

Please note that the metals initial calibration verification check standard was analyzed out of sequence during the metals analysis. As indicated on the analytical run sequence, this sample was not analyzed immediately following the calibration standards.

For the benefit of interested parties, documentation of sample handling and preparation is included at the end of the "Sample Data Package." Colored sheets of paper entitled "Sample Preparation" and "Sample Handling" have been used to explicitly mark the location of these documents.

If there are any questions regarding this submittal, please contact Christopher A. Ouellette at (802) 655-1203.

Sincerely,

Karen R. Chirgwin
Laboratory Operations Director

KRC/bss

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63260
Project No.: 93206
No. Samples: 4
Arrived : 12/30/96
P.O. Number: *

Case:OBASH SDG:63260

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
322827	OB043:12/28/96 @1330(Water)	
9050	Conductivity (umhos/cm)	604
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.27
9060	Total Organic Carbon	1.0
322828	OB044:12/28/96 @1330(Water)	
9050	Conductivity (umhos/cm)	681
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.25
9060	Total Organic Carbon	1.0
322829	OB045:12/28/96 @1330(Water)	
9050	Conductivity (umhos/cm)	716
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.27
9060	Total Organic Carbon	1.0
322830	OB046:12/28/96 @1330(Water)	
9050	Conductivity (umhos/cm)	716
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.26
9060	Total Organic Carbon	1.0

< Last Page > Submitted By : Aquatec Inc.

ITS Environmental
Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63272
Project No.: 93206
No. Samples: 29
Arrived : 12/31/96
P.O. Number: *

Case:OBASH SDG:63260

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
322949	OB052:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1040
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.43
9060	Total Organic Carbon	0.9
322950	OB053:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1050
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.28
9060	Total Organic Carbon	0.9
322951	OB054:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1060
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.41
9060	Total Organic Carbon	0.9
322952	OB055:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1120
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.26
9060	Total Organic Carbon	0.8
322953	OB048:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1190
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.12
9060	Total Organic Carbon	1.2

< Cont. Next Page >

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63272
Project No.: 93206
No. Samples: 29
Arrived : 12/31/96
P.O. Number: *

Case:OBASH SDG:63260

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
322954	OB049:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1250
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.14
9060	Total Organic Carbon	0.9
322955	OB050:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1270
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.12
9060	Total Organic Carbon	0.8
322956	OB051:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1300
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.21
9060	Total Organic Carbon	1.0
322957	OB047:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	1.6
9020	Total Organic Halides	<0.02
9040	pH (std. units)	6.03
9060	Total Organic Carbon	<0.5
322958	OB058:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	946
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.19
9060	Total Organic Carbon	0.8

< Cont. Next Page >

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63272
Project No.: 93206
No. Samples: 29
Arrived : 12/31/96
P.O. Number: *

Case:OBASH SDG:63260

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
322959	OB059:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	922
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.28
9060	Total Organic Carbon	0.9
322960	OB060:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	929
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.28
9060	Total Organic Carbon	0.8
322962	OB056:12/29/96 (Water)	
9050	Conductivity (umhos/cm)	919
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.23
9060	Total Organic Carbon	0.8
322962MS	OB056MS:[MS]12/29/96 (Water)	
9020	Total Organic Halides	0.10
9060	Total Organic Carbon	10.1
322962DP	OB056REP:[REP]12/29/96 (Water)	
9050	Conductivity (umhos/cm)	928
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.24
9060	Total Organic Carbon	0.8

< Cont. Next Page >

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63272
Project No.: 93206
No. Samples: 29
Arrived : 12/31/96
P.O. Number: *

Case:OBASH SDG:63260

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
322963	OB061:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	870
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.11
9060	Total Organic Carbon	1.0
322964	OB062:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	861
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.10
9060	Total Organic Carbon	1.0
322965	OB063:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	850
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.10
9060	Total Organic Carbon	1.0
322966	OB064:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	819
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.09
9060	Total Organic Carbon	1.0
322967	OB069:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	844
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.41
9060	Total Organic Carbon	1.2

< Cont. Next Page >

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63272
Project No.: 93206
No. Samples: 29
Arrived : 12/31/96
P.O. Number: *

Case:OBASH SDG:63260

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
322968	OB070:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	841
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.39
9060	Total Organic Carbon	1.1
322969	OB071:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	753
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.41
9060	Total Organic Carbon	1.1
322970	OB072:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	809
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.42
9060	Total Organic Carbon	1.1
322971	OB065:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	725
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.52
9060	Total Organic Carbon	1.4
322972	OB066:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	747
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.45
9060	Total Organic Carbon	1.4

< Cont. Next Page >

ITS Environmental Laboratories

55 South Park Drive
Colchester, VT 05446

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 01/27/97
ETR Number : 63272
Project No.: 93206
No. Samples: 29
Arrived : 12/31/96
P.O. Number: *

Case:OBASH SDG:63260

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
322973	OB067:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	688
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.48
9060	Total Organic Carbon	1.3
322974	OB068:12/30/96 (Water)	
9050	Conductivity (umhos/cm)	729
9020	Total Organic Halides	<0.02
9040	pH (std. units)	7.49
9060	Total Organic Carbon	1.3

< Last Page > Submitted By : Aquatec Inc.

Inchcape Testing Services
Environmental Laboratories

Quality Control Summary

Project No: 93206
SDG No: 63260
Units: mg/L

Parameter	Date Analyzed	Method Preparation Blank	Laboratory Control Sample		
			Reported Value	True Value	Percent Recovery
Conductivity (umhos/cm)	12/30/96	NA	1314	1413	93.0
Conductivity (umhos/cm)	01/22/97	NA	1323	1413	93.6
pH (Std Units)	12/30/96	NA	6.00	6.00	100.0
pH (Std Units)	12/31/96	NA	6.04	6.00	100.7
Total Organic Carbon	01/14/97	< 0.5	56.7	58.4	97.1
Total Organic Carbon	01/22/97	< 0.5	55.5	58.4	95.0
Total Organic Carbon	01/22/97	< 0.5	55.2	58.4	94.5
Total Organic Halides	01/22/97	< 0.02	0.106	0.100	106.0
Total Organic Halides	01/23/97	< 0.02	0.106	0.100	106.0

Reviewed By: DEK
Date: 1/28/97

Inchcape Testing Service
Environmental Laboratories

Quality Control Summary

Project No: 93206
SDG No: 63260
Sample No: 322962
Units: mg/L

Parameter	Date Analyzed	Sample Result	Duplicate Sample Result	Relative Percent Difference	Spiked Sample Result	Spike Added	Perce Spik Recov
Conductivity (umhos/cm)	01/22/97	919	928	1.0	NA	NA	NA
pH (Std Units)	12/31/96	7.23	7.24	0.1	NA	NA	NA
Total Organic Carbon	01/14/97	0.8	0.8	0.0	10.1	10.0	93.0
Total Organic Halides	01/23/97	< 0.02	< 0.02	NA	0.10	0.10	100.(

Rev'd By: DEK
Date: 1/28/97

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH SAS No.: _____ SDG No.:63260_

OW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_OB043_____	_322827_____
_OB047_____	_322957_____
_OB048_____	_322953_____
_OB052_____	_322949_____
_OB056_____	_322962_____
_OB056D_____	_322962DP_____
_OB056S_____	_322962MS_____
_OB057_____	_322961_____
_OB061_____	_322963_____
_OB065_____	_322971_____
_OB069_____	_322967_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

ere 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:

_____

_____

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I certify that this data package is in compliance with the terms and onditions of the contract, both technically and for completeness, for ther 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 anager's designee, as verified by the following signature.

Signature: _____ Name: _____

ate: _____ Title: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB043

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322827

Level (low/med): LOW__ Date Received: 12/30/96

% 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_	130	B		P_
7440-36-0	Antimony_	5.1	U		P_
7440-38-2	Arsenic__	4.2	U		P_
7440-39-3	Barium___	27.4	B		P_
7440-41-7	Beryllium	0.20	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	120000			P_
7440-47-3	Chromium_	1.0	U		P_
7440-48-4	Cobalt___	1.0	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron_____	124			P_
7439-92-1	Lead_____	2.2	U		P_
7439-95-4	Magnesium	26000			P_
7439-96-5	Manganese	5.7	B		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	U		P_
7440-09-7	Potassium	2440	B		P_
7782-49-2	Selenium_	4.1	B		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___	11100			P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	10.7	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB047

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322957

Level (low/med): LOW__ Date Received: 12/31/96

% 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_	19.8	B		P_
7440-36-0	Antimony_	5.1	U		P_
7440-38-2	Arsenic__	4.2	U		P_
7440-39-3	Barium___	2.3	U		P_
7440-41-7	Beryllium	0.20	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	92.8	U		P_
7440-47-3	Chromium_	1.0	U		P_
7440-48-4	Cobalt___	1.0	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron_____	17.9	U		P_
7439-92-1	Lead_____	2.2	U		P_
7439-95-4	Magnesium	68.7	U		P_
7439-96-5	Manganese	0.30	U		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	U		P_
7440-09-7	Potassium	99.7	U		P_
7782-49-2	Selenium_	2.7	U		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___	282	U		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	6.3	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB048

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322953

Level (low/med): LOW__ Date Received: 12/31/96

% 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_	53.5	B		P_
7440-36-0	Antimony_	5.1	U		P_
7440-38-2	Arsenic__	4.2	U		P_
7440-39-3	Barium___	21.1	B		P_
7440-41-7	Beryllium	0.20	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	248000			P_
7440-47-3	Chromium_	1.0	U		P_
7440-48-4	Cobalt___	1.0	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron_____	69.5	B		P_
7439-92-1	Lead_____	2.2	U		P_
7439-95-4	Magnesium	55400			P_
7439-96-5	Manganese	2.1	B		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	U		P_
7440-09-7	Potassium	3670	B		P_
7782-49-2	Selenium_	2.7	U		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___	37000			P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	20.1		N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB052

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322949

Level (low/med): LOW__ Date Received: 12/31/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.7	B		P
7440-36-0	Antimony	5.1	U		P
7440-38-2	Arsenic	4.2	U		P
7440-39-3	Barium	17.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	180000			P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	44.7	B		P
7439-92-1	Lead	2.2	U		P
7439-95-4	Magnesium	64200			P
7439-96-5	Manganese	8.8	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.9	B		P
7440-09-7	Potassium	7430			P
7782-49-2	Selenium	2.7	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	16700			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.6	U		P
7440-66-6	Zinc	6.2	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB056

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322962

Level (low/med): LOW__ Date Received: 12/31/96

% 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	226			P
7440-36-0	Antimony	5.1	U		P
7440-38-2	Arsenic	4.2	U		P
7440-39-3	Barium	45.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	164000			P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	124			P
7439-92-1	Lead	2.2	U		P
7439-95-4	Magnesium	32200			P
7439-96-5	Manganese	0.68	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1550	B		P
7782-49-2	Selenium	2.7	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	31200			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.6	U		P
7440-66-6	Zinc	5.7	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB057

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322961

Level (low/med): LOW__ Date Received: 12/31/96

% 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	171	B		P
7440-36-0	Antimony	5.1	U		P
7440-38-2	Arsenic	4.2	U		P
7440-39-3	Barium	44.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	159000			P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	94.2	B		P
7439-92-1	Lead	2.2	U		P
7439-95-4	Magnesium	31300			P
7439-96-5	Manganese	0.49	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1490	B		P
7782-49-2	Selenium	2.7	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	30100			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.6	U		P
7440-66-6	Zinc	9.4	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB061

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322963

Level (low/med): LOW__ Date Received: 12/31/96

% 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_	11.8	B		P_
7440-36-0	Antimony_	5.1	U		P_
7440-38-2	Arsenic__	4.2	U		P_
7440-39-3	Barium___	81.0	B		P_
7440-41-7	Beryllium	0.20	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	154000			P_
7440-47-3	Chromium_	1.0	U		P_
7440-48-4	Cobalt___	1.0	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron_____	17.9	U		P_
7439-92-1	Lead_____	2.2	U		P_
7439-95-4	Magnesium	29100			P_
7439-96-5	Manganese	4.1	B		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	U		P_
7440-09-7	Potassium	1630	B		P_
7782-49-2	Selenium_	3.0	B		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___	15100			P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	8.5	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB065

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322971

Level (low/med): LOW__ Date Received: 12/31/96

% 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_	133	B		P_
7440-36-0	Antimony_	5.1	U		P_
7440-38-2	Arsenic__	4.2	U		P_
7440-39-3	Barium___	92.4	B		P_
7440-41-7	Beryllium	0.20	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	79500			P_
7440-47-3	Chromium_	1.0	U		P_
7440-48-4	Cobalt___	1.0	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron_____	109			P_
7439-92-1	Lead_____	2.2	U		P_
7439-95-4	Magnesium	60300			P_
7439-96-5	Manganese	0.50	B		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	U		P_
7440-09-7	Potassium	8880			P_
7782-49-2	Selenium_	2.7	U		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___	15000			P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	12.3	B	N	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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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

OB069

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Matrix (soil/water): WATER Lab Sample ID: 322967

Level (low/med): LOW__ Date Received: 12/31/96

% 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_	13.5	B		P_
7440-36-0	Antimony_	5.1	U		P_
7440-38-2	Arsenic__	4.2	U		P_
7440-39-3	Barium___	86.7	B		P_
7440-41-7	Beryllium	0.20	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	104000			P_
7440-47-3	Chromium_	1.0	U		P_
7440-48-4	Cobalt___	1.0	U		P_
7440-50-8	Copper___	1.0	B		P_
7439-89-6	Iron_____	23.3	B		P_
7439-92-1	Lead_____	2.2	U		P_
7439-95-4	Magnesium	51200			P_
7439-96-5	Manganese	50.0			P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.1	U		P_
7440-09-7	Potassium	7570			P_
7782-49-2	Selenium_	2.7	U		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___	16400			P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	5.9	B	N	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

ab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260

nitial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	26000.0	25920.00	99.7	30200.0	30070.00	99.6	29530.00	97.8	P
Antimony	250.0	248.00	99.2	300.0	295.20	98.4	292.90	97.6	P
Arsenic	250.0	249.60	99.8	100.0	98.40	98.4	97.06	97.1	P
Barium	500.0	499.70	99.9	200.0	194.70	97.4	192.60	96.3	P
Beryllium	500.0	504.60	100.9	100.0	95.57	95.6	94.08	94.1	P
Cadmium	500.0	493.00	98.6	100.0	94.05	94.0	92.43	92.4	P
Calcium	25000.0	24780.00	99.1	30200.0	29780.00	98.6	29310.00	97.1	P
Chromium	500.0	504.70	100.9	200.0	191.50	95.8	188.30	94.2	P
Cobalt	500.0	492.70	98.5	200.0	188.70	94.4	184.70	92.4	P
Copper	500.0	516.90	103.4	200.0	196.20	98.1	194.40	97.2	P
Iron	25500.0	25390.00	99.6	30200.0	29830.00	98.8	29320.00	97.1	P
Lead	1000.0	1033.00	103.3	400.0	396.40	99.1	389.10	97.3	P
Magnesium	25000.0	24580.00	98.3	30200.0	29660.00	98.2	29060.00	96.2	P
Manganese	500.0	499.60	99.9	200.0	191.50	95.8	187.80	93.9	P
Mercury	1.8	2.04	113.3	5.0	5.01	100.2	4.89	97.8	CV
Nickel	500.0	498.10	99.6	200.0	185.30	92.6	181.90	91.0	P
Potassium	25000.0	26250.00	105.0	30200.0	31410.00	104.0	31160.00	103.2	P
Selenium	250.0	239.90	96.0	100.0	100.20	100.2	98.66	98.7	P
Silver	500.0	508.30	101.7	100.0	99.25	99.2	98.60	98.6	P
Sodium	25000.0	24460.00	97.8	30200.0	29680.00	98.3	29550.00	97.8	P
Thallium	250.0	235.80	94.3	100.0	96.70	96.7	96.71	96.7	P
Vanadium	500.0	508.50	101.7	200.0	191.30	95.6	189.60	94.8	P
Zinc	500.0	510.40	102.1	200.0	198.70	99.4	196.10	98.0	P
Cyanide	40.0	35.20	88.0	150.0	129.00	86.0	130.00	86.7	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: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260

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	30570.00	101.2	31170.00	103.2	P
Antimony				300.0	301.60	100.5	307.80	102.6	P
Arsenic				100.0	99.65	99.6	101.40	101.4	P
Barium				200.0	197.40	98.7	199.70	99.8	P
Beryllium				100.0	95.61	95.6	96.39	96.4	P
Cadmium				100.0	92.25	92.2	92.08	92.1	P
Calcium				30200.0	29600.00	98.0	30060.00	99.5	P
Chromium				200.0	191.40	95.7	193.10	96.6	P
Cobalt				200.0	187.90	94.0	190.50	95.2	P
Copper				200.0	203.80	101.9	207.90	104.0	P
Iron				30200.0	30120.00	99.7	30670.00	101.6	P
Lead				400.0	400.50	100.1	406.90	101.7	P
Magnesium				30200.0	29400.00	97.4	29680.00	98.3	P
Manganese				200.0	189.10	94.6	190.40	95.2	P
Mercury				5.0	4.88	97.6			CV
Nickel				200.0	188.90	94.4	194.40	97.2	P
Potassium				30200.0	31970.00	105.9	32560.00	107.8	P
Selenium				100.0	101.90	101.9	103.00	103.0	P
Silver				100.0	100.30	100.3	101.10	101.1	P
Sodium				30200.0	30000.00	99.3	30440.00	100.8	P
Thallium				100.0	100.30	100.3	102.50	102.5	P
Vanadium				200.0	191.50	95.8	193.00	96.5	P
Zinc				200.0	202.80	101.4	206.40	103.2	P
Cyanide				150.0	130.00	86.7			AS

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

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260

Initial Calibration Source: VENTURES____

Continuing Calibration Source: SPEX_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide	120.0	109.00	90.8	150.0	134.00	89.3	133.00	88.7	AS

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

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

AA CRDL Standard Source: VENTURES____

ICP CRDL Standard Source: VENTURES____

Concentration Units: ug/L

	CRDL Standard for AA			CRDL Standard for ICP				
					Initial			Final
Analyte	True	Found	%R	True	Found	%R	Found	%R
Aluminum				400.0	474.10	118.5	491.80	123.0
Antimony				120.0	125.90	104.9	132.50	110.4
Arsenic				20.0	20.79	104.0	21.23	106.2
Barium				400.0	400.10	100.0	411.80	103.0
Beryllium				10.0	10.18	101.8	10.87	108.7
Cadmium				10.0	10.05	100.5	9.77	97.7
Calcium				10000.0	10300.00	103.0	10410.00	104.1
Chromium				20.0	20.15	100.8	20.31	101.6
Cobalt				100.0	99.86	99.9	100.60	100.6
Copper				50.0	51.83	103.7	56.71	113.4
Iron				200.0	224.10	112.0	234.80	117.4
Lead				6.0	6.58	109.7	6.54	109.0
Magnesium				10000.0	10180.00	101.8	10180.00	101.8
Manganese				30.0	30.52	101.7	30.37	101.2
Mercury	0.2	0.20	100.0					
Nickel				80.0	78.67	98.3	82.82	103.5
Potassium				10000.0	11070.00	110.7	11560.00	115.6
Selenium				10.0	12.17	121.7	12.89	128.9
Silver				20.0	19.70	98.5	19.76	98.8
Sodium				10000.0	9794.00	97.9	10030.00	100.3
Thallium				20.0	19.65	98.2	15.99	80.0
Vanadium				100.0	104.70	104.7	105.90	105.9
Zinc				40.0	41.62	104.0	43.26	108.2

3
BLANKS

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep. Blank	C	M
Aluminum	8.4	U	12.7	B	11.0	B	8.4	U	34.620	B	P
Antimony	5.1	U	5.1	U	5.1	U	5.1	U	5.100	U	P
Arsenic	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Barium	2.3	U	2.3	U	2.3	U	2.3	U	2.300	U	P
Beryllium	0.2	U	0.2	U	0.2	U	0.5	B	0.200	U	P
Cadmium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Calcium	92.8	U	92.8	U	92.8	U	92.8	U	92.800	U	P
Chromium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Copper	1.0	U	1.0	U	1.0	U	1.2	B	1.000	U	P
Iron	17.9	U	17.9	U	17.9	U	17.9	U	17.900	U	P
Lead	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Magnesium	68.7	U	68.7	U	68.7	U	68.7	U	68.700	U	P
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	2.1	U	2.1	U	2.1	U	2.1	U	2.100	U	P
Potassium	99.7	U	100.5	B	118.8	B	135.9	B	116.400	B	P
Selenium	2.7	U	3.3	B	2.7	U	3.1	B	2.700	U	P
Silver	1.0	U	1.0	U	1.0	U	-1.2	B	-1.301	B	P
Sodium	282.3	U	282.3	U	282.3	U	282.3	U	282.300	U	P
Thallium	3.7	U	3.7	U	3.7	U	3.7	U	3.700	U	P
Vanadium	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Zinc	1.8	U	1.8	U	1.8	U	1.8	U	3.440	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

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3
BLANKS

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

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			-10.2	B							P
Antimony			5.1	U							P
Arsenic			4.2	U							P
Barium			2.3	U							P
Beryllium			0.7	B							P
Cadmium			0.3	U							P
Calcium			92.8	U							P
Chromium			1.0	U							P
Cobalt			1.0	U							P
Copper			1.5	B							P
Iron			17.9	U							P
Lead			2.2	U							P
Magnesium			68.7	U							P
Manganese			0.3	U							P
Mercury				U							NR
Nickel			2.1	U							P
Potassium			226.6	B							P
Selenium			2.7	U							P
Silver			-1.3	B							P
Sodium			282.3	U							P
Thallium			3.7	U							P
Vanadium			1.6	U							P
Zinc			1.8	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: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No: _____ SDG No.: 63260_

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

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial %R	Final Found Sol. A	Final Found Sol. AB	Final %R
Aluminum	500000	490660	501000	493900.0	100.7	514800	516100.0	105.2
Antimony	0	580	-1	609.1	105.0	-1	639.2	110.2
Arsenic	0	100	-2	100.1	100.1	3	106.4	106.4
Barium	0	510	1	508.1	99.6	1	525.8	103.1
Beryllium	0	485	0	481.7	99.3	1	484.9	100.0
Cadmium	0	941	6	934.8	99.3	8	921.0	97.9
Calcium	500000	499800	531100	526300.0	105.3	519100	528500.0	105.7
Chromium	0	489	4	485.2	99.2	4	491.2	100.4
Cobalt	0	461	0	462.2	100.3	0	468.6	101.6
Copper	0	544	3	531.9	97.8	5	563.6	103.6
Iron	200000	189560	192600	192200.0	101.4	193800	198000.0	104.5
Lead	0	49	-7	43.2	88.2	-6	45.7	93.3
Magnesium	500000	518980	538200	529700.0	102.1	527200	530900.0	102.3
Manganese	0	492	-1	482.8	98.1	-1	482.4	98.0
Mercury								
Nickel	0	947	1	930.2	98.2	2	973.9	102.8
Potassium	0	0	82	69.3		135	182.0	
Selenium	0	49	-2	48.3	98.6	-1	49.8	101.6
Silver	0	212	0	208.8	98.5	-1	216.2	102.0
Sodium	0	0	-36	-40.1		-155	-11.3	
Thallium	0	100	2	103.2	103.2	1	100.3	100.3
Vanadium	0	494	0	487.5	98.7	-1	494.4	100.1
Zinc	0	1031	19	1023.0	99.2	21	1069.0	103.7

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
OB056S

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

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	2257.0000		225.7000		2000.00	101.6		P
Antimony	75-125	507.1000		5.1000	U	500.00	101.4		P
Arsenic	75-125	42.6500		4.2000	U	40.00	106.6		P
Barium	75-125	2019.0000		45.7900	B	2000.00	98.7		P
Beryllium	75-125	48.2400		0.2000	U	50.00	96.5		P
Cadmium	75-125	47.3200		0.3000	U	50.00	94.6		P
Calcium									NR
Chromium	75-125	195.6000		1.0000	U	200.00	97.8		P
Cobalt	75-125	469.4000		1.0000	U	500.00	93.9		P
Copper	75-125	250.4000		1.0000	U	250.00	100.2		P
Iron	75-125	1142.0000		124.0000		1000.00	101.8		P
Lead	75-125	19.1300		2.2000	U	20.00	95.6		P
Magnesium									NR
Manganese	75-125	476.4000		0.6810	B	500.00	95.1		P
Mercury	75-125	0.9430		0.1000	U	1.00	94.3		CV
Nickel	75-125	452.1000		2.1000	U	500.00	90.4		P
Potassium									NR
Selenium	75-125	11.6000		2.7000	U	10.00	116.0		P
Silver	75-125	50.9600		1.0000	U	50.00	101.9		P
Sodium									NR
Thallium	75-125	45.8500		3.7000	U	50.00	91.7		P
Vanadium	75-125	478.8000		1.6000	U	500.00	95.8		P
Zinc	75-125	708.1000		5.7220	B	500.00	140.5	N	P
Cyanide	75-125	41.7500		5.0000	U	50.00	83.5		AS

Comments:

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
OB056A

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

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		2365.00		225.70		2000.0	107.0		P
Antimony		519.40		5.10	U	500.0	103.9		P
Arsenic		41.00		4.20	U	40.0	102.5		P
Barium		2060.00		45.79	B	2000.0	100.7		P
Beryllium		49.53		0.20	U	50.0	99.1		P
Cadmium		48.86		0.30	U	50.0	97.7		P
Calcium									NR
Chromium		200.80		1.00	U	200.0	100.4		P
Cobalt		480.80		1.00	U	500.0	96.2		P
Copper		255.10		1.00	U	250.0	102.0		P
Iron		1174.00		124.00		1000.0	105.0		P
Lead		20.91		2.20	U	20.0	104.6		P
Magnesium									NR
Manganese		489.30		0.68	B	500.0	97.7		P
Mercury									NR
Nickel		462.40		2.10	U	500.0	92.5		P
Potassium									NR
Selenium		12.45		2.70	U	10.0	124.5		P
Silver									NR
Sodium									NR
Thallium		49.46		3.70	U	50.0	98.9		P
Vanadium		490.70		1.60	U	500.0	98.1		P
Zinc		493.90		5.72	B	500.0	97.6		P
Cyanide									NR

Comments:

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6
DUPLICATES

EPA SAMPLE NO.

OB056D

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

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	225.7000		289.5000		24.8		P
Antimony		5.1000	U	5.1000	U			P
Arsenic		4.2000	U	4.2000	U			P
Barium		45.7900	B	46.0400	B	0.5		P
Beryllium		0.2000	U	0.2000	U			P
Cadmium		0.3000	U	0.3000	U			P
Calcium		163700.0000		162400.0000		0.8		P
Chromium		1.0000	U	1.0000	U			P
Cobalt		1.0000	U	1.0000	U			P
Copper		1.0000	U	1.0000	U			P
Iron	100.0	124.0000		155.3000		22.4		P
Lead		2.2000	U	2.2000	U			P
Magnesium		32220.0000		32010.0000		0.7		P
Manganese		0.6810	B	0.8560	B	22.8		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		2.1000	U	2.1000	U			P
Potassium		1547.0000	B	1604.0000	B	3.6		P
Selenium		2.7000	U	3.0500	B	200.0		P
Silver		1.0000	U	1.0000	U			P
Sodium		31170.0000		31150.0000		0.1		P
Thallium		3.7000	U	3.7000	U			P
Vanadium		1.6000	U	1.6000	U			P
Zinc		5.7220	B	7.5200	B	27.2		P
Cyanide		5.0000	U	5.0000	U			AS

7
LABORATORY CONTROL SAMPLE

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

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	51440.00	100.9						
Antimony	2000.0	2035.00	101.8						
Arsenic	1050.0	1065.00	101.4						
Barium	500.0	498.70	99.7						
Beryllium	500.0	499.00	99.8						
Cadmium	525.0	513.20	97.8						
Calcium	50000.0	49940.00	99.9						
Chromium	500.0	497.80	99.6						
Cobalt	500.0	482.90	96.6						
Copper	500.0	516.50	103.3						
Iron	50500.0	50200.00	99.4						
Lead	1015.0	1028.00	101.3						
Magnesium	50000.0	49560.00	99.1						
Manganese	500.0	493.70	98.7						
Mercury	1.0	0.95	94.9						
Nickel	500.0	485.30	97.1						
Potassium	50000.0	51200.00	102.4						
Selenium	525.0	520.40	99.1						
Silver	500.0	541.00	108.2						
Sodium	50000.0	51150.00	102.3						
Thallium	550.0	534.50	97.2						
Vanadium	500.0	498.80	99.8						
Zinc	500.0	508.70	101.7						
Cyanide									

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8
STANDARD ADDITION RESULTS

Lab Name: ITS_ENVIRONMENTAL________ Contract:93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.:______ SDG No.:63260_

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.

OB056L

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

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	225.70		323.70	B	43.4		P
Antimony	5.10	U	25.50	U			P
Arsenic	4.20	U	21.00	U			P
Barium	45.79	B	44.95	B	1.8		P
Beryllium	0.20	U	1.00	U			P
Cadmium	0.30	U	1.50	U			P
Calcium	163700.00		158100.00		3.4		P
Chromium	1.00	U	5.00	U			P
Cobalt	1.00	U	5.00	U			P
Copper	1.00	U	5.00	U			P
Iron	124.00		145.50	B	17.3		P
Lead	2.20	U	11.00	U			P
Magnesium	32220.00		31420.00		2.5		P
Manganese	0.68	B	1.50	U	100.0		P
Mercury							NR
Nickel	2.10	U	10.50	U			P
Potassium	1547.00	B	1980.00	B	28.0		P
Selenium	2.70	U	13.50	U			P
Silver	1.00	U	5.00	U			P
Sodium	31170.00		29820.00		4.3		P
Thallium	3.70	U	18.50	U			P
Vanadium	1.60	U	8.00	U			P
Zinc	5.72	B	9.93	B	73.6		P

10
Instrument Detection Limits (Quarterly)

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

CP ID Number: ICP4_TJA_61E Date: 01/01/97

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	8.4	P
Antimony	206.84		60	5.1	P
Arsenic	189.04		10	4.2	P
Barium	493.41		200	2.3	P
Beryllium	313.04		5	0.2	P
Cadmium	226.50		5	0.3	P
Calcium	317.93		5000	92.8	P
Chromium	267.72		10	1.0	P
Cobalt	228.62		50	1.0	P
Copper	324.75		25	1.0	P
Iron	271.44		100	17.9	P
Lead	220.35		3	2.2	P
Magnesium	279.08		5000	68.7	P
Manganese	257.61		15	0.3	P
Mercury			0.2		NR
Nickel	231.60		40	2.1	P
Potassium	766.49		5000	99.7	P
Selenium	196.03		5	2.7	P
Silver	328.07		10	1.0	P
Sodium	330.23		5000	282.3	P
Thallium	190.86		10	3.7	P
Vanadium	292.40		50	1.6	P
Zinc	213.86		20	1.8	P

Comments:

10
Instrument Detection Limits (Quarterly)

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

ICP ID Number: _____ Date: 01/01/97

Flame AA ID Number : CV1_PS200II_

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: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

ICP ID Number: _____ Date: 01/01/97

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: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

ICP ID Number: ICP4 TJA 61E Date: 01/01/97

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: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

ICP ID Number: ICP4 TJA 61E Date: 01/01/97

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:

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.: 63260_

ICP ID Number: ICP4 TJA 61E Date: 01/01/97

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	20000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	10000.0	P
Cadmium	10.00	10000.0	P
Calcium	10.00	500000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	50000.0	P
Copper	10.00	100000.0	P
Iron	10.00	500000.0	P
Lead	10.00	100000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Mercury			NR
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	4000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	10000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	4000.0	P

Comments:

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PREPARATION LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:63260_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	01/09/97		100
OB043	01/09/97		100
OB047	01/09/97		100
OB048	01/09/97		100
OB052	01/09/97		100
OB056	01/09/97		100
OB056D	01/09/97		100
OB056S	01/09/97		100
OB057	01/09/97		100
OB061	01/09/97		100
OB065	01/09/97		100
OB069	01/09/97		100
PBW	01/09/97		100

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PREPARATION LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:63260_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	01/08/97		100
OB043	01/08/97		100
OB047	01/08/97		100
OB048	01/08/97		100
OB052	01/08/97		100
OB056	01/08/97		100
OB056D	01/08/97		100
OB056S	01/08/97		100
OB057	01/08/97		100
OB061	01/08/97		100
OB065	01/08/97		100
OB069	01/08/97		100
PBW	01/08/97		100

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PREPARATION LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:63260_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	01/02/97		250
OB043	01/02/97		250
PBW	01/02/97		250

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PREPARATION LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.:_OBASH_ SAS No.: _____ SDG No.:63260_

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	01/10/97		250
OB047	01/10/97		250
OB048	01/10/97		250
OB052	01/10/97		250
OB056	01/10/97		250
OB056D	01/10/97		250
OB056S	01/10/97		250
OB057	01/10/97		250
OB061	01/10/97		250
OB065	01/10/97		250
OB069	01/10/97		250
PBW	01/10/97		250

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ANALYSIS RUN LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:63260_

Instrument ID Number: ICP4 TJA 61E_ Method: P_

Start Date: 01/11/97 End Date: 01/11/97

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	
S0	1.00	0841		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	0846		_	_	_	X	X	X	_	X	X	X	_	_	_	X	_	X	_	_	X	_	_	X	X
S	1.00	0850		X	_	_	_	_	_	X	_	_	_	X	_	X	_	_	_	X	_	_	X	_	_	_
S	1.00	0854		_	X	X	_	_	_	_	_	_	_	_	X	_	_	_	_	_	X	_	_	X	_	_
ICV	1.00	0859		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	0904		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	0908		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	0913		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	0918		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	0922		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	0927		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
PBW	1.00	0931		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
LCSW	1.00	0936		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB043	1.00	0940		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB052	1.00	0945		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB048	1.00	0949		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB047	1.00	0954		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB057	1.00	0958		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB056	1.00	1003		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB056L	5.00	1007		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB056A	1.00	1012		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	1016		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	1021		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB056S	1.00	1025		X	X	X	X	X	X	_	X	X	X	X	X	_	X	_	X	_	X	X	_	X	X	X
OB056D	1.00	1030		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB061	1.00	1034		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB069	1.00	1039		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	X	X	X
OB065	1.00	1043		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	1048		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1052		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1057		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1101		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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ANALYSIS RUN LOG

Lab Name: ITS_ENVIRONMENTAL________ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:63260_

Instrument ID Number: ICP4 TJA 61E_ Method: P_

Start Date: 01/11/97 End Date: 01/11/97

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
ZZZZZZ	1.00	1106																								
CCV	1.00	1110		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	1115		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	1120																								
ZZZZZZ	1.00	1124																								
ZZZZZZ	1.00	1129																								
ZZZZZZ	1.00	1133																								
ICSA	1.00	1138		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	1142		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	1147		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	1151		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	1156		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: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:63260_

Instrument ID Number: CV1 PS200II__ Method: CV

Start Date: 01/09/97 End Date: 01/09/97

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
S0	1.00	0805																X								
S0.2	1.00	0808																X								
S0.5	1.00	0810																X								
S1	1.00	0813																X								
S5	1.00	0815																X								
S10	1.00	0817																X								
ICV	1.00	0820																X								
ICB	1.00	0822																X								
CRA	1.00	0825																X								
CCV	1.00	0827																X								
CCB	1.00	0829																X								
PBW	1.00	0831																X								
LCSW	1.00	0833																X								
ZZZZZZ	1.00	0836																								
ZZZZZZ	1.00	0838																								
ZZZZZZ	1.00	0840																								
ZZZZZZ	1.00	0842																								
OB043	1.00	0844																X								
OB052	1.00	0847																X								
OB048	1.00	0849																X								
CCV	1.00	0851																X								
CCB	1.00	0853																X								
OB047	1.00	0856																X								
OB057	1.00	0858																X								
OB056	1.00	0900																X								
OB056S	1.00	0902																X								
OB056D	1.00	0905																X								
OB061	1.00	0907																X								
OB069	1.00	0909																X								
OB065	1.00	0912																X								
ZZZZZZ	1.00	0914																								
CCV	1.00	0916																X								

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ANALYSIS RUN LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:63260_

Instrument ID Number: CV1 PS200II__ Method: CV

Start Date: 01/09/97 End Date: 01/09/97

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
CCB	1.00	0918																X								

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ANALYSIS RUN LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:63260_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 01/10/97 End Date: 01/10/97

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
S0	1.00	2011																								
S10	1.00	2014																								
S50	1.00	2016																								
S100	1.00	2018																								
S200	1.00	2020																								
S300	1.00	2022																								
ZZZZZZ	1.00	2025																								
ICB	1.00	2027																								
CCV	1.00	2029																								
CCB	1.00	2031																								
ICV	1.00	2033																								
PBW	1.00	2035																								
ZZZZZZ	1.00	2037																								
ZZZZZZ	1.00	2039																								
ZZZZZZ	1.00	2042																								
ZZZZZZ	1.00	2044																								
ZZZZZZ	1.00	2046																								
ZZZZZZ	1.00	2048																								
ZZZZZZ	1.00	2050																								
ZZZZZZ	1.00	2052																								
CCV	1.00	2054																								
CCB	1.00	2056																								
OB052	1.00	2058																								
OB048	1.00	2100																								
OB047	1.00	2102																								
OB057	1.00	2104																								
OB056	1.00	2107																								
OB056D	1.00	2109																								
OB056S	1.00	2111																								
OB061	1.00	2113																								
OB069	1.00	2115																								
OB065	1.00	2117																								

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ANALYSIS RUN LOG

Lab Name: ITS_ENVIRONMENTAL_____ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: _____ SDG No.:63260_

Instrument ID Number: PS1214_____ Method: AS

Start Date: 01/10/97 End Date: 01/10/97

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
CCV	1.00	2119																							
CCB	1.00	2121																							

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ANALYSIS RUN LOG

Lab Name: ITS_ENVIRONMENTAL________ Contract: 93206_____

Lab Code: INCHVT Case No.: OBASH_ SAS No.: ______ SDG No.:63260_

Instrument ID Number: PS1214_______ Method: AS

Start Date: 01/02/97 End Date: 01/02/97

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
S0	1.00	1753																								
S10	1.00	1755																								
S50	1.00	1757																								
S100	1.00	1800																								
S200	1.00	1802																								
S300	1.00	1804																								
ICV	1.00	1806																								
ICB	1.00	1808																								
CCV	1.00	1811																								
CCB	1.00	1813																								
ZZZZZZ	1.00	1815																								
PBW	1.00	1817																								
ZZZZZZ	1.00	1819																								
ZZZZZZ	5.00	1821																								
ZZZZZZ	1.00	1823																								
OB043	1.00	1825																								
CCV	1.00	1827																								
CCB	1.00	1829																								