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NEW YORK STATE DEPARTMENT OF TRANSPORTATION

Albany, New York

POST-CLOSURE QUARTERLY LANDFILL MONITORING

Second Year - First Quarter

Harrison Subresidency

D008873 P.I.N. 8806.51.301

Town of Harrison

Westchester County, New York

February 2002

Prepared By

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Environmental Science & Engineering Consultants

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Pearl River, New York 10965

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ALBANY, NEW YORK

HARRISON SUBRESIDENCY
WESTCHESTER COUNTY
POST-CLOSURE MONITORING RESULTS

D008873, PIN 8806.51.301

SECOND YEAR, FIRST QUARTERLY REPORT

February 2002

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HARRISON SUBRESIDENCY
WESTCHESTER COUNTY
POST-CLOSURE QUARTERLY MONITORING RESULTS
SECOND YEAR, FIRST QUARTER

D008873, PIN 8806.51.301

EXECUTIVE SUMMARY

This report presents the results of the 7 and 8 November 2001 second year, first quarter post-closure sampling and monitoring conducted at the Harrison Subresidency site located in the town of Harrison, Westchester County, New York. The objectives of the post-closure sampling and monitoring program are to; 1) evaluate the environmental impacts of the landfill; 2) meet the post-closure monitoring requirements of the NYSDEC and; 3) provide NYSDEC with data to evaluate and/or modify the existing sampling and monitoring program. As part of this program six wells (LMW-2, MW-4, PC-1, PC-2, PC-3 and PC-4) and four surface water/sediment locations (SW/SD-1, SW/SD-2, SD-3 and SW/SD-4) were sampled for Target Analyte List (TAL) metals and chloride.

The analytical results indicate that the RCRA metals selenium and chromium were detected in the groundwater above their respective New York State (NYS) Class GA standard. Chromium was not detected in the filtered samples and selenium was detected in only one filtered sample, PC-2, slightly above the standard. Concentrations of iron, manganese, magnesium, sodium and thallium (which are non-RCRA constituents) were detected in excess of the NYS standards in the filtered and unfiltered groundwater samples. However, in general, the data indicates that a large portion of the TAL metals detected in the groundwater are associated with the suspended solids faction (which typically do not migrate) and were not detected in the dissolved phase or were detected at a lower concentration. Elevated levels of iron, magnesium, manganese, sodium and thallium, in the sample collected from the upgradient well LMW-2, suggest there may be a contributing external source to the concentrations detected in the downgradient wells. The Harrison Subresidency landfill is located approximately 508 ft. downgradient of a local landfill and approximately 574 ft. downgradient of the Westchester County Airport (Figure 6).

Chloride was detected in excess of the NYS standard of 250 ppm in the off-site well PC-3. The concentrations of chloride detected in this well have consistently been one order of magnitude higher than the levels detected in the other wells since the monitoring program began in October

2000. PC-3 is located near a highway and the elevated chloride levels detected in this well may be due in part to road de-icing activities in this area.

Surface water analytical results indicate that the RCRA metal lead was detected above the NYS standard in the sample collected from SW-2. However, lead was not detected in the downstream surface water sample (SW-4) which was collected from a point near a culvert that diverts the stream under Route 120 to Rye Lake. This indicates there is no off-site surface water migration of lead from the landfill. In addition, concentrations of the non-RCRA metals, iron, manganese, sodium and thallium were detected at levels that exceeded the NYS standards.

Lead and zinc were detected in two sediment samples (lead in SD-3 and zinc in SD-4) above their respective severe effect levels (SELs). However, zinc was not detected above the NYS guidance value in the corresponding surface water sample collected from SW-4. The stream at SW-3 was dry and therefore a corresponding surface water sample was not collected. Cadmium, copper, manganese and nickel were detected in the downstream sediment samples above or at their respective lowest effect levels (LELs). However, only manganese was detected above the NYS standard in the surface water samples. Manganese is not a hazardous or RCRA metal.

1.0 INTRODUCTION

1.1 Background

This report presents the results of the 7 and 8 November 2001 second year, first quarter post-closure sampling and monitoring conducted at the Harrison Subresidency site located in the town of Harrison, Westchester County, New York (Figure 1). The site, a seasonal highway maintenance support and salt storage facility operated by the New York State Department of Transportation (NYSDOT), includes approximately 2.6 acres of landfill area (Figure 2) that was closed in December 1998 in compliance with New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 360 regulations. The second year, first quarter sampling and monitoring was conducted to evaluate the environmental impacts of landfill closure through groundwater, surface water and sediment sampling, gas monitoring and a landfill inspection. The quarterly sampling and monitoring program was established to conform to the requirements of 6 NYCRR Part 360 2.15 (K).

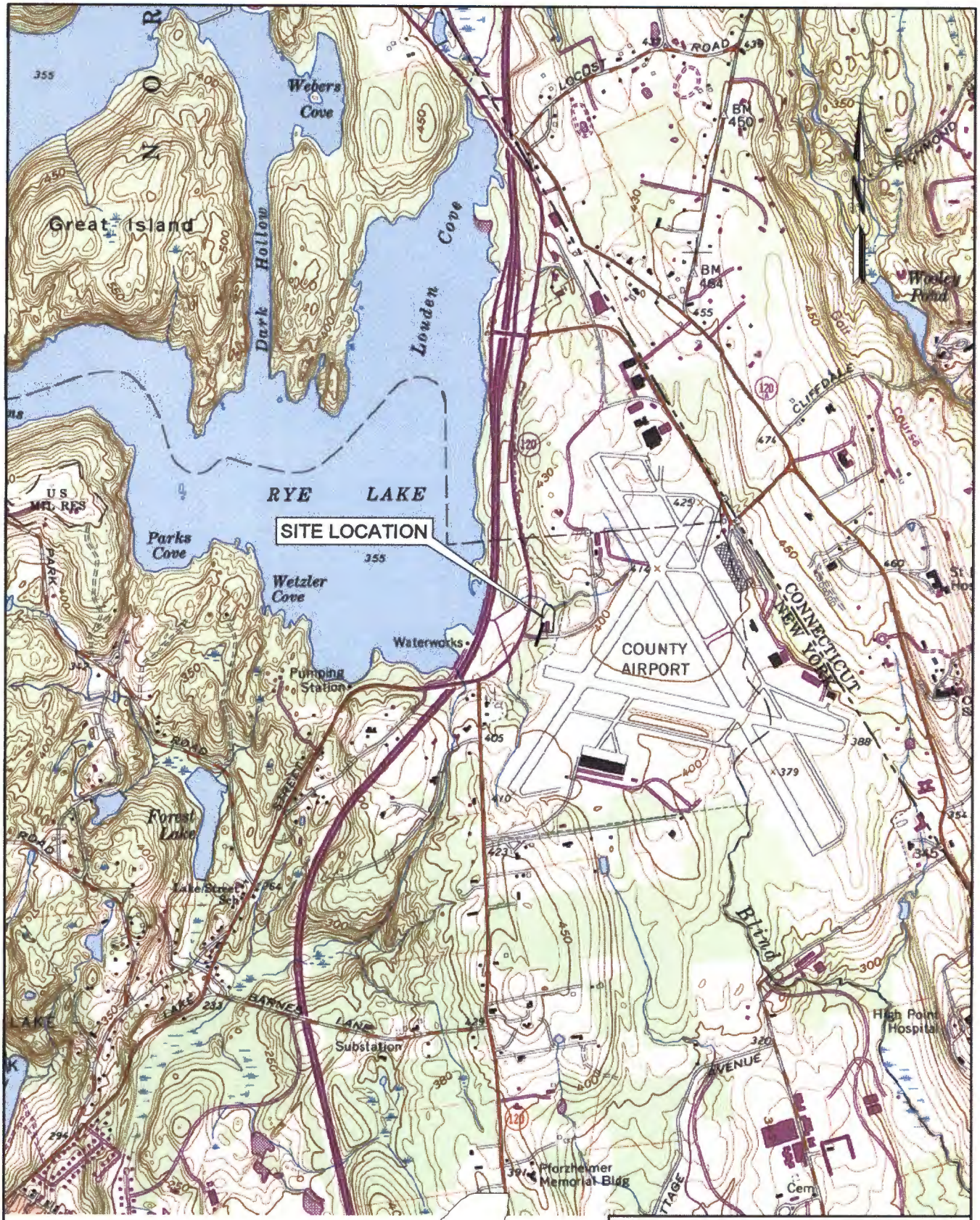
1.2 Monitoring Objectives

The objectives of the post-closure sampling and monitoring program are to; 1) evaluate the environmental impacts of the landfill; 2) meet the post-closure monitoring requirements of the NYSDEC and; 3) provide NYSDEC with data to evaluate and/or modify the existing sampling and monitoring program.

1.3 First Year Quarterly Post-Closure Monitoring

In October 2000, LMS conducted the first quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill. Samples were collected from four on-site and two off-site monitoring wells (Figure 3), three on-site surface water locations and four corresponding sediment locations (Figure 4) and analyzed for TAL metals and chloride. Analytical results indicate that, with the exception of selenium, no RCRA metals were detected above the Class GA standards or guidance values in the filtered groundwater and surface water samples. Lead, manganese and silver were detected above the Lowest Effect Level (LEL) in three sediment samples. Chloride was detected, above the Class GA standard of 250 ppm, in a groundwater sample collected from the off-site well PC-3.

In January 2001, LMS conducted the second quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill. Samples were collected from four on-



Map source: USGS 7.5 minute quadrangle map, Glenville Conn. NY, 1960
Photorevised 1971.

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Figure 1

Site Location

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN 8806.51.101

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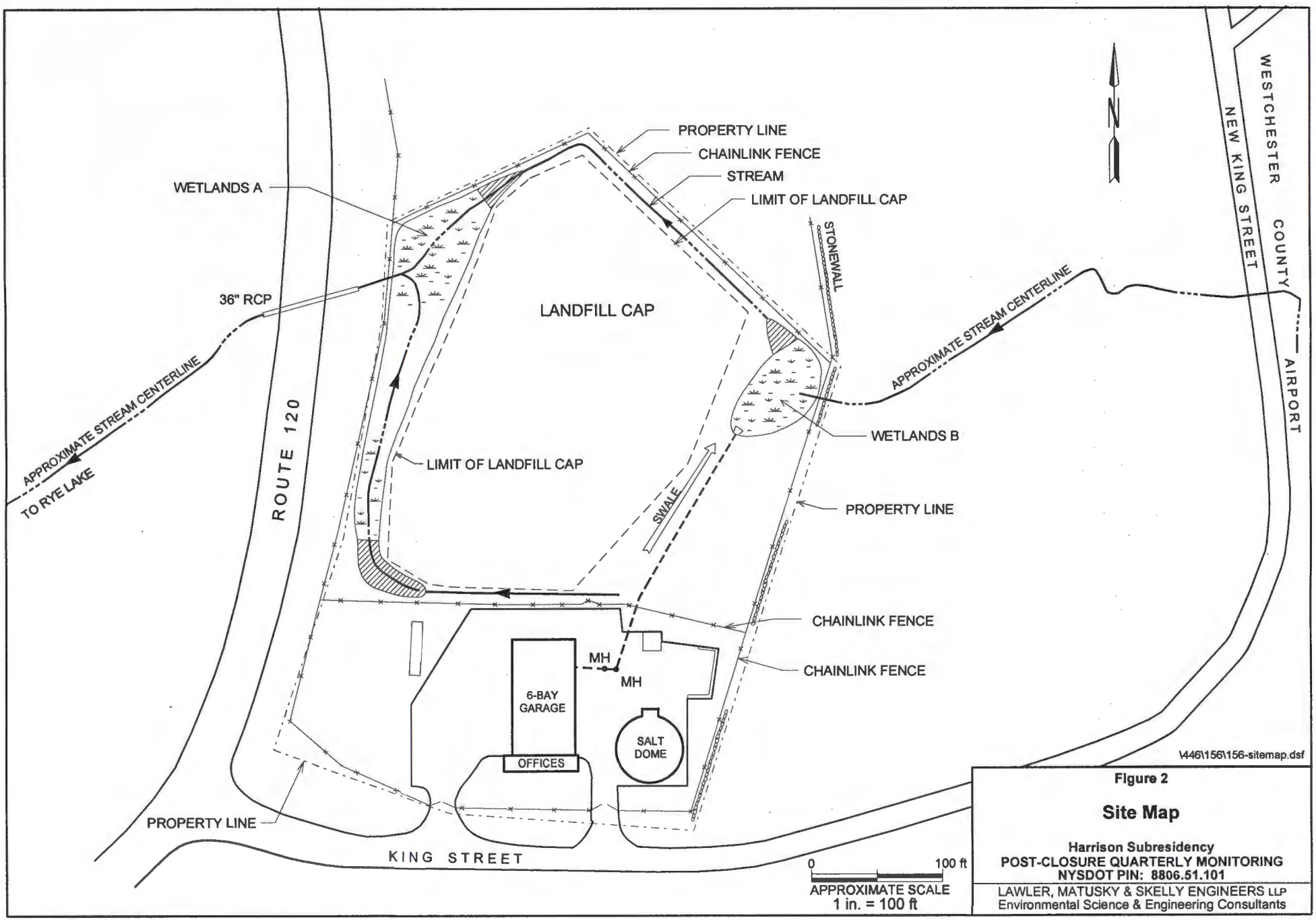
PROPERTY LINE
CHAINLINK FENCE
STREAM
LIMIT OF LANDFILL CAP
WETLANDS A
36" RCP
LANDFILL CAP
STONEWALL
APPROXIMATE STREAM CENTERLINE
TO RYE LAKE
ROUTE 120
LIMIT OF LANDFILL CAP
SWALE
WETLANDS B
PROPERTY LINE
CHAINLINK FENCE
CHAINLINK FENCE
MH
MH
6-BAY GARAGE
OFFICES
SALT DOME
PROPERTY LINE
KING STREET
NEW KING STREET
WESTCHESTER COUNTY AIRPORT
APPROXIMATE STREAM CENTERLINE
N
0
100 ft
APPROXIMATE SCALE
1 in. = 100 ft
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Figure 2
Site Map
Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN: 8806.51.101
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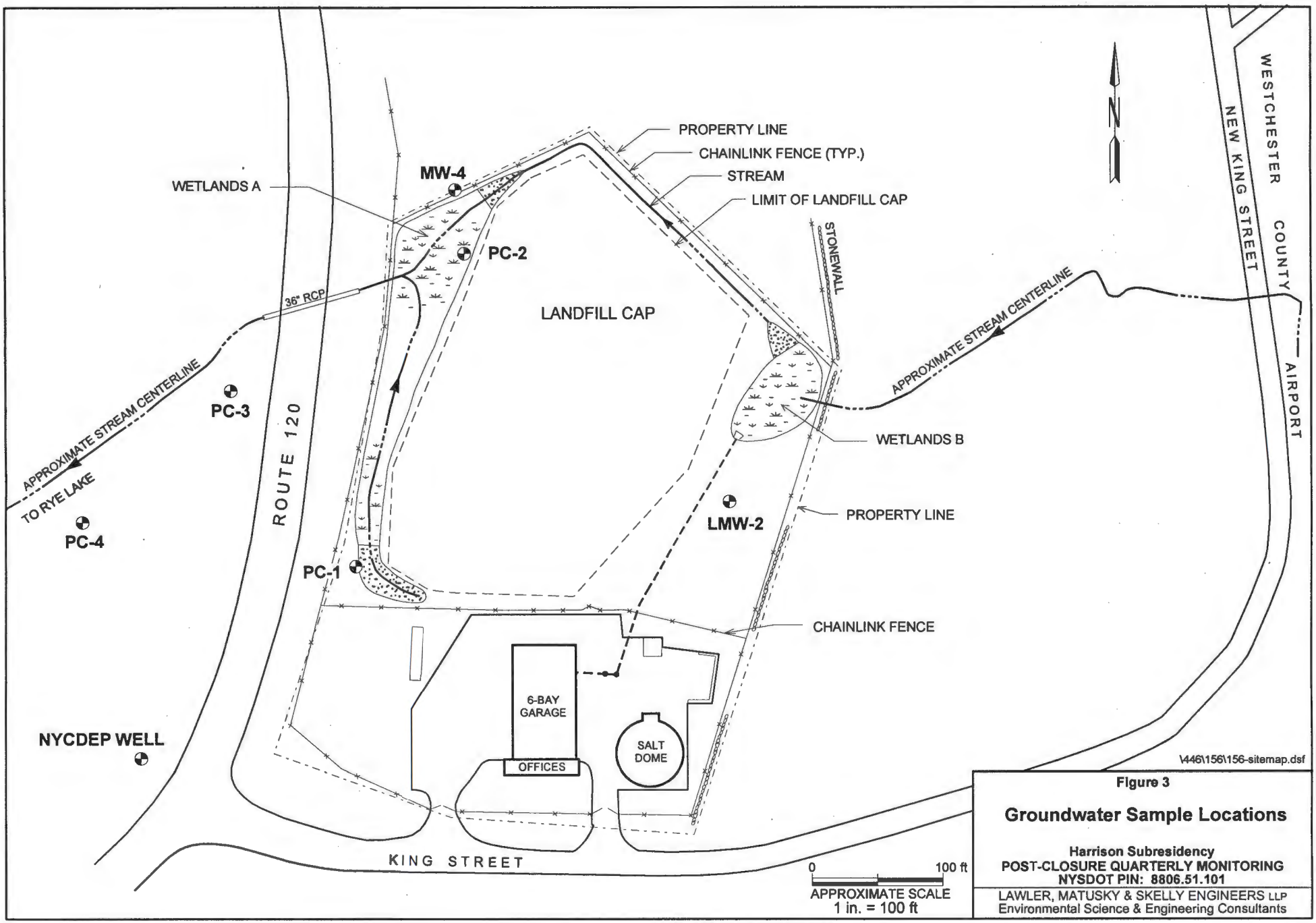

Figure 3

Groundwater Sample Locations

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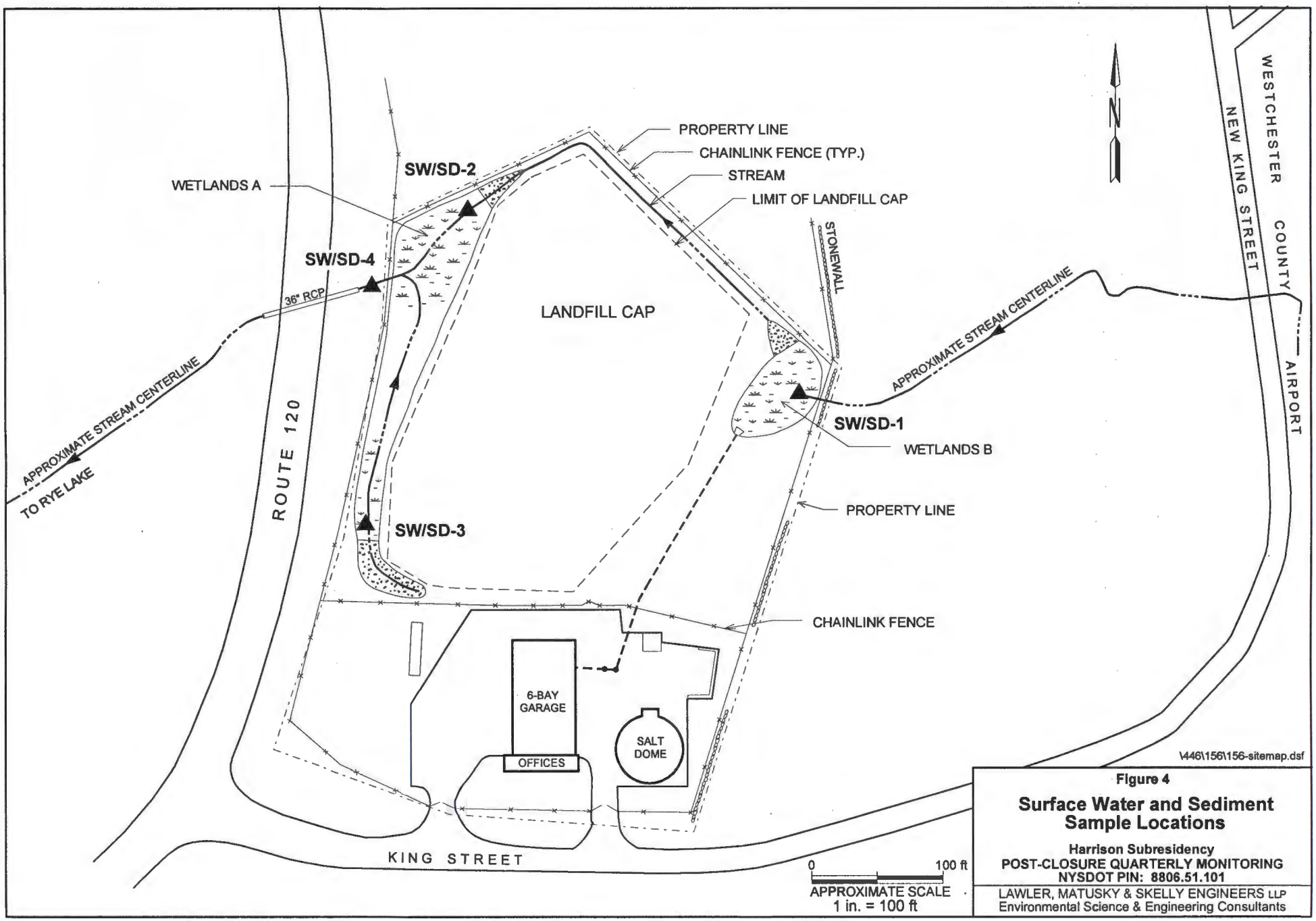

Figure 4

Surface Water and Sediment Sample Locations

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NYSDOT PIN: 8806.51.101

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site and two off-site monitoring wells, two downstream surface water locations and two corresponding sediment locations. Analytical results indicate that, with the exception of thallium, no RCRA metals were detected above the standards or guidance values in the filtered groundwater or surface water samples. No RCRA metals were detected above guidance values in the sediment.

LMS conducted the third quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill in June 2001. Samples were collected from four on-site and two off-site monitoring wells, one upstream and three downstream surface water locations and four corresponding sediment locations. With the exception of selenium, there were no exceedances of RCRA metals detected in the filtered groundwater samples. Chloride was detected at the NYS standard of 250 mg/l in the offsite well, PC-3. Results of the surface water analysis indicated that no RCRA metals exceeded the standards in the filtered samples. Copper, lead, manganese, silver and zinc were detected above the LEL in both the upstream and downstream sediment samples. Copper and zinc were detected at higher concentrations in the upstream sample, which suggests a contributing off-site source.

In August 2001, LMS conducted the fourth quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill. Samples were collected from four on-site and two off-site monitoring wells, one upstream and two downstream surface water locations and three sediment locations. Analytical results indicate that no RCRA metals were detected above the standards and guidance values in the filtered groundwater and surface water samples. Copper, iron and lead were detected in the downstream sediment samples above their respective Severe Effect Level (SEL) and antimony, arsenic, chromium, manganese, nickel and zinc were detected above the LEL. Copper was also detected above the LEL in the sample collected from the upstream location SD-1, which suggests a contributing external source. Antimony, arsenic, chromium, copper, nickel and zinc were not detected above the NYS standards and/or guidance values in the groundwater or surface water samples, which indicates there has been no off-site migration of these constituents from the landfill.

Results of the first year quarterly post-closure monitoring at the landfill suggest that a large portion of the non-RCRA metals and the majority of the RCRA metals detected in the samples collected from the landfill were associated with the suspended solids faction (suspended particulates greater than 0.45 microns) and were not detected in the dissolved phase, or were detected at lower concentrations.

2.0 FIELD INVESTIGATION

2.1 Monitoring Well Sampling

As part of the quarterly post-closure sampling and monitoring program, six monitoring wells (LMW-2, MW-4, PC-1, PC-2, PC-3 and PC-4) were purged and sampled for Target Analyte List (TAL) metals and chloride from 7 November 2001 to 8 November 2001. An additional sample, LMW-1, was collected as a blind duplicate of PC-4.

The upgradient well LMW-2 and the downgradient well MW-4 were purged dry after 2.5 and 3 gallons respectively. The wells were allowed to recharge to more than 90% before sampling. PC-1, PC-2, PC-3 and PC-4 were each purged of three well volumes prior to sampling. Purging of each well was performed by using either a small submersible pump, a peristaltic pump or by hand using a dedicated bailer. PC-2 was purged with a peristaltic pump because of a damaged casing (the well casing at PC-2 had sheared sideways allowing only a gap of about 2 cm down the well). After purging, samples were collected using dedicated disposable bailers. The samples were preserved on ice to 4°C and sent, under chain of custody, to a New York State Department of Health (NYSDOH)-approved laboratory for TAL metal (filtered and total) and chloride analyses.

A round of static water level measurements was recorded for all wells prior to sampling activities. Groundwater chemistry measurements (temperature, pH, conductivity, and turbidity) were recorded before, during, and after purging, with a measurement recorded for approximately every well volume. An additional round of static water measurements was recorded for all wells after purging. Groundwater purging information is recorded on the groundwater well sampling logs included in Attachment A.

2.2 Surface Water Sampling

On 7 November 2001 one upstream (SW-1) and two downstream (SW-2 and SW-4) surface water sampling points (Figure 4) were sampled. The stream at SW-3 was dry. All surface water samples were collected from approximately the same location staked out during the first quarterly sampling event.

SW-1 was collected from a point located at the eastern section of wetlands B. SW-2 was collected from a point located at the northern portion of wetlands A (western side of the landfill). SW-4 was collected from a point located approximately 17 ft. northeast of the 36-in. reinforced

concrete pipe (RCP) culvert that diverts the stream southwest under Route 120 to Rye Lake. The flow at SW-1, SW-2 and SW-4 was very low, <1 cubic foot per second (cfs), and limited to a small channel approximately 2 to 7 inches deep.

The samples were collected by dipping a dedicated laboratory-cleaned stainless steel ladle into the water and transferring the sample to the appropriate pre-cleaned laboratory-supplied container. The containers were iced to 4°C and sent, under chain of custody, to a NYSDOH-approved laboratory for TAL metal (filtered and unfiltered) and chloride analyses. Water chemistry measurements (temperature, pH, conductivity, and turbidity) were recorded during sample collection and are included in Attachment B.

2.3 Sediment Sampling

One upstream sediment sample (SD-1) and three downstream sediment samples (SD-2, SD-3 and SD-4) were collected for TAL metal and chloride analyses. Each sediment sample was collected subsequent to, and at the same location as, its corresponding surface water sample (Figure 4). The samples were collected using a dedicated laboratory-cleaned stainless steel spoon and placed directly into the appropriate pre-cleaned laboratory-supplied sample container. Each sample container was iced to 4°C and sent, under chain of custody, to a NYSDOH-approved laboratory for TAL metal and chloride analyses. The sample depth, texture, color and odor were noted and are included in Attachment B.

2.4 Gas Monitoring

In conformance with the June 2000 Post-Closure Operations and Maintenance Manual, a gas monitoring program was instituted to verify that any gases, produced as a result of the natural decomposition of waste, do not pose a hazard to health or safety. The program includes the measurement of concentrations of methane or other explosive gases, hydrogen sulfide and volatile organic compounds (VOCs) at each of four gas vents and around the perimeter of the landfill (Figure 5).

Methane and other explosive gases were measured with a combustible gas indicator (CGI) around the perimeter of landfill and gas vents. Gas vent readings were obtained by inserting the instrument detector probe into the vent. The CGI was set to sound an alarm if the readings exceeded 10 % of the lower explosive limit (LEL) of methane. In addition, alarms were set at 10% of the LEL of hydrogen sulfide, 25 parts per million (ppm) of carbon monoxide and 19.5%

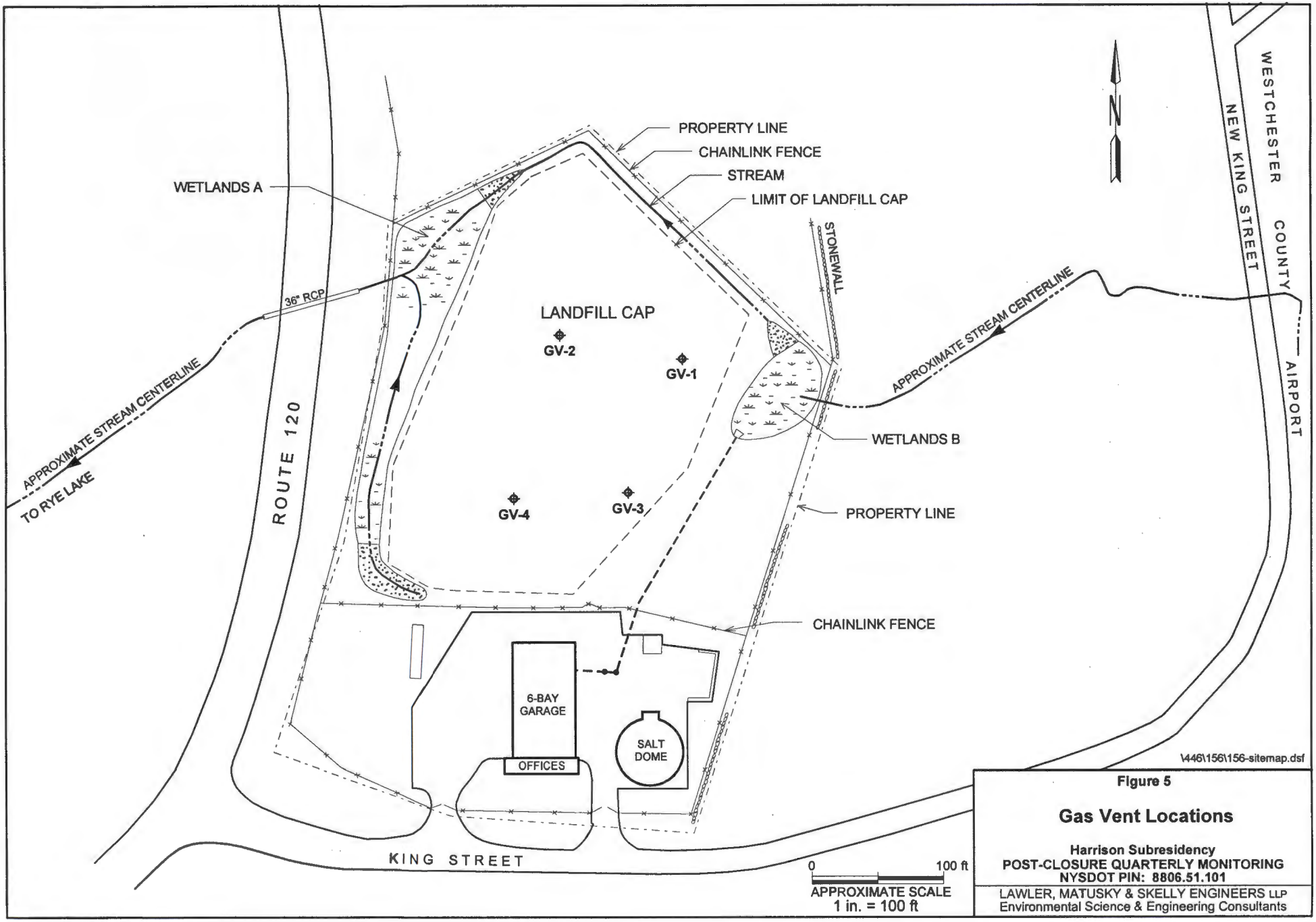

Figure 5

Gas Vent Locations

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN: 8806.51.101

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and 23.5% of oxygen. No readings were detected above the preset alarm levels at the gas vents or the perimeter of the site.

VOCs were measured with a photoionization detector (PID) and a flame ionization detector (FID) (with and without the methane filter) at the perimeter of the landfill and at each of the four gas vents. There were no readings, above background, at the vents or the perimeter of the landfill. An air monitoring field data sheet is included in Attachment C.

2.5 Inspections

All six groundwater monitoring wells were inspected and, with the exception of PC-2, were found to be in good condition. As noted in Section 2.1.1 the well casing at PC-2 had sheared sideways allowing only a gap of about 2 cm down the well. The landfill was inspected and, with the exception of a few small areas devoid of vegetation (western side of the landfill), was found to be in good condition. The drainage swales were inspected and found to be in good condition. All four gas vents were also inspected and were found to be in good condition. No vermin or vector were noted on the landfill.

3.0 ANALYTICAL RESULTS

3.1 Groundwater Results

Filtered and unfiltered groundwater samples were collected on 7 and 8 November 2001 from four on-site (LMW-2, MW-4, PC-1 and PC-2) and two off-site (PC-3 and PC-4) monitoring wells and were analyzed for TAL metals and chloride. In addition, a blind duplicate sample, LMW-1 was collected from PC-4. Groundwater samples were analyzed according to NYSDEC Analytical Services Protocol (ASP). Analytical results for the filtered and unfiltered groundwater samples are presented in Table 1 and a copy of the analytical laboratory report is presented in Attachment D. Field parameters for temperature, pH, specific conductance, and turbidity are provided on the groundwater well sampling logs included in Attachment A. Results of the analyses indicate that nineteen TAL metals were detected in the groundwater samples. Antimony, beryllium, mercury and silver were not detected in the filtered and unfiltered groundwater samples. In addition, lead was not detected in the filtered groundwater samples. With some exceptions [cadmium (LMW-1, PC-3), calcium (LMW-1, MW-4, PC-1, PC-3, PC-4), chromium (PC-2), cobalt (PC-2), manganese (MW-4), sodium (LMW-1, LMW-2, MW-4, PC-2, PC-4) and thallium (MW-4, PC-1, PC-3)] the concentrations of TAL metals detected in the filtered ground water samples were lower than those detected in the unfiltered samples.

Chloride was detected in all the unfiltered groundwater samples. The highest concentration, 330 parts per million (ppm) was detected in the off-site well PC-3.

3.2 Surface Water Results

Three surface water samples were collected on 7 November 2001 and analyzed for TAL metals (filtered and unfiltered) and chloride. Surface water samples were analyzed according to NYSDEC ASP. Analytical results are presented in Table 2 and a copy of the analytical laboratory report is presented in Attachment D. Field parameters for temperature, pH, specific conductance, and turbidity are provided on the surface water sampling logs included in Attachment B. Results of the TAL metals analyses indicate that nineteen TAL metals were detected in the surface water samples. Antimony, beryllium, mercury and silver were not detected in the filtered and unfiltered surface water samples. In addition, cadmium, cobalt, lead and nickel were not detected in the filtered surface water samples. With some exceptions [calcium (SW-1), chromium (SW-4), selenium (SW-1), sodium (SW-1) and thallium (SW-1, SW-4)] the concentrations of TAL metals detected in the filtered surface water samples were lower than those detected in the unfiltered samples.

TABLE 1

GROUNDWATER DATA SUMMARY

Second Year - First Quarter (November 2001)

Harrison Subresidency

NYSDOT

D008873, PIN 8806.51.301

PARAMETER	LMW-1	FIL LMW-1	LMW-2	FIL LMW-2	MW-4	FIL MW-4	PC-1	FIL PC-1	PC-2	FIL PC-2	PC-3	FIL PC-3	PC-4	FIL PC-4	NATURAL AMBIENT GROUNDWATER RANGES (n)	NYSDEC CLASS GA STANDARDS (a)
TAL METALS (ug/L)																
Aluminum	16000	190	4200	39	10000	ND	39000	120	110	ND	35000	48	21000	120	<5.0 - 1000	NS
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	3
Arsenic	4.1	ND	ND	ND	ND	ND	8.3	ND	ND	ND	3.3	ND	6.8	3.8	<1.0 - 30	25
Barium	200	120	220	150	280	120	470	63	180	87	530	340	260	100	10 - 500	1000
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10	3.0 GV
Cadmium	ND	0.34	0.45	ND	ND	0.23	ND	ND	ND	ND	ND	0.33	ND	ND	<1.0	5
Calcium	30000	36000	91000	91000	64000	70000	45000	47000	63000	62000	150000	160000	34000	36000	1000 - 150000	NS
Chromium	60	1.7	17	7	58	31	95	1.8	13	19	68	9.1	81	4.9	<1.0 - 5.0	50
Cobalt	8.3	0.94	5.2	0.63	21	14	24	ND	1.4	2.1	22	2.1	12	0.56	<10	NS
Copper	33	2.3	13	3.1	25	ND	96	2	ND	ND	110	ND	47	1.7	<1.0 - 3	200
Iron	24000	140	7000	22	90000	18000	70000	110	74000	27000	45000	83	31000	84	10 - 10000	300 (m)
Lead	8.2	ND	ND	ND	13	ND	20	ND	ND	ND	13	ND	15	ND	<15	25
Magnesium	16000	12000	38000	37000	23000	22000	27000	10000	22000	22000	53000	47000	19000	12000	1000 - 50000	35000 GV
Manganese	210	82	1300	650	29000	30000	3100	850	16000	16000	710	560	290	80	<1.0 - 1000	300 (m)
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	0.7
Nickel	54	10	20	12	20	ND	64	1	ND	ND	45	2.9	73	11	<10 - 50	100
Potassium	7400	5200	7400	5600	5300	3700	19000	3400	3200	3100	12000	9000	8900	5300	1000 - 10000	NS
Selenium	5	ND	ND	ND	30	3.3	18	ND	23	13	11	ND	12	ND	<1.0 - 10	10
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	50
Sodium	45000	51000	53000	55000	33000	35000	130000	130000	67000	68000	110000	110000	48000	51000	500 - 120000	20000
Thallium	ND	ND	8	4.5	54	63	2.5	4.1	47	43	ND	5.2	ND	ND	N/A	0.5 GV
Vanadium	58	18	26	16	47	12	140	12	18	16	110	23	73	17	<1.0 - 10	NS
Zinc	67	ND	32	12	56	ND	180	9.3	10	ND	100	ND	91	9.1	<10 - 2000	2000 GV
Chloride (mg/L)	91	*	25	*	48	*	95	*	70	*	330	*	89	*	N/A	250

(a) - NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1). June 1998, revised April 2000.
GV - Guidance value.
(m) - Sum of Iron and Manganese not to exceed 500 ug/L.
(n) - Dragun, J., The Soil Chemistry of Hazardous Materials.
N/A - Not applicable.
ND - Not detected at analytical detection limit.
NS - No standard.
* - Not analyzed.

TABLE 2

SURFACE WATER DATA SUMMARY

Second Year - First Quarter (November 2001)

Harrison Subresidency

NYSDOT

D008873, PIN 8806.51.301

PARAMETER	SW-1	FIL SW-1	SW-2	FIL SW-2	SW-4	FIL SW-4	NATURAL AMBIENT GROUNDWATER RANGES (n)	NYSDEC CLASS GA STANDARDS (a)
TAL METALS (ug/L)								
Aluminum	580	36	3500	36	130	34	<5.0 - 1000	NS
Antimony	ND	ND	ND	ND	ND	ND	N/A	3
Arsenic	2.5	2.7	2.8	2.3	ND	2.6	<1.0 - 30	25
Barium	35	31	110	20	28	23	10 - 500	1000
Beryllium	ND	ND	ND	ND	ND	ND	<10	3.0 GV
Cadmium	ND	ND	0.32	ND	ND	ND	<1.0	5
Calcium	45000	46000	45000	43000	45000	43000	1000 - 150000	NS
Chromium	3	2.1	12	1.9	2.3	2.4	<1.0 - 5.0	50
Cobalt	ND	ND	3.3	ND	ND	ND	<10	NS
Copper	2.9	0.88	13	0.9	1.1	0.61	<1.0 - 3	200
Iron	1200	84	8800	28	700	31	10 - 10000	300 (m)
Lead	ND	ND	34	ND	ND	ND	<15	25
Magnesium	16000	16000	16000	15000	15000	14000	1000 - 50000	35000 GV
Manganese	190	160	4000	2	100	9.7	<1.0 - 1000	300 (m)
Mercury	ND	ND	ND	ND	ND	ND	<1.0	0.7
Nickel	ND	ND	6.3	ND	ND	ND	<10 - 50	100
Potassium	4200	4000	4500	3800	3600	3600	1000 - 10000	NS
Selenium	2.9	4.6	4.9	ND	ND	ND	<1.0 - 10	10
Silver	ND	ND	ND	ND	ND	ND	<5	50
Sodium	20000	21000	20000	19000	19000	19000	500 - 120000	20000
Thallium	ND	2.8	19	ND	ND	2.2	N/A	0.5 GV
Vanadium	11	8.9	17	8.4	9.7	8.9	<1.0 - 10	NS
Zinc	19	9.6	53	ND	13	ND	<10 - 2000	2000 GV
Chloride (mg/L)	22	*	22	*	22	*	N/A	250

* - Not analyzed.

(a) - NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1). June 1998, revised April 2000.

GV - Guidance value.

(n) - Dragun, J., The Soil Chemistry of Hazardous Materials.

ND - Not detected at analytical detection limit, N/A - Not Applicable.

Chloride was detected at 22 ppm in each unfiltered surface water sample.

3.3 Sediment Data Results

Four sediment samples (one upstream and three downstream) were collected on 7 November 2001 and were analyzed for TAL metals and chloride. Sediment samples were analyzed according to NYSDEC ASP. Analytical results are presented in Table 3 and a copy of the analytical laboratory report is presented in Attachment D. Sample depths and field observations are provided on the sediment sampling logs included in Attachment B.

Seventeen TAL metals were detected in the upstream (SD-1) and downstream (SD-2, SD-3 and SD-4) sediment samples. Antimony, beryllium, mercury, silver, sodium and thallium were not detected in the sediment samples. In general, the highest concentrations of TAL metals were detected in the sample collected from SD-3.

Chloride was detected in the sample collected from the upstream location SD-1 (150 ppm) and the downstream sampling location SD-2 (89 ppm).

TABLE 3

SEDIMENT DATA SUMMARY

Second Year - First Quarter (November 2001)

Harrison Subresidency

NYSDOT

D008873, PIN 8806.51.301

PARAMETER	SD-1	SD-2	SD-3	SD-4	Sediment Criteria (a) LEL[1]	Sediment Criteria (a) SEL[2]
TAL METALS (mg/kg)						
Aluminum	8100	5100	8600	3800		
Antimony	ND	ND	ND	ND	2	25
Arsenic	ND	ND	2.4	ND	6	33
Barium	53	32	48	40		
Beryllium	ND	ND	ND	ND		
Cadmium	ND	ND	ND	0.98	0.6	9
Calcium	5700	41000	43000	40000		
Chromium	16	9.6	17	ND	26	110
Cobalt	5.2	4.7	5.7	3.9		
Copper	12	10	19	10	16	110
Iron	14000	13000	15000	11000	20000	40000
Lead	21	19	210	19	31.0	110
Magnesium	4900	23000	25000	23000		
Manganese	280	720	250	740	460	1100
Mercury	ND	ND	ND	ND	0.15	1.3
Nickel	13	12	16	12	16	50
Potassium	1200	1100	1600	860		
Selenium	ND	ND	2.4	ND		
Silver	ND	ND	ND	ND	1	2.2
Sodium	ND	ND	ND	ND		
Thallium	ND	ND	ND	ND		
Vanadium	22	ND	25	16		
Zinc	87	24	78	500	120	270
Chloride (mg/kg)	150	89	ND	ND		

(a) - NYSDEC Technical Guidance for Screening Contaminated Sediments. November 1993, revised January 1999.

1 - Lowest Effect Level

2 - Severe Effect Level

ND - Not detected at analytical detection limit.

4.0 COMPARISON TO APPLICABLE CRITERIA

4.1 Groundwater

The results of the groundwater TAL metals and chloride analyses were compared to current NYSDEC Ambient Water Quality Class GA Standards and Guidance Values (April 2000 Revision).

The results of the TAL metals analyses indicate that five non-RCRA and two RCRA metals, detected in the unfiltered and filtered samples, occurred at concentrations exceeding their respective groundwater criteria (Table 1). As stated in section 3.1, TAL metals detected in the filtered ground water samples were lower than those detected in the unfiltered samples. Groundwater turbidity, measured during sample collection, ranged from greater than 50 nephelometric turbidity units (NTUs) to less than 200 NTUs in the wells. This suggests that the majority of the TAL metals detected in the samples are associated with the suspended solids portion, which typically do not migrate with the groundwater.

Iron and manganese exceeded their combined Class GA standard of 500 parts per billion (ppb) in all but one sample (filtered PC-4 and its blind duplicate filtered LMW-1). The highest combined concentration of iron and manganese was detected in the unfiltered sample collected from MW-4. However, all the combined concentrations of iron and manganese detected in the filtered samples were lower than those detected in the unfiltered samples.

Magnesium exceeded the Class GA guidance value of 35,000 ppb in the unfiltered and filtered upgradient samples collected from LMW-2 and the samples collected from the off-site well, PC-3. The highest concentration (53,000 ppb) was detected in the unfiltered sample collected from PC-3. The associated filtered sample concentration (47,000 ppb) was lower than the unfiltered concentration but still exceeded the guidance value.

Sodium exceeded the standard of 20,000 ppb in all filtered and unfiltered groundwater samples. The highest concentration (130,000 ppb) was detected in the unfiltered and filtered samples collected from PC-1.

Thallium exceeded the Class GA guidance value of 0.5 ppb five wells. The highest concentration (63 ppb) was detected in the filtered sample collected from MW-4. Thallium was also detected in both the unfiltered and filtered samples collected from the upgradient well, LMW-2, which suggests a contributing off-site source. Thallium was detected in the filtered

samples from MW-4, PC-1 and PC-3 at higher concentrations than detected in their corresponding unfiltered samples. All five non-RCRA TAL metals were also detected above the standards and/or guidance values in the upgradient well, LMW-2 which suggests a contributing off-site source.

Two RCRA metals, chromium and selenium, were detected at concentrations exceeding their respective Class GA standards of 50 ppb and 10 ppb in the unfiltered and one filtered groundwater sample.

Chromium exceeded the Class GA standard in four unfiltered samples (MW-4, PC-1, PC-3 and PC-4). The highest concentration of chromium, 95 ppb, was detected in PC-1.

Selenium was detected above the Class GA standard in five unfiltered (MW-4, PC-1, PC-2, PC-3 and PC-4) and one filtered sample (PC-3). The highest concentration of selenium (30 ppb) was detected in the unfiltered sample collected from MW-4. Selenium was also detected above the Class GA standard in the filtered sample collected from PC-2 (13 ppb). However, the concentration of selenium detected in the corresponding unfiltered sample (23 ppb) was higher.

Chloride was detected above the Class GA standard of 250 ppm in the off-site well PC-3 (330 ppm).

4.2 Surface Water

The results of the surface water analyses were compared to current NYSDEC Ambient Water Quality Class GA Standards and Guidance Values (April 2000 Revision).

The results of the TAL metals analyses indicate that four non-RCRA metals (iron, manganese sodium and thallium) and one RCRA metal (lead) were detected in the surface water samples at concentrations exceeding their respective criteria (Table 2). Iron and manganese exceeded the combined Class GA standard of 500 ppb in the unfiltered samples collected from the upstream location, SW-1 and both downstream locations, SW-2 and SW-4. The highest combined iron and manganese concentration was detected in SW-2 (12,800 ppb). Iron and manganese were not detected above the combined standard in the filtered samples. The elevated levels of iron and manganese detected in the upstream sampling location, SW-1, suggest a contributing off-site source.

Sodium was detected at the Class GA standard of 20,000 ppb in the unfiltered sample collected from the upstream location SW-1 and above the standard in the corresponding filtered sample (21,000 ppb). Sodium was also detected at the Class GA standard in the unfiltered sample collected from SW-2. The elevated level of sodium detected in the filtered upstream sample suggests a contributing off-site source.

Thallium was detected above the Class GA guidance value of 0.5 ppb in the filtered samples collected from SW-1 (2.8 ppb) and SW-4 (2.2 ppb). Thallium was also detected above the Class GA standard in the unfiltered sample collected from the downstream sample location SW-2 at 19 ppb.

One RCRA metal, lead, was detected above the Class GA standard of 25 ppb in the unfiltered sample collected from the downstream sample location SW-2 at 34 ppb. Lead was not detected in any other surface water sample (unfiltered or filtered).

Chloride was not detected above the Class GA standard of 250 ppm in the surface water samples.

4.3 Sediment

The results of the sediment analyses (Table 3) were compared to the current NYSDEC Technical Guidance for Screening Contaminated Sediments (January 1999 Revision).

The results of the TAL metals analyses indicate that concentrations of cadmium, copper, manganese and nickel exceeded or was detected at the lowest effect level (LEL) in the downstream sample locations while lead and zinc exceeded the severe effect level (SEL) sediment criteria. Cadmium exceeded the LEL of 0.6 ppm in the downstream sampling location SD-4 (0.98 ppm). Copper exceeded the LEL of 16 ppm in the downstream sample collected from SD-3 (19 ppm). Manganese exceeded the LEL of 460 ppm in the downstream samples collected from SD-2 (720 ppm) and SD-4 (740 ppm). Nickel was detected in SD-3 at the LEL of 16 ppm. According to the NYSDEC Technical Guidance for Screening Contaminated Sediments if only the LEL criterion is exceeded, the impact to the sediment is considered moderate. When compared to the surface water and groundwater results it was noted that only the non-RCRA metal manganese was detected above the NYS standard in the surface water and groundwater samples.

Lead was detected above the SEL of 110 ppm in the downstream sample collected from SD-3 (210 ppm). Zinc was detected above the SEL of 270 ppm in the downstream sample collected

from SD-4 at 500 ppm. According to the NYSDEC Technical Guidance for Screening Contaminated Sediments, sediment that exceeds the SEL is considered to be severely impacted. However, when compared to the surface water and groundwater results it was noted that zinc was not detected above the NYS standard in the surface water or groundwater samples and lead was only detected above the NYS standard in one unfiltered surface water sample.

There is no recommended sediment criterion for chloride.

5.0 COMPARISON WITH PREVIOUS QUARTER

5.1 Groundwater

Results of the second year first quarter groundwater sampling event (November 2001) indicate that the TAL metals of concern (i.e., those metals exceeding NYSDEC standards or guidance values) show an increase in concentration of the RCRA metals chromium (in the unfiltered samples) and selenium (in unfiltered samples and one filtered sample). In addition, there has been an increase in the concentrations of iron (in the unfiltered samples), magnesium (in the filtered samples), sodium (in both filtered and unfiltered samples) and thallium (in both the filtered and unfiltered samples) since the previous sampling event (August 2001). However, the concentrations of manganese (in both the filtered and unfiltered samples) detected in the August 2001 sampling event, were higher than detected in current sampling event (November 2001). In addition, the concentration of chloride detected in PC-3 in August 2001 (580 ppm) was higher than that detected in this well (330 ppm) during the November 2001 sampling event.

5.2 Surface Water

Between August 2001 and November 2001 there has been an increase in the concentration of the RCRA metal, lead, and the non-RCRA metals, iron, manganese and thallium, detected above the standards and guidance values, in the surface water samples. However, there has been a decrease in the overall concentration of sodium. In addition, there has been a decrease in the chloride concentration detected in the upstream sample, SW-1.

5.3 Surface Sediments

Between August 2001 and November 2001 there has been a decrease in the concentrations of RCRA metals, (arsenic, chromium and lead) antimony, copper, iron, and nickel. There has been an increase in the RCRA metal cadmium and the non-RCRA metals manganese and zinc.

6.0 CONCLUSIONS

Concentrations of iron, manganese, magnesium, sodium and thallium (which are non-RCRA constituents) were detected in excess of the NYS standards in the unfiltered and filtered groundwater samples. Elevated levels of iron, magnesium, manganese, sodium and thallium, in the sample collected from the upgradient well LMW-2, suggest there may be a contributing external source to the concentrations detected in the downgradient wells. The Harrison Subresidency landfill is located approximately 508 ft. downgradient of a local landfill and approximately 574 ft. downgradient of the Westchester County Airport (Figure 6). The analytical results also indicate that concentrations of the RCRA metals, chromium and selenium were detected in excess of the NYS standards in the downgradient wells. Chromium was not detected in the filtered samples and selenium was detected, slightly above the NYS standard of 10 ug/l, in the filtered sample collected from PC-2 (13 ug/l). The filtered and unfiltered analytical results suggest that a large portion of the TAL metals, detected in the groundwater samples, is associated with the suspended solids faction (which typically do not migrate with the groundwater) and were not detected in the dissolved phase or were detected at lower concentrations.

Chloride was detected in excess of the NYS standard of 250 ppm in the off-site well PC-3. Since the monitoring program began in October 2000, the concentration of chloride in this well has consistently been one order of magnitude higher than that detected in the other wells. PC-3 is located near a highway and the elevated chloride levels detected in this well may be due in part to road de-icing activities in this area.

Surface water analytical results indicate that concentrations of the non-RCRA metals, iron, manganese, sodium and thallium were detected at levels exceeding the NYS standards. In addition, the RCRA metal lead was detected in the surface water sample collected from SW-2. Lead was not detected in the downstream surface water sample (SW-4), which was collected from a point located near a culvert that diverts the stream under Route 120 to Rye Lake. This indicates there is no off-site surface water migration of lead from the landfill.

Lead and zinc were detected in two sediment samples (lead in SD-3 and zinc in SD-4) above their respective SELs. Zinc was not detected above the NYS guidance value in the corresponding surface water sample collected from SW-4. The stream at SW-3 was dry therefore a corresponding surface water sample was not collected from this location. Cadmium, copper, manganese and nickel were detected in the downstream sediment samples above, or at, their

Source: NYSDOT 2001

V446\156...\graphics\156-site vicinity aerial.dsf

Figure 6

Harrison Subresidency Site and Vicinity

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN 8806.51.101

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York

respective LELs. However, only manganese was detected above the NYS standard in the corresponding surface water samples. Manganese is not a hazardous or RCRA metal.

ATTACHMENT A

LMS Well Sampling Log

Date: 11/07/2001
Crew: E.T., M.P.
Job No: 446-304
Project: Harrison Landfill
Project Site: Harrison NY

METERS USED

Temp.: TCL # 9
pH: 9907
Cond.: TCL # 9
Turb.: LMS

Well ID No.: LMW-2
Well Condition: Good
Well Depth/Diameter: 24.19'/2"
Well Casing Type: PVC
Screened Interval: NA
Casing Ht./Lock No.:
Reference Pt.: TOC
Depth to Water (DTW) 12.75'
Water Column Ht./Vol. 11.44'/1.9 gal.
Purge Est.: 6 gal.
Purge Method(s): Hand Bailed
Purge Date/Time(s): 11/07/2001 10:35

Depth(s):
Rates (gpm): NA
Purged Volume: 2.5 gal.
DTW After Purging: Purged dry
Yield Rate: L - M - H L
Purge Observations:
Slightly turbid.

DTW Before Sampling: 12.75'
Sample Date/Time: 11/7/01/13:30
Sampling Method: Bailer
Sampling Depth(s): 13-16'
DTW After Sampling: 12.12'
Chain-of-Custody No.(s):
Analytical Lab(s): Veritech
Sampling Observations:

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	12.6	7.1	0.678	>50<200
End	12.6	7.1	0.678	>50<200

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
Total metals	NA	HNO3	No
Filtered metals	NA	None	Yes
Cl^-	NA	None	No

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	13.3	7.3	0.877	>50<200
2.5	13.3	7.3	0.877	>50<200

Comments:

Air Temp: 60°F
Weather Conditions: Sunny/Windy

Crew Chief Signature [signature] Date: 11/7/01

LMS Well Sampling Log

Date: 11/07/2001
Crew: E.T., M.P.
Job No: 446-304
Project: Harrison Landfill
Project Site: Harrison NY

METERS USED

Temp.: TCL # 9
pH: 9907
Cond.: TCL # 9
Turb.: LMS

Well ID No.: MW-4
Well Condition: Good
Well Depth/Diameter: 15.73'/2"
Well Casing Type: PVC
Screened Interval: NA
Casing Ht./Lock No.:
Reference Pt.: TOC
Depth to Water (DTW): 7.44'
Water Column Ht./Vol.: 8.29'/1.4 gal.
Purge Est.: 4.5 gal.
Purge Method(s): Hand bailed
Purge Date/Time(s): 11/07/2001 12:20

Depth(s):
Rates (gpm): NA
Purged Volume: 3 gal.
DTW After Purging: Purged dry
Yield Rate: L - M - H H
Purge Observations:
Slightly turbid.

DTW Before Sampling: 7.44'
Sample Date/Time: 11/7/01/13:50
Sampling Method: Bailer
Sampling Depth(s): 8-12'
DTW After Sampling: 7.89'
Chain-of-Custody No.(s): NA
Analytical Lab(s): Veritech
Sampling Observations:

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	13.9	6.9	0.967	>50<200
End	13.9	6.9	0.967	>50<200

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
Total metals	NA	HNO3	No
Filtered metal	NA	None	Yes
Cl^-	NA	None	No

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	14.3	6.9	0.982	>50<200
3	14.3	6.9	0.982	>50<200

Comments:

Air Temp: 60°F
Weather Conditions: Sunny/Windy

Crew Chief Signature [signature] Date: 11.7.01

LMS Well Sampling Log

Date: 11/07/2001
Crew: E.T., M.P.
Job No: 446-304
Project: Harrison Landfill
Project Site: Harrison NY

METERS USED
Temp.: TCL # 9
pH: 9907
Cond.: TCL # 9
Turb.: LMS

Well ID No.: PC-1
Well Condition: Good
Well Depth/Diameter: 16.82'/2"
Well Casing Type: PVC
Screened Interval: NA
Casing Ht./Lock No.:
Reference Pt.: TOC
Depth to Water (DTW): 7.99'
Water Column Ht./Vol.: 8.83'/1.4 gal.
Purge Est.: 5 gal.
Purge Method(s): Hand Bailed
Purge Date/Time(s): 11/07/2001 10:50

Depth(s):
Rates (gpm): NA
Purged Volume: 6 gal.
DTW After Purging: 7.99'
Yield Rate: L - M - H H
Purge Observations:
Slightly turbid.

DTW Before Sampling: 7.99'
Sample Date/Time: 11/7/01/13:40
Sampling Method: Bailer
Sampling Depth(s): 8-12'
DTW After Sampling: 7.99'
Chain-of-Custody No.(s): NA
Analytical Lab(s): Veritech
Sampling Observations:

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	14.1	7.4	0.88	>50<200
End	14.1	7.4	0.88	>50<200

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
Total metals	NA	HNO3	No
Filtered metal	NA	None	Yes
Cl^-	NA	None	No

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	18.4	7.5	0.936	>50<200
6	18.4	7.5	0.936	>50<200

Comments:

Air Temp: 60°F
Weather Conditions: Sunny/Windy

Crew Chief Signature [signature] Date: 11/7/01

LMS Well Sampling Log

Date: 11/07/2001
Crew: E.T., M.P.
Job No: 446-304
Project: Harrison Landfill
Project Site: Harrison NY

METERS USED

Temp.: TCL # 9
pH: 9907
Cond.: TCL # 9
Turb.: LMS

Well ID No.: PC-2
Well Condition: Poor (bent)
Well Depth/Diameter: 11.49'/2"
Well Casing Type: PVC
Screened Interval: NA
Casing Ht./Lock No.:
Reference Pt.: TOC
Depth to Water (DTW): 5.62'
Water Column Ht./Vol.: 5.87'/1 gal.
Purge Est.: 5 gal.
Purge Method(s): Peristaltic pump
Purge Date/Time(s): 11/07/2001 11:10

Depth(s):
Rates (gpm): <1 gpm
Purged Volume: 5 gal.
DTW After Purging: 5.87'
Yield Rate: L - M - H M
Purge Observations:
Slightly turbid.

DTW Before Sampling: 5.62'
Sample Date/Time: 11/07/01/14:00
Sampling Method: Bailer
Sampling Depth(s): 6-10'
DTW After Sampling: 5.89'
Chain-of-Custody No.(s): NA
Analytical Lab(s): Veritech
Sampling Observations:

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	18.5	7.2	1.031	>50<200
End	18.5	7.2	1.031	>50<200

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
Total metals	NA	HNO3	No
Filtered metals	NA	None	Yes
Cl^-	NA	None	No

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	16.1	6.8	0.988	>50<200
5	16.1	6.8	0.988	>50<200

Comments:

Air Temp: 60°F
Weather Conditions: Sunny/Windy

Crew Chief Signature [signature] Date: 11/7/01

LMS Well Sampling Log

Date: 11/08/2001
Crew: E.T., M.P.
Job No: 446-304
Project: Harrison Landfill
Project Site: Harrison NY

METERS USED
Temp.: TCL # 9
pH: 9907
Cond.: TCL # 9
Turb.: LMS

Well ID No.: PC-3
Well Condition: Good
Well Depth/Diameter: 18.57'/2"
Well Casing Type: PVC
Screened Interval: NA
Casing Ht./Lock No.:
Reference Pt.: TOC
Depth to Water (DTW): 11.35
Water Column Ht./Vol.: 7.22'/1.2 gal.
Purge Est.: 5 gal.
Purge Method(s): Hand bailed
Purge Date/Time(s): 11/08/2001 9:30

Depth(s):
Rates (gpm): NA
Purged Volume: 5 gal.
DTW After Purging: 11.65'
Yield Rate: L - M - H H
Purge Observations:
Slightly turbid.

DTW Before Sampling: 11.35'
Sample Date/Time: 11/08/01/11:00
Sampling Method: Bailer
Sampling Depth(s): 12-16'
DTW After Sampling: 11.69'
Chain-of-Custody No.(s): NA
Analytical Lab(s): Veritech
Sampling Observations:

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	13.1	7.2	1.793	>50<200
End	13.1	7.2	1.793	>50<200

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
Total metals	NA	HNO3	No
Filtered metal	NA	None	Yes
Cl^-	NA	None	No

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	12.8	7.1	2.38	>50<200
5	12.8	7.1	2.38	>50<200

Comments:

Air Temp: 60°F
Weather Conditions: Sunny/Windy

Crew Chief Signature [signature] Date: 11/8/01

LMS Well Sampling Log

Date: 11/08/2001
Crew: E.T., M.P.
Job No: 446-304
Project: Harrison Landfill
Project Site: Harrison NY

METERS USED

Temp.: TCL # 9
pH: 9907
Cond.: TCL # 9
Turb.: LMS

Well ID No.: PC-4
Well Condition: Good
Well Depth/Diameter: 16.68'/2"
Well Casing Type: PVC
Screened Interval: NA
Casing Ht./Lock No.:
Reference Pt.: TOC
Depth to Water (DTW): 10.48
Water Column Ht./Vol.: 6.2'/1 gal.
Purge Est.: 5 gal.
Purge Method(s): Hand bailed
Purge Date/Time(s): 11/08/2001 9:40

Depth(s):
Rates (gpm): NA
Purged Volume: 5 gal.
DTW After Purging: 11.02
Yield Rate: L - M - H H
Purge Observations:
Slightly turbid.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	13.8	7.3	0.514	>50<200
5	13.8	7.3	0.514	>50<200

DTW Before Sampling: 10.48
Sample Date/Time: 11/8/01/10:00
Sampling Method: Bailer
Sampling Depth(s): 11-15'
DTW After Sampling: 10.56'
Chain-of-Custody No.(s): NA
Analytical Lab(s): Veritech
Sampling Observations:

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	13.1	7.3	0.527	>50<200
End	13.1	7.3	0.527	>50<200

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
Total metals	NA	HNO3	No
Filtered metal	NA	None	Yes
Cl^-	NA	None	No

Collected Blind Duplicate Sample
(Labeled LMW-1 taken at 1130)
Sample was collected with PC-4 samples at 10:00

Comments:

Air Temp: 60°F
Weather Conditions: Sunny/Windy

Crew Chief Signature: [signature] Date: 11/8/01

ATTACHMENT B

Lawler, Matusky & Skelly , Eng.
Pearl River, New York

Date: 11/7/01
Crew: MP / ET
Site: HARRISON LF

FIELD DATA SHEET FOR SURFACE WATER

pH No: 9907
TLC No: #9
Turb. Meter: LMS-1

Sta. No.	Time	Sample Depth	Total Depth	Temp. °C	pH	Cond. umhos/cm	Turb. NTUs	Flow CFS	Sample Parameters	Comments
SW-1	1050	5"	5"	9.6	7.7	0.445	< 50	< 1	TAL METALS (T+F) Cl^-	/
SW-2	1300	2"	2"	13.3	7.6	0.403	< 50	< 1	↓	/
SW-3	*	/	/	/	/	/	/	/	/	* No sample collected - stream Dry.
SW-4	1240	7"	7"	12.9	7.8	0.426	< 50	< 1	TAL METALS (T+F) Cl^-	/

Date: 11/7/01
Crew: MP/ET
Site: HARRISON LF

FIELD DATA SHEET FOR SOIL/SEDIMENTS

Lawler, Matusky & Skelly, Eng.
Pearl River, New York

Sta. No.	Time	Sample Depth	Method	Texture	Color	Odor	Sample Parameters	Comments
SD-1	1050	≈ 4"	Ded. SPOON (SS)	Sandy	Brown/ Drk. Br	NONE	TAL METALS CL	Some organic meterial.
SD-2	1300	↓	↓		Brown	↓	↓	/
SD-3	1220	↓	↓		↓	↓	↓	/
SD-4	1240	↓	↓		Brown/ Drk. Por.	↓	↓	Some organic material

ATTACHMENT C

Lawler, Matusky & Skelly , Eng.
Pearl River, New York

Date: 11/8/01
Crew: MP/ET
Site: HARRISON L.F.

AIR MONITORING FIELD DATA SHEET

CGI: Genisis
PID: HNU
FID: FOXBORO

Sample Point	Time	Inspector	% LEL CGI	PID Equiv.	FID PPM	CH4	Background PID	Background FID	Observations/Notes
GV-1	1530*	MP	0%	< 3	2/<2	0	<3	2	Gas Vent *START
2		↓	↓	↓	↓	↓	↓	↓	↓
3									
4									↓
S									Property Line
E									↓
N									
W	1600**	↓	↓	↓	↓	↓	↓	↓	↓ **END

ATTACHMENT D

Hampton-Clarke, Inc.
veritech laboratories

175 Route 46 West, Unit D
Fairfield, NJ 07004
(973) 244-9770
Federal ID: 222679402

Lawler, Metusky & Skelly Engineers

Format: NYDOH-CatA

Project: Harrison Landfill
PO Number: 446-156

Samples submitted on: 11/8/01

AB46349
AB46350
AB46351
AB46352
AB46353
AB46354
AB46355
AB46356
AB46357
AB46358
AB46359
AB46360
AB46361
AB46362
AB46363
AB46364
AB46365
AB46366
AB46367
AB46368
AB46369
AB46370

Date: 12/7/01
HCI Project: 11081749

SDG Narrative

Project: NYSDOT Harrison LF
Job: 446-156

Hampton-Clarke, Inc. (HCI) received the following Lawler, Metusky & Skelly Engineers samples on November 8, 2001:

LMS #	HCI #	Type	Analysis
SW-1 (w) unfiltered	AB46349	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SW-1(w) filtered	AB46350	Aqueous	TAL-METALS (6010B), HG (7470A)
SW-2 (w) unfiltered	AB46351	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
SW-2 (w) filtered	AB46352	Aqueous	TAL-METALS (6010B), HG (7470A)
SW-4(w) unfiltered	AB46353	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SW-4(w) filtered	AB46354	Aqueous	TAL-METALS (6010B), HG (7470A)
PC-1 (w) unfiltered	AB46355	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
PC-1 (w) filtered	AB46356	Aqueous	TAL-METALS (6010B), HG (7470A)
MW-4 (w) unfiltered	AB46357	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
MW-4(w) filtered	AB46358	Aqueous	TAL-METALS (6010B), HG (7470A)
LMW-2(w) unfiltered	AB46359	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
LMW-2(w) filtered	AB46360	Aqueous	TAL-METALS (6010B), HG (7470A)
PC-2 (w) unfiltered	AB46361	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
PC-2 (w) filtered	AB46362	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SD-1	AB46363	Soil	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SD-1	AB46364	Soil	CANCEL
SD-2	AB46365	Soil	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SD-2	AB46366	Soil	CANCEL
SD-3	AB46367	Soil	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SD-3	AB46368	Soil	CANCEL
SD-4	AB46369	Soil	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
SD-4	AB46370	Soil	CANCEL

To meet the necessary detection limits for the Aqueous samples, the samples were concentrated during the digestion step (200ml to 100 ml). This step is evident on the result page, were the dilution factor is indicated as 0.5

All metals sample results have been reported to the MDL, as requested by the client, to achieve the detection limits as listed in the ASP Standards. The Method blanks and continuing calibration blanks are based upon the PQL criteria.

Problems associated with these analyses are as follows:

Metals

For Batch 3713

The serial dilution exceeded the RPD criteria for vanadium. This suggests that there may be some matrix interference occurring in the sample.

No other problems were encountered in the analysis of these samples.

For Batch 3711:

The serial dilution exceeded the RPD criteria for Aluminum, Calcium, Cobalt, Iron, Magnesium and Zinc. This suggests that there may be some matrix interference occurring in the sample.

The MS and MSD fell outside the QC limit for the following elements:

Aluminum	MS-27%	MSD-2.1%
Antimony	MS-58%	MSD-44%

Barium	MS-59%	--------
Calcium	MS-37%	MSD-29%
Chromium	MS-0%	MSD-0%
Copper	MS-34%	MSD-63%
Iron	MS-0%	MSD-0%
Lead	MS-420%	MSD-0%
Manganese	--------	MSD-56%
Nickel	MS-0%	MS-0%
Silver	MS-46%	MSD-52%
Vanadium	MS-54%	--------
Zinc	MS-49%	MSD-44%

Several elements were out of the control limits for RPD:

Arsenic	RPD-60%
Copper	RPD-33%
Magnesium	RPD-23%
Nickel	RPD-35%
Vanadium	RPD-23%
Zinc	RPD-22%

Wet Chemistry

No problems were encountered in the analysis of these samples.

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

Stan Gilewicz, Laboratory Director

12/19/01
Date

1081749

Veritech, 175 Route 46 West, Fairfield, NJ 07004
A Division of HAMPTON-CLARKE, INC. NJDEPE # 14622

CHAIN OF CUSTODY RECORD

PHONE (800) 426-9992
FAX (973) 439-1458

CUSTOMER INFORMATION

CUSTOMER: LMS ENGINEERS
ADDRESS: One Blue Hill Plaza, NY
TELEPHONE: 845 735 8300
FAX: 845 735 7466
PROJECT: HARRISON LANDFILL
PROJECT MANAGER: T. Schieder
PROJECT LOCATION: HARRISON, NY
STATE: NY
PO NUMBER: 446-156

REPORT INFORMATION

SEND REPORT TO: MARIA HEICNZ
One Blue Hill Plaza
Pearl River NY 10965

SEND INVOICE TO: Finance
SAME

PROJECT INFORMATION

TURNAROUND (CONFIRM RUSH TAT'S WITH LAB)
- ☒ STANDARD
- ☐ RUSH
  - ☐ 24 HOURS 100%
  - ☐ 48 HOURS 75%
  - ☐ 72 HOURS 50%
  - ☐ 1 WEEK 25%
  - ☐ 10 DAYS 10%

DELIVERABLES (PLEASE CHECK BOX)
- ☐ STANDARD
- ☐ WASTE
- ☐ NJ REDUCED
- ☐ HAZSITE
- ☐ ELECTRONIC DELIVERABLE
- ☐ OTHER (SPECIFY)
- ☐ FULL
- ☐ BUST
- ☐ EXCEL
- ☐ CUSTOM

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE (C)	SAMPLE TYPE: GRAB (G)	SAMPLE MATRIX	No. of Bottles: H_2SO_4	HNO_3	HCl	NaOH	$ZnAc + NaOH$	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB46349	SW-1 H F		11/7	1050		X	W	1						2			Metals (Total/F. Hexcr) & Cl⁻
46350																	
46351	SW-2 H F			1300													
46352																	
46353	SW-4 H F			1240													
46354																	
46355	PC-1 H F			1340													
46356																	
46357	MW-4 H F			1350													
46358																	
46359	LMW-2 H F			1330													
46360																	
46361	PC-2 H F			1400													
46362																	
46363	SD-1 H F		AB 11/9	1050			S										
46364																	
46365	SD-2 H F		AB 11/9	1300													
46366																	
46367	SD-3 H F		AB 11/9	1220													
46368																	

(INITIALS)

SAMPLER CERTIFIES THAT EACH SAMPLE RECEIVED PROPER FIELD PRESERVATION (IF REQUIRED)

SAMPLE HAZARDS: FLAMMABLE ☐ SKIN IRRITANT ☐ NON-HAZARD ☒ UNKNOWN ☐ NOXIOUS FUMES ☐

TEMPERATURE UPON RECEIPT: 4.0°C

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: [signature]	DATE / TIME	RECEIVED BY: UPS	DATE / TIME
AGENT OF: LMS ENGINEERS		AGENT OF:	
RELINQUISHED BY: UPS	DATE / TIME	RECEIVED BY: RMarriott	DATE / TIME 11/09/9 945
AGENT OF:		AGENT OF: MCI	

Veritech, 175 Route 46 West, Fairfield, NJ 07004
A Division of HAMPTON-CLARKE, INC. NJDEPE # 14622

CHAIN OF CUSTODY RECORD

PHONE (800) 426-9992
FAX (973) 439-1458

CUSTOMER INFORMATION

CUSTOMER: LMS ENGINEERS
ADDRESS: Pearl River NY
TELEPHONE: 845 735 8300
FAX: 845 735 7466
PROJECT: HARRISON LANDFILL
PROJECT MANAGER: Terry Schneider
PROJECT LOCATION: HARRISON NJ
STATE: NJ
PO NUMBER: 446-156

REPORT INFORMATION

SEND REPORT TO:

SEND INVOICE TO:

PROJECT INFORMATION

TURNAROUND (CONFIRM RUSH TAT'S WITH LAB)

- ☐ STARDARD
- ☐ RUSH
  - ☐ 24 HOURS 100%
  - ☐ 48 HOURS 75%
  - ☐ 72 HOURS 50%
  - ☐ 1 WEEK 25%
  - ☐ 10 DAYS 10%

DELIVERABLES (PLEASE CHECK BOX)

- ☐ STANDARD
- ☐ WASTE
- ☐ NJ REDUCED
- ☐ HAZSITE
- ☐ ELECTRONIC DELIVERABLE
- ☐ OTHER (SPECIFY)
- ☐ FULL
- ☐ BUST
- ☐ EXCEL
- ☐ CUSTOM

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE (C)	SAMPLE TYPE: GRAB (G)	SAMPLE MATRIX	No. of Bottles: H2SO4	HNO3	HCL	NaOH	ZnAc + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB46369	SD-4 #			1240		X	S										Metals (Total & Filtered) Cl⁻

SAMPLER CERTIFIES THAT EACH SAMPLE RECEIVED PROPER FIELD PRESERVATION (IF REQUIRED) (INITIALS)

SAMPLE HAZARDS : FLAMMABLE ☐ SKIN IRRITANT ☐ NON-HAZARD ☒ UNKNOWN ☐ NOXIOUS FUMES ☐

SPECIAL INSTRUCTIONS:

TEMPERATURE UPON RECEIPT: 4.0°C

RELINQUISHED BY: M. V. Pratt	DATE / TIME 11/7	RECEIVED BY: URS	DATE / TIME
AGENT OF: LMS ENGINEERS		AGENT OF:	
RELINQUISHED BY: URS	DATE / TIME	RECEIVED BY: R. MacGrath	DATE / TIME 11/08/01 945
AGENT OF:		AGENT OF: YCI	

CONDITION UPON RECEIPT FORM

Veritech

Date Received: 11/08/01 Filed By: RM

Client: LMS Eng. Project/Account: Harrison Landfill

Veritech Project #: _____

INITIAL CONDITIONS

YES	NO		
✓		[1]	Is there a corresponding Chain of Custody included with the samples?
✓		[2]	Are the samples in a container such as a cooler or ice chest?
✓		[3]	Are the custody seals intact? IF NO, please circle one of the following: missing broken N.A.
4.0 °C		[4]	Please specify the temperature inside the container.

SAMPLE INFORMATION

YES	NO		
✓		[5]	Are the samples properly refrigerated (where required), have they arrived on ice?
✓		[6]	Are the samples within holding times for the parameters listed on the COC? If NO, list parameters and associated samples: _____
✓		[7]	Are all of the sample bottles intact? If NO, specify sample numbers below: broken: _____ leaking: _____
✓		[8]	Are all of the sample labels or numbers legible? If NO, specify: _____
✓		[9]	Do the contents of the container match the COC? If NO, specify: _____
✓		[10]	Is there enough sample sent for the analyses listed on the COC? If NO, specify: _____
✓		[11]	Are the samples preserved correctly (see Preservation Form for actual pH readings)?
		[12]	Are all soil VO(NJ) samples properly preserved in methanol with the correct soil weights (8g - 12g) and accompanied by dry soil? _____

OTHER

[13] Specify: _____

CORRECTIVE ACTIONS

NO.	ACTION

\CUR9.DOC

PRESERVATION DOCUMENTATION

Date Received: 11/08/01
Filed By: RM
Client: LMS
Project: Harrison Landfill
Veritech Project #:

SAMPLE ID:	CONTAINER SIZE	CONTAINER TYPE (PG)	PARAMETER	PRESERVATIVE	pH
SW-1	40mL	P	Metals	HNO_3	1
SW-2	"	"	"	"	1
SW-4	"	"	"	"	1
PC-1	"	"	"	"	1
MW-4	"	"	"	"	1
LMW-2	"	"	"	"	1
PC-2	"	"	"	"	1

00015

INTERNAL CHAIN OF CUSTODY RECORD - REFRIGERATOR #12

veritech

Client ID: LMS

Location: C-4

COMMENTS

Two boxes

		REMOVED:				RETURNED:			
TEST	SAMPLE No.	DATE	TIME	SIGNATURE	ALTERNATE	DATE	TIME	SIGNATURE	ALTERNATE
Chloride	46349,51,53,55 57,59,61	11/9/01	9:45	JDS	Rec	11/9/01	12:20	JDS	
TD-LI ISHG	46363, 65, 67, 69	11/12/01	0825	Dm.		11/12/01	1100	Dm.	
O/G S	46363	11.12.01	~~10:55~~ 1100	MJ		11.12.01	11:30	MJ	
O/G S	46365-6769	11/12/01	14:58	BCT		11/12/01	16:00	BCT	
TD-LI/WHG	46349 - 62	11/13/01	0850	Dm.		11/13/01	1240	Dm.	
metals filtrate	46350,52,54,56,58,60 62	11/13/01	11			11	11		
Cl	46363,65,67,69	11/15/01	1055			11/15/01	1355		

FOR LOGIN BATCH

AB46349-70

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46349
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	35	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	45000	P
7440473	Chromium	0.80	3.0	P
7440484	Cobalt	0.14	U	P
7439896	Iron	20	1200	P
7439954	Magnesium	3.6	16000	P
7439965	Manganese	0.79	190	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	2.9	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	11	P
7440666	Zinc	7.9	19	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/5

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46349
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	4200	P
7440235	Sodium	110	20000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46349
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	2.9	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46349
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	580	P
7440382	Arsenic	2.0	2.5	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46349
Client ID: SW-1 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/03/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46350
Client ID: SW-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P_
7440393	Barium	0.17	31	P_
7440417	Beryllium	0.026	U	P_
7440439	Cadmium	0.18	U	P_
7440702	Calcium	11	46000	P_
7440473	Chromium	0.80	2.1	P_
7440484	Cobalt	0.14	U	P_
7439896	Iron	20	84	P_
7439954	Magnesium	3.6	16000	P_
7439965	Manganese	0.79	160	P_
7440020	Nickel	0.21	U	P_
7782492	Selenium	2.4	4.6	P_
7440224	Silver	0.30	U	P_
7440280	Thallium	1.6	2.8	P_
7440622	Vanadium	0.49	8.9	P_
7440666	Zinc	7.9	9.6	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/15/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713Z

Lab Code: 14622

Analysis Date: 11/16/01

Matrix: Water

Lab Sample ID: AB46350
Client ID: SW-1 filtered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	4000	P_
7440235	Sodium	110	21000	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46350
Client ID: SW-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	0.88	P
7439921	Lead	0.79	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46350
Client ID: SW-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	36	P
7440382	Arsenic	2.0	2.7	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46350

Client ID: SW-1 filtered

Dilution: 1

% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/03/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46351
Client ID: SW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	110	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	0.32	P
7440702	Calcium	11	45000	P
7440473	Chromium	0.80	12	P
7440484	Cobalt	0.14	3.3	P
7439896	Iron	20	8800	P
7439954	Magnesium	3.6	16000	P
7439965	Manganese	0.79	4000	P
7440020	Nickel	0.21	6.3	P
7782492	Selenium	2.4	4.9	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	19	P
7440622	Vanadium	0.49	17	P
7440666	Zinc	7.9	53	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46351
Client ID: SW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	4500	P
7440235	Sodium	110	20000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46351
Client ID: SW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	13	P
7439921	Lead	0.79	34	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46351
Client ID: SW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	3500	P
7440382	Arsenic	2.0	2.8	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46351
Client ID: SW-2 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

1-2/03/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46352
Client ID: SW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	20	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	43000	P
7440473	Chromium	0.80	1.9	P
7440484	Cobalt	0.14	U	P
7439896	Iron	20	28	P
7439954	Magnesium	3.6	15000	P
7439965	Manganese	0.79	2.0	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	8.4	P
7440666	Zinc	7.9	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46352
Client ID: SW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	3800	P
7440235	Sodium	110	19000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46352
Client ID: SW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	0.90	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/5/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46352
Client ID: SW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	36	P_
7440382	Arsenic	2.0	2.3	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46352
Client ID: SW-2 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

11/16/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46353
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	28	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	45000	P
7440473	Chromium	0.80	2.3	P
7440484	Cobalt	0.14	U	P
7439896	Iron	20	700	P
7439954	Magnesium	3.6	15000	P
7439965	Manganese	0.79	100	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	9.7	P
7440666	Zinc	7.9	13	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46353
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	3600	P
7440235	Sodium	110	19000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46353
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	1.1	P
7439921	Lead	0.79	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46353
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	130	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46353

Client ID: SW-4 unfiltered

Dilution: 1

% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

1-2/13/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713A1

Lab Code: 14622

Analysis Date: 11/15/01

Matrix: Water

Lab Sample ID: AB46354
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Level: low/med
Batch: 3713

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	23	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	43000	P
7440473	Chromium	0.80	2.4	P
7440484	Cobalt	0.14	U	P
7439896	Iron	20	31	P
7439954	Magnesium	3.6	14000	P
7439965	Manganese	0.79	9.7	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	2.2	P
7440622	Vanadium	0.49	8.9	P
7440666	Zinc	7.9	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

1-7-15

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46354
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	3600	P_
7440235	Sodium	110	19000	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46354
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	0.61	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46354
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	34	P
7440382	Arsenic	2.0	2.6	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46354
Client ID: SW-4 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/3/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46355
Client ID: PC-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	470	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	45000	P
7440473	Chromium	0.80	95	P
7440484	Cobalt	0.14	24	P
7439896	Iron	20	70000	P
7439954	Magnesium	3.6	27000	P
7439965	Manganese	0.79	3100	P
7440020	Nickel	0.21	64	P
7782492	Selenium	2.4	18	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	2.5	P
7440622	Vanadium	0.49	140	P
7440666	Zinc	7.9	180	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46355
Client ID: PC-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	19000	P
7440235	Sodium	110	130000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46355
Client ID: PC-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	96	P_
7439921	Lead	0.79	20	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46355
Client ID: PC-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	39000	P
7440382	Arsenic	2.0	8.3	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46355
Client ID: PC-1 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____
_____
_____

12/3/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713A1

Lab Code: 14622

Analysis Date: 11/15/01

Matrix: Water

Lab Sample ID: AB46356
Client ID: PC-1 filtered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	63	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	47000	P
7440473	Chromium	0.80	1.8	P
7440484	Cobalt	0.14	U	P
7439896	Iron	20	110	P
7439954	Magnesium	3.6	10000	P
7439965	Manganese	0.79	850	P
7440020	Nickel	0.21	1.0	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	4.1	P
7440622	Vanadium	0.49	12	P
7440666	Zinc	7.9	9.3	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46356
Client ID: PC-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	3400	P_
7440235	Sodium	110	130000	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46356
Client ID: PC-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	2.0	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46356
Client ID: PC-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	120	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/5/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46356
Client ID: PC-1 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

1-23-02

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46357
Client ID: MW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	280	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	64000	P
7440473	Chromium	0.80	58	P
7440484	Cobalt	0.14	21	P
7439896	Iron	20	90000	P
7439954	Magnesium	3.6	23000	P
7440020	Nickel	0.21	20	P
7782492	Selenium	2.4	30	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	54	P
7440622	Vanadium	0.49	47	P
7440666	Zinc	7.9	56	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46357
Client ID: MW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	5300	P
7440235	Sodium	110	33000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46357

Client ID: MW-4 unfiltered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	25	P
7439921	Lead	0.79	13	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713C

Lab Code: 14622

Analysis Date: 11/20/01

Matrix: Water

Lab Sample ID: AB46357
Client ID: MW-4 unfiltered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	10000	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713D

Analysis Date: 11/21/01

Lab Sample ID: AB46357
Client ID: MW-4 unfiltered
Dilution: 2.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	3.9	29000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46357
Client ID: MW-4 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/03

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46358
Client ID: MW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	120	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	0.23	P
7440702	Calcium	11	70000	P
7440473	Chromium	0.80	31	P
7440484	Cobalt	0.14	14	P
7439896	Iron	20	18000	P
7439954	Magnesium	3.6	22000	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	3.3	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	63	P
7440622	Vanadium	0.49	12	P
7440666	Zinc	7.9	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12.15

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46358
Client ID: MW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	3700	P
7440235	Sodium	110	35000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46358
Client ID: MW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	U	P
7439921	Lead	0.79	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46358
Client ID: MW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	U	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713D

Analysis Date: 11/21/01

Lab Sample ID: AB46358
Client ID: MW-4 filtered
Dilution: 2.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	3.9	30000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46358
Client ID: MW-4 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

10/23/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46359
Client ID: LMW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	220	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	0.45	P
7440702	Calcium	11	91000	P
7440473	Chromium	0.80	17	P
7440484	Cobalt	0.14	5.2	P
7439896	Iron	20	7000	P
7439954	Magnesium	3.6	38000	P
7439965	Manganese	0.79	1300	P
7440020	Nickel	0.21	20	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	8.0	P
7440622	Vanadium	0.49	26	P
7440666	Zinc	7.9	32	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46359
Client ID: LMW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	7400	P_
7440235	Sodium	110	53000	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46359
Client ID: LMW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	13	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46359
Client ID: LMW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	4200	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46359
Client ID: LMW-2 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46360
Client ID: LMW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	150	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	91000	P
7440473	Chromium	0.80	7.0	P
7440484	Cobalt	0.14	0.63	P
7439896	Iron	20	22	P
7439954	Magnesium	3.6	37000	P
7439965	Manganese	0.79	650	P
7440020	Nickel	0.21	12	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	4.5	P
7440622	Vanadium	0.49	16	P
7440666	Zinc	7.9	12	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46360
Client ID: LMW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	5600	P
7440235	Sodium	110	55000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46360
Client ID: LMW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	3.1	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46360
Client ID: LMW-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	39	P_
7440382	Arsenic	2.0	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46360
Client ID: LMW-2 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/3/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46361
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	180	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	63000	P
7440473	Chromium	0.80	13	P
7440484	Cobalt	0.14	1.4	P
7439896	Iron	20	74000	P
7439954	Magnesium	3.6	22000	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	23	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	47	P
7440622	Vanadium	0.49	18	P
7440666	Zinc	7.9	10	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46361
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	3200	P_
7440235	Sodium	110	67000	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46361
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	U	P
7439921	Lead	0.79	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46361
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	110	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: A3747B

Analysis Date: 12/04/2001

Lab Sample ID: AB46361
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	16000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46361
Client ID: PC-2 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/3/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46362
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	87	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	62000	P
7440473	Chromium	0.80	19	P
7440484	Cobalt	0.14	2.1	P
7439896	Iron	20	27000	P
7439954	Magnesium	3.6	22000	P
7440020	Nickel	0.21	U	P
7782492	Selenium	2.4	13	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	43	P
7440622	Vanadium	0.49	16	P
7440666	Zinc	7.9	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12-15-01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46362

Client ID: PC-2 filtered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	40	3100	P
7440235	Sodium	110	68000	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP(ARL 3560)

CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46362
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	U	P
7439921	Lead	0.79	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46362
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	U	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: A3747B

Analysis Date: 12/04/2001

Lab Sample ID: AB46362
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	16000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46362
Client ID: PC-2 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

11/23/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711A

Analysis Date: 11/14/2001

Lab Sample ID: AB46363
Client ID: SD-1
Dilution: 100
% Solid: 76

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440360	Antimony	2.6	U	P
7440382	Arsenic	2.6	U	P
7440393	Barium	13	53	P
7440417	Beryllium	0.79	U	P
7440439	Cadmium	0.79	U	P
7440473	Chromium	6.6	16	P
7440484	Cobalt	3.3	5.2	P
7440508	Copper	6.6	12	P
7439921	Lead	6.6	21	P
7439965	Manganese	21	280	P
7440020	Nickel	6.6	13	P
7782492	Selenium	2.6	U	P
7440224	Silver	3.3	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	13	22	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711B

Analysis Date: 11/15/2001

Lab Sample ID: AB46363
Client ID: SD-1
Dilution: 100
% Solid: 76

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440666	Zinc	13	87	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711Z

Analysis Date: 11/14/01

Lab Sample ID: AB46363
Client ID: SD-1
Dilution: 100
% Solid: 76

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7429905	Aluminum	390	8100	P
7440702	Calcium	660	5700	P
7439896	Iron	390	14000	P
7439954	Magnesium	660	4900	P
7440097	Potassium	330	1200	P
7440235	Sodium	660	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: H3711S

Analysis Date: 11/13/2001

Lab Sample ID: AB46363
Client ID: SD-1
Dilution: 167
% Solid: 76

Concentration Units: mg/Kg

Cas No.	Analyte	RL	Concentration	M
7439976	Mercury	0.19	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

PLV 11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711A

Analysis Date: 11/14/2001

Lab Sample ID: AB46365
Client ID: SD-2
Dilution: 100
% Solid: 68

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440360	Antimony	2.9	U	P
7440382	Arsenic	2.9	U	P
7440393	Barium	15	32	P
7440417	Beryllium	0.88	U	P
7440439	Cadmium	0.88	U	P
7440473	Chromium	7.4	9.6	P
7440484	Cobalt	3.7	4.7	P
7440508	Copper	7.4	10	P
7439921	Lead	7.4	19	P
7439965	Manganese	24	720	P
7440020	Nickel	7.4	12	P
7782492	Selenium	2.9	U	P
7440224	Silver	3.7	U	P
7440280	Thallium	1.8	U	P
7440622	Vanadium	15	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

DW 11/20/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711B

Analysis Date: 11/15/2001

Lab Sample ID: AB46365
Client ID: SD-2
Dilution: 100
% Solid: 68

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440666	Zinc	15	24	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

PLV 11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711Z

Analysis Date: 11/14/01

Lab Sample ID: AB46365
Client ID: SD-2
Dilution: 100
% Solid: 68

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7429905	Aluminum	440	5100	P
7440702	Calcium	740	41000	P
7439896	Iron	440	13000	P
7439954	Magnesium	740	23000	P
7440097	Potassium	370	1100	P
7440235	Sodium	740	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

DW 11/21/1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: H3711S

Analysis Date: 11/13/2001

Lab Sample ID: AB46365
Client ID: SD-2
Dilution: 167
% Solid: 68

Concentration Units: mg/Kg

Cas No.	Analyte	RL	Concentration	M
7439976	Mercury	0.21	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

DLV 11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711A

Analysis Date: 11/14/2001

Lab Sample ID: AB46367
Client ID: SD-3
Dilution: 100
% Solid: 88

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440360	Antimony	2.3	U	P
7440382	Arsenic	2.3	2.4	P
7440393	Barium	11	48	P
7440417	Beryllium	0.68	U	P
7440439	Cadmium	0.68	U	P
7440473	Chromium	5.7	17	P
7440484	Cobalt	2.8	5.7	P
7440508	Copper	5.7	19	P
7439921	Lead	5.7	210	P
7439965	Manganese	18	250	P
7440020	Nickel	5.7	16	P
7782492	Selenium	2.3	2.4	P
7440224	Silver	2.8	U	P
7440280	Thallium	1.4	U	P
7440622	Vanadium	11	25	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med

Batch: 3711

Data File Name: S3711Z

Analysis Date: 11/14/01

Lab Sample ID: AB46367

Client ID: SD-3

Dilution: 100

% Solid: 88

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7429905	Aluminum	340	8600	P
7440702	Calcium	570	43000	P
7439896	Iron	340	15000	P
7439954	Magnesium	570	25000	P
7440097	Potassium	280	1600	P
7440235	Sodium	570	U	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP(ARL 3560)

CV - Indicates analyzed by Cold Vapor

Comments: _____

11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711C

Analysis Date: 11/15/2001

Lab Sample ID: AB46367
Client ID: SD-3
Dilution: 100
% Solid: 88

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440666	Zinc	11	78	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech
Data File Name: H3711S

Lab Code: 14622
Analysis Date: 11/13/2001

Matrix: Soil
Lab Sample ID: AB46367
Client ID: SD-3

Level: low/med
Dilution: 167

Batch: 3711
% Solid: 88

Concentration Units: mg/Kg

Cas No.	Analyte	RL	Concentration	M
7439976	Mercury	0.16	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

DV 11/21/01

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711A

Analysis Date: 11/14/2001

Lab Sample ID: AB46369
Client ID: SD-4
Dilution: 100
% Solid: 81

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440360	Antimony	2.5	U	P
7440382	Arsenic	2.5	U	P
7440393	Barium	12	40	P
7440417	Beryllium	0.74	U	P
7440439	Cadmium	0.74	0.98	P
7440473	Chromium	6.2	U	P
7440484	Cobalt	3.1	3.9	P
7440508	Copper	6.2	10	P
7439921	Lead	6.2	19	P
7439965	Manganese	20	740	P
7440020	Nickel	6.2	12	P
7782492	Selenium	2.5	U	P
7440224	Silver	3.1	U	P
7440280	Thallium	1.5	U	P
7440622	Vanadium	12	16	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711C

Analysis Date: 11/15/2001

Lab Sample ID: AB46369
Client ID: SD-4
Dilution: 100
% Solid: 81

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7440666	Zinc	12	500	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: S3711Z

Analysis Date: 11/14/01

Lab Sample ID: AB46369
Client ID: SD-4
Dilution: 100
% Solid: 81

Concentration Units: Mg/Kg

Cas No.	Analyte	RL	Concentration	M
7429905	Aluminum	370	3800	P
7440702	Calcium	620	40000	P
7439896	Iron	370	11000	P
7439954	Magnesium	620	23000	P
7440097	Potassium	310	860	P
7440235	Sodium	620	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments:_____

11/21/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3711

Data File Name: H3711S

Analysis Date: 11/13/2001

Lab Sample ID: AB46369
Client ID: SD-4
Dilution: 167
% Solid: 81

Concentration Units: mg/Kg

Cas No.	Analyte	RL	Concentration	M
7439976	Mercury	0.18	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

DLV 11/21/01

Veritech Wet Chem Form 1 Summary

Lab #: AB46349

Lab #: AB46349 | Sample Matrix: Aqueous
Sample ID: SW-1 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	22	mg/l	0.98	1	11/9/01

Lab #: AB46351 | Sample Matrix: Aqueous
Sample ID: SW-2 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	22	mg/l	0.98	1	11/9/01

Lab #: AB46353 | Sample Matrix: Aqueous
Sample ID: SW-4 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	22	mg/l	0.98	1	11/9/01

Lab #: AB46355 | Sample Matrix: Aqueous
Sample ID: PC-1 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	95	mg/l	0.98	1	11/9/01

Lab #: AB46357 | Sample Matrix: Aqueous
Sample ID: MW-4 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	46	mg/l	0.98	1	11/9/01

Lab #: AB46359 | Sample Matrix: Aqueous
Sample ID: LMW-2 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	25	mg/l	0.98	1	11/9/01

Lab #: AB46361 | Sample Matrix: Aqueous
Sample ID: PC-2 unfiltered | Date Received: 11/8/01

Test Group Name: Chloride EPA 325 | Date Prepared: 11/9/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	70	mg/l	0.98	1	11/9/01

Veritech Wet Chem Form 1 Summary

Lab #: AB46363

Lab #: AB46363 | Sample Matrix: Sediment
Sample ID: SD-1 | Date Received: 11/8/01

Test Group Name: % Solids SM2540G | Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	76	Percent		1	11/12/01

Test Group Name: Chloride 9250 | Date Prepared: 11/15/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	150	mg/kg	66	1	11/16/01

Lab #: AB46365 | Sample Matrix: Sediment
Sample ID: SD-2 | Date Received: 11/8/01

Test Group Name: % Solids SM2540G | Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	68	Percent		1	11/12/01

Test Group Name: Chloride 9250 | Date Prepared: 11/15/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	89	mg/kg	74	1	11/16/01

Lab #: AB46367 | Sample Matrix: Sediment
Sample ID: SD-3 | Date Received: 11/8/01

Test Group Name: % Solids SM2540G | Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	88	Percent		1	11/12/01

Test Group Name: Chloride 9250 | Date Prepared: 11/15/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	ND	mg/kg	57	1	11/16/01

Lab #: AB46369 | Sample Matrix: Sediment
Sample ID: SD-4 | Date Received: 11/8/01

Test Group Name: % Solids SM2540G | Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	81	Percent		1	11/12/01

Test Group Name: Chloride 9250 | Date Prepared: 11/15/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	ND	mg/kg	62	1	11/16/01

BLANKS

Lab Name: Veritech Data File Name: S3711Z

Lab Code: 14622 Analysis Date: 11/14/01

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3711mg/kg	ICB M-01-BL	CCB	CCB	CCB				M
Aluminum	300.00000 U	3.0000000 U	3.0000000 U	3.0000000 U	3.0000000 U				P
Calcium	500.00000 U	5.0000000 U	5.0000000 U	5.0000000 U	5.0000000 U				P
Iron	300.00000 U	3.0000000 U	3.0000000 U	3.0000000 U	3.0000000 U				P
Magnesium	500.00000 U	5.0000000 U	5.0000000 U	5.0000000 U	5.0000000 U				P
Potassium	250.00000 U	2.5000000 U	2.5000000 U	2.5000000 U	2.5000000 U				P
Sodium	500.00000 U	5.0000000 U	5.0000000 U	5.0000000 U	5.0000000 U				P

BLANKS

Lab Name: Veritech Data File Name: S3711B

Lab Code: 14622 Analysis Date: 11/15/2001

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3711mg/kg	ICB M-01-BL	CCB	CCB					M
Zinc	10.000000 U	0.1000000 U	0.1000000 U	0.1000000 U					P

BLANKS

Lab Name: Veritech

Data File Name: S3711A

Lab Code: 14622

Analysis Date: 11/14/2001

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3711mg/kg	ICB M-01-BL	CCB	CCB	CCB				M
									=
									P
Antimony	2.0000000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U				P
Arsenic	2.0000000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U				P
Barium	10.000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U				P
Beryllium	0.6000000 U	0.0060000 U	0.0060000 U	0.0060000 U	0.0060000 U				P
Cadmium	0.6000000 U	0.0060000 U	0.0060000 U	0.0060000 U	0.0060000 U				P
Chromium	5.0000000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U				P
Cobalt	2.5000000 U	0.0250000 U	0.0250000 U	0.0250000 U	0.0250000 U				P
Copper	5.0000000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U				P
Lead	5.0000000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U				P
Manganese	16.000000 U	0.1600000 U	0.1600000 U	0.1600000 U	0.1600000 U				P
Nickel	5.0000000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U				P
Selenium	2.0000000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U				P
Silver	2.5000000 U	0.0250000 U	0.0250000 U	0.0250000 U	0.0250000 U				P
Thallium	1.2000000 U	0.0120000 U	0.0120000 U	0.0120000 U	0.0120000 U				P
Vanadium	10.000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U				P

BLANKS

Lab Name: Veritech

Data File Name: S3711C

Lab Code: 14622

Analysis Date: 11/15/2001

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	ICB M-01-BL	CCB	CCB					M
Zinc	0.1000000 U	0.1000000 U	0.1000000 U					P

BLANKS

Lab Name: Veritech

Data File Name: H3711S

Lab Code: 14622

Analysis Date: 11/13/2001

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3711mg/kg	ICB	CCB	CCB	CCB	CCB	CCB		M
									=
Mercury	0.1419500 U	0.8500000 U	0.8500000 U	0.8500000 U	0.8500000 U	0.8500000 U	0.8500000 U		C

Spike Sample Recovery

Lab Name: Veritech

Data File Name: S3711A

Lab Code: 14622

Analysis Date: 11/14/2001

ICP sample ID: 46282

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46282 Non Spike	46282 MS 1 Matrix Spike 1	46282 MS 2 Matrix Spike 2	Rec1	Rec2		M
Antimony	0.5000	75 - 125	0.1186498	0.4091974	0.3405098	58*	44*		P
Arsenic	0.5000	75 - 125	0.1020148	0.5329657	0.5371362	86	87		P
Barium	0.5000	75 - 125	1.6029079	1.8978653	2.1255209	59*	105		P
Beryllium	0.5000	75 - 125	0.0060000 U	0.4399730	0.4354666	88	87		P
Cadmium	0.5000	75 - 125	0.0209061	0.4598217	0.4543246	88	87		P
Chromium	0.5000	75 - 125	16.4669319	13.9786785	12.2298726	< 0*	< 0*		P
Cobalt	0.5000	75 - 125	0.4270811	0.8034972	0.8654999	75	88		P
Copper	0.5000	75 - 125	1.9794201	2.1481039	2.2931992	34*	63*		P
Lead	0.5000	75 - 125	4.2189470	6.3209127	4.7240716	420*	101		P
Manganese	0.5000	75 - 125	7.2486280	7.7427616	7.5289789	99	56*		P
Nickel	0.5000	75 - 125	16.1583929	14.2851968	15.6867778	< 0*	< 0*		P
Selenium	0.5000	75 - 125	0.0301815	0.4587058	0.4429513	86	83		P
Silver	0.5000	75 - 125	0.0250000 U	0.2324730	0.2592438	46*	52*		P
Thallium	0.5000	75 - 125	0.0120000 U	0.3994426	0.3941597	80	79		P
Vanadium	0.5000	75 - 125	0.7675181	1.0351220	1.1720065	54*	81		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech

Data File Name: S3711B

Lab Code: 14622

Analysis Date: 11/15/2001

ICP sample ID: 46282

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46282 Non Spike	46282 MS 1 Matrix Spike 1	46282 MS 2 Matrix Spike 2	Rec1	Rec2		M
Zinc	0.5000	75 - 125	0.9964663	1.2394157	1.2165314	49*	44*		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech

Data File Name: S3711Z

Lab Code: 14622

Analysis Date: 11/14/01

ICP sample ID: 46282

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46282 Non Spike	46282 MS 1 Matrix Spike 1	46282 MS 2 Matrix Spike 2	Rec1	Rec2		M
Aluminum	5.000	75 - 125	59.9320000	61.2790000	60.0370000	27*	2.1*		P
Calcium	50.000	75 - 125	257.9570000	276.6230000	272.6860000	37*	29*		P
Iron	5.000	75 - 125	740.8220000	651.7130000	724.0330000	< 0*	< 0*		P
Magnesium	50.000	75 - 125	35.7930000	87.2950000	84.5060000	103	97		P
Potassium	50.000	75 - 125	3.7550000	50.5610000	52.3320000	94	97		P
Sodium	50.000	75 - 125	5.0000000 U	52.6860000	52.3560000	105	105		P

* - Indicates the analyte failed the control limit criteria

U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech

Data File Name: H3711S

Lab Code: 14622

Analysis Date: 11/13/2001

ICP sample ID: 46282

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46282 Non Spike	46282 MS 1 Matrix Spike 1	46282 MS 2 Matrix Spike 2	Rec1	Rec2		M
Mercury	10.000	75 - 125	1.9467793	11.6942197	11.5464364	97	96		C

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3711Z

Lab Code: 14622

Analysis Date: 11/14/01

ICP sample ID: LCS 100 MR

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	M
Aluminum	9200	5300- 13100	7476.5000000	81	P
Calcium	11700	8740- 14600	11266.6000000	96	P
Iron	13700	8350- 19100	13412.9000000	98	P
Magnesium	3070	2280- 3860	2961.9000000	96	P
Potassium	3640	2670- 4610	3241.7000000	89	P
Sodium	863	585- 1140	838.5000000	97	P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3711Z

Lab Code: 14622

Analysis Date: 11/14/01

ICP sample ID: LCS 100

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	9200	5300- 13100	6690.0000000	73		P
Calcium	11700	8740- 14600	11365.4000000	97		P
Iron	13700	8350- 19100	12654.7000000	92		P
Magnesium	3070	2280- 3860	2920.8000000	95		P
Potassium	3640	2670- 4610	3112.4000000	86		P
Sodium	863	585- 1140	841.7000000	98		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3711B

Lab Code: 14622

Analysis Date: 11/15/2001

ICP sample ID: LCS 100 MR

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	M
Zinc	289	224- 356	286.5412860	99	P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3711B

Lab Code: 14622

Analysis Date: 11/15/2001

ICP sample ID: LCS 100

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Zinc	289	224- 356	286.8388950	99		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3711A

Lab Code: 14622

Analysis Date: 11/14/2001

ICP sample ID: LCS 100 MR

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits		Found	Rec		M
Antimony	62.7	17.1-	141	73.3512120	117		P
Arsenic	47.5	34.4-	60.6	48.5307790	102		P
Barium	509	392-	626	499.0504250	98		P
Beryllium	55.9	43.8-	68.2	55.0792210	99		P
Cadmium	157	118-	196	160.2088830	102		P
Chromium	51.4	39.0-	63.7	50.0300870	97		P
Cobalt	88.4	68.8-	108	93.6002950	106		P
Copper	69.5	56.9-	82.0	69.8344370	100		P
Lead	186	139-	233	184.6526540	99		P
Manganese	674	511-	836	668.7276990	99		P
Nickel	112	87.6-	137	116.8759810	104		P
Selenium	109	81.0-	138	110.2397580	101		P
Silver	84.3	54.2-	114	86.7876290	103		P
Thallium	66.2	37.9-	94.7	66.6491190	101		P
Vanadium	136	92.6-	179	139.2961360	102		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3711A

Lab Code: 14622

Analysis Date: 11/14/2001

ICP sample ID: LCS 100

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits		Found	Rec		M
Antimony	62.7	17.1-	141	74.3152840	119		P
Arsenic	47.5	34.4-	60.6	49.4333540	104		P
Barium	509	392-	626	505.8600280	99		P
Beryllium	55.9	43.8-	68.2	55.2341050	99		P
Cadmium	157	118-	196	160.4580290	102		P
Chromium	51.4	39.0-	63.7	49.3238140	96		P
Cobalt	88.4	68.8-	108	94.3498940	107		P
Copper	69.5	56.9-	82.0	70.0932460	101		P
Lead	186	139-	233	186.9734300	101		P
Manganese	674	511-	836	670.3345950	99		P
Nickel	112	87.6-	137	115.9901010	104		P
Selenium	109	81.0-	138	110.0356910	101		P
Silver	84.3	54.2-	114	86.7961920	103		P
Thallium	66.2	37.9-	94.7	67.3284160	102		P
Vanadium	136	92.6-	179	138.9324400	102		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: H3711S

Lab Code: 14622

Analysis Date: 11/13/2001

ICP sample ID: LCS 334

Batch: 3711

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	6210	4190- 8230	5536.5276200	89		C

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Analysis Type: CL-W
Batch Number: CL-W-8
Cal Curve Date:
Units: mg/l

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-11/09/01	50	90-110	NA	50.68074	101	NA	
CAL-01	CAL-01-11/07/01	50	90-110	NA	51.66483	103	NA	
CAL-01	CAL-01-10/18/01	50	90-110	NA	50.68074	101	NA	
DUP	AB44274	NA	NA	20	18.23752	NA	3	
MBS	MBS	50	75-125	NA	51.17278	102	NA	
MS	AB44274	50	75-125	NA	67.90235	102	NA	
MSD	AB44274	50	75-125	20	67.4103	101	0.73	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Tkr Vol	Smp Vol	DF	NofT	Tit Blk	Prep Date	Prep By	Anal Date	Anal By
CAL-01-10/18/01	CAL-01		51		100	50.681	5.2	50	1	0.01388	.05			10/18/01	mg
MB-1-10/18/01	MB	MB-1-10/18/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
AB44274	Sample	MB-1-10/18/01	17	0.98	100	16.73	1.75	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
AB44274	DUP	MB-1-10/18/01	16	0.98	100	16.238	1.7	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
AB44274	MS	MB-1-10/18/01	68	0.98	100	67.902	6.95	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
AB44274	MSD	MB-1-10/18/01	67	0.98	100	67.41	6.9	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
AB44275	Sample	MB-1-10/18/01	27	0.98	100	27.063	2.8	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
MBS	MBS	MB-1-10/18/01	51	0.98	100	51.173	5.25	50	1	0.01388	.05	10/18/01	mg	10/18/01	mg
CAL-01-11/07/01	CAL-01		52		100	51.665	5.3	50	1	0.01388	.05			11/07/01	jds
MB-1-11/07/01	MB	MB-1-11/07/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	11/07/01	jds	11/07/01	jds
AB46107	Sample	MB-1-11/07/01	8.4	0.98	100	8.3648	0.90	50	1	0.01388	.05	11/07/01	jds	11/07/01	jds
AB46108	Sample	MB-1-11/07/01	65	0.98	100	65.442	6.70	50	1	0.01388	.05	11/07/01	jds	11/07/01	jds
AB46109	Sample	MB-1-11/07/01	22	0.98	100	22.142	2.30	50	1	0.01388	.05	11/07/01	jds	11/07/01	jds
AB46110	Sample	MB-1-11/07/01	32	0.98	100	32.475	3.35	50	1	0.01388	.05	11/07/01	jds	11/07/01	jds
CAL-01-11/09/01	CAL-01		51		100	50.681	5.20	50	1	0.01388	.05			11/09/01	jds
MB-1-11/09/01	MB	MB-1-11/09/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46236	Sample	MB-1-11/09/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46349	Sample	MB-1-11/09/01	22	0.98	100	22.142	2.30	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46351	Sample	MB-1-11/09/01	22	0.98	100	22.142	2.30	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46353	Sample	MB-1-11/09/01	22	0.98	100	22.142	2.30	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46355	Sample	MB-1-11/09/01	95	0.98	100	94.965	9.70	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46357	Sample	MB-1-11/09/01	48	0.98	100	48.221	4.95	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46359	Sample	MB-1-11/09/01	25	0.98	100	25.094	2.60	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46361	Sample	MB-1-11/09/01	70	0.98	100	70.363	7.20	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46399	Sample	MB-1-11/09/01	110	0.98	100	111.2	11.35	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46401	Sample	MB-1-11/09/01	220	0.98	100	215.52	21.95	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46403	Sample	MB-1-11/09/01	200	0.98	100	197.8	20.15	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46405	Sample	MB-1-11/09/01	170	0.98	100	171.72	17.50	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46407	Sample	MB-1-11/09/01	150	0.98	100	145.15	14.80	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46410	Sample	MB-1-11/09/01	94	0.98	100	94.473	9.65	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds

Flag Codes: Ra - Recovery failed specified criteria (PVS/MBS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: CL-S
Batch Number: CL-S-7
Cal Curve Date:
Units: mg/kg

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-11/16/01	50	90-110	NA	53.96	108	NA	
DUP	AB46367	NA	NA	20	48.40909	NA	NA	Nc
MBS	MBS	500	75-125	NA	536.05	107	NA	
MS	AB46367	568.1818	75-125	NA	633.3523	111	NA	
MSD	AB46367	568.1818	75-125	20	657.5568	116	3.8	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Titr Vol1	Titr Vol2	DF	Smp Vol	Smp Wt	Fin Vol	NofT	Prep Date	Prep By	Anal Date	Anal By
CAL-01-11/16/01	CAL-01		54		100	53.96	3.22	1.70	1	50	100	100	.025			11/16/01	ges
MB-1-11/15/01	MB	MB-1-11/15/01	ND	50	100	31.95	0.21	0.12	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46367	Sample	MB-1-11/15/01	ND	57	88	56.477	0.31	0.17	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46367	DUP	MB-1-11/15/01	ND	57	88	48.409	0.27	0.15	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46367	MS	MB-1-11/15/01	630	57	88	633.35	3.16	1.59	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46367	MSD	MB-1-11/15/01	660	57	88	657.56	3.21	1.58	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
MBS	MBS	MB-1-11/15/01	540	50	100	536.05	3.33	1.82	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46363	Sample	MB-1-11/15/01	150	66	76	154.14	0.64	0.31	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46365	Sample	MB-1-11/15/01	89	74	68	88.75	0.40	0.23	1	50	10	100	.025	11/15/01	ges	11/16/01	ges
AB46369	Sample	MB-1-11/15/01	ND	62	81	43.827	0.19	0.09	1	50	10	100	.025	11/15/01	ges	11/16/01	ges

Flag Codes: Ra - Recovery failed specified criteria (PVS/MBS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: SOLIDS
Batch Number: SOLIDS-237
Cal Curve Date:
Units: Percent

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AB46334	NA	NA	20	97.87234	NA	0.69	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Tare Wt	Tare Wet	Tare Dry	Prep Date	Prep By	Anal Date	Anal By
AB46334	DUP		98		100	97.872	1	10.4	10.2			11/09/01	jw
AB46334	Sample		97		100	97.196	1	11.7	11.4			11/09/01	jw
AB46335	Sample		97		100	96.875	1	10.6	10.3			11/09/01	jw
AB46336	Sample		98		100	98.214	1	12.2	12.0			11/09/01	jw
AB46337	Sample		97		100	96.842	1	10.5	10.2			11/09/01	jw
AB46338	Sample		97		100	97.115	1	11.4	11.1			11/09/01	jw
AB46339	Sample		97		100	97.196	1	11.7	11.4			11/09/01	jw
AB46340	Sample		88		100	87.963	1	11.8	10.5			11/09/01	jw
AB46341	Sample		96		100	96.46	1	12.3	11.9			11/09/01	jw
AB46342	Sample		95		100	95.098	1	11.2	10.7			11/09/01	jw
AB46343	Sample		96		100	96.078	1	11.2	10.8			11/09/01	jw
AB46344	Sample		97		100	97.115	1	11.4	11.1			11/09/01	jw
AB46345	Sample		97		100	96.939	1	10.8	10.5			11/09/01	jw
AB46305	Sample		89		100	89.474	1	10.5	9.5			11/09/01	jw
AB46306	Sample		90		100	90.11	1	10.1	9.2			11/09/01	jw
AB46347	Sample		92		100	92.035	1	12.3	11.4			11/09/01	jw
AB46348	Sample		92		100	91.667	1	10.6	9.8			11/09/01	jw
AB44523	Sample		90		100	90	1	11.0	10.0			11/09/01	jw
AB46363	Sample		76		100	75.701	1	11.7	9.1			11/12/01	MG
AB46423	Sample		88		100	88.172	1	10.3	9.2			11/12/01	MG
AB46434	Sample		84		100	83.654	1	11.4	9.7			11/12/01	MG

Flag Codes: Ra - Recovery failed specified criteria (PVS/MBS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: SOLIDS
Batch Number: SOLIDS-245
Cal Curve Date:
Units: Percent

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AB46365	NA	NA	20	66.94915	NA	2.2	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Tare Wt	Tare Wet	Tare Dry	Prep Date	Prep By	Anal Date	Anal By
AB46365	DUP		67		100	66.949	1	12.8	8.9			11/12/01	BCT/
AB46365	Sample		68		100	68.421	1	12.4	8.8			11/12/01	BCT/
AB46367	Sample		88		100	87.5	1	10.6	9.4			11/12/01	BCT/
AB46369	Sample		81		100	81.481	1	11.8	9.8			11/12/01	BCT/
AB46389	Sample		85		100	85.455	1	12.0	10.4			11/12/01	BCT/
AB46390	Sample		85		100	85.106	1	10.4	9.0			11/12/01	BCT/
AB46391	Sample		86		100	85.567	1	10.7	9.3			11/12/01	BCT/
AB46392	Sample		84		100	84.112	1	11.7	10.0			11/12/01	BCT/
AB46628	Sample		74		100	74.312	1	11.9	9.1			11/12/01	BCT/
AB46629	Sample		81		100	81.111	1	10.0	8.3			11/12/01	BCT/
AB46630	Sample		83		100	82.796	1	10.3	8.7			11/12/01	BCT/
AB46631	Sample		84		100	84	1	11.0	9.4			11/12/01	BCT/
AB46647	Sample		96		100	95.69	1	12.6	12.1			11/13/01	JW/M
AB46648	Sample		95		100	95.37	1	11.8	11.3			11/13/01	JW/M
AB46649	Sample		96		100	95.833	1	10.6	10.2			11/13/01	JW/M
AB46650	Sample		96		100	96.296	1	11.8	11.4			11/13/01	JW/M
AB46651	Sample		98		100	97.917	1	10.6	10.4			11/13/01	JW/M
AB46652	Sample		96		100	96.33	1	11.9	11.5			11/13/01	JW/M
AB46654	Sample		86		100	86.17	1	10.4	9.1			11/13/01	JW/M
AB46534	Sample		38		100	38.462	1	12.7	5.5			11/13/01	jw/mg
AB46554	Sample		95		100	94.792	1	10.6	10.1			11/13/01	jw/mg

Flag Codes: Ra - Recovery failed specified criteria (PVS/MBS/MS/MSD/ICV/CAL) Rp - RPD failed specified criteria.
Na - Not Applicable Nc - Not Checked ..either one or both values =ND

Hampton-Clarke, Inc.
veritech laboratories

175 Route 46 West, Unit D
Fairfield, NJ 07004
(973) 244-9770
Federal ID: 222679402

Lawler, Metusky & Skelly Engineers

Format: NYDOH-CatA

Project: Harrison Landfill
PO Number: 446-156

Samples submitted on: 11/9/01

AB46503
AB46504
AB46505
AB46506
AB46507
AB46508

Date: 12/7/01
HCI Project: 11091737

SDG Narrative

Project: NYSDOT Harrison LF
Job: 446-156

Hampton-Clarke, Inc. (HCI) received the following Lawler, Metusky & Skelly Engineers samples on November 8, 2001:

LMS #	HCI #	Type	Analysis
PC-3 (w) unfiltered	AB46503	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
PC-3 (w) filtered	AB46504	Aqueous	TAL-METALS (6010B), HG (7470A)
PC-4 (w) unfiltered	AB46505	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
PC-4 (w) filtered	AB46506	Aqueous	TAL-METALS (6010B), HG (7470A)
LMW-1(w) unfiltered	AB46507	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
LMW-1(w) filtered	AB46508	Aqueous	TAL-METALS (6010B), HG (7470A)

To meet the necessary detection limits for the Aqueous samples, the samples were concentrated during the digestion step (200ml to 100 ml). This step is evident on the result page, were the dilution factor is indicated as 0.5

All metals sample results have been reported to the MDL, as requested by the client, to achieve the detection limits as listed in the ASP Standards. The Method blanks and continuing calibration blanks are based upon the PQL criteria.

Problems associated with these analyses are as follows:

Metals

For Batch 3713

The serial dilution exceeded the RPD criteria for vanadium. This suggests that there may be some matrix interference occurring in the sample.

No other problems were encountered in the analysis of these samples.

Wet Chemistry

No problems were encountered in the analysis of these samples.

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

Stan Gilewicz, Laboratory Director

12/20/01
Date

H081749 — 11091737

Veritech, 175 Route 46 West, Fairfield, NJ 07004
A Division of HAMPTON-CLARKE, INC. NJDEPE # 14622

CHAIN OF CUSTODY RECORD

PHONE (800) 426-9992
FAX (973) 439-1458

CUSTOMER INFORMATION

CUSTOMER: LMS ENGINEERS
ADDRESS: PEARL RIVER, NY
TELEPHONE: (845) 735-8300
FAX: (845) 735-7466
PROJECT: HARRISON LANDF. II
PROJECT MANAGER: Tom Schneider
PROJECT LOCATION: HARRISON, NJ
STATE: NJ
PO NUMBER: 496-156

REPORT INFORMATION

SEND REPORT TO: MARIA Heicnz
One Blue Hill PLAZA
Pearl River NY 10970

SEND INVOICE TO: Finance
SAME

PROJECT INFORMATION

TURNAROUND (CONFIRM RUSH TAT'S WITH LAB)

- [x] STANDARD
- [ ] RUSH
  - [ ] 24 HOURS 100%
  - [ ] 48 HOURS 75%
  - [ ] 72 HOURS 50%
  - [ ] 1 WEEK 25%
  - [ ] 10 DAYS 10%

DELIVERABLES (PLEASE CHECK BOX)

- [ ] STANDARD
- [ ] FULL
- [ ] WASTE
- [ ] BUST
- [ ] NJ REDUCED
- [ ] EXCEL
- [ ] HAZSITE
- [ ] CUSTOM
- [ ] ELECTRONIC DELIVERABLE
- [ ] OTHER (SPECIFY)

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE (C)	SAMPLE TYPE: GRAB (G)	SAMPLE MATRIX	No. of Bottles: HCSO4	HNO3	HCL	NaOH	ZnAc + NaOH	Ascorbic	MONE	Methanol	Other	ANALYSIS
AB46503	PC-3 U		11/8	1100		X	W		1							2	Metals (Total & Filtered) + Cl⁻
46504	PC-3 F																
46505	PC-4 U			1000													
46506	PC-4 F																
46507	LMW-1 U			1130													
46508	LMW-1 F																

SAMPLER CERTIFIES THAT EACH SAMPLE RECEIVED PROPER FIELD PRESERVATION (IF REQUIRED) (INITIALS) MVP

SAMPLE HAZARDS : FLAMMABLE [ ] SKIN IRRITANT [ ] NON-HAZARD [ ] UNKNOWN [ ] NOXIOUS FUMES [ ]

SPECIAL INSTRUCTIONS: LAB Filters & Preserves Filtered Metal SAMPLE

TEMPERATURE UPON RECEIPT: 4.0°C

RELINQUISHED BY: M. V. Pattel	DATE / TIME 11/8 1300	RECEIVED BY:	DATE / TIME
AGENT OF: LMS		AGENT OF: UPS	
RELINQUISHED BY: UPS	DATE / TIME	RECEIVED BY:	DATE / TIME 11/9/11 1000
AGENT OF:		AGENT OF: HCL	

CONDITION UPON RECEIPT FORM

Veritech

Date Received: 11/9/01
Client: LMS
Veritech Project #

Filed By: RM
Project/Account: Harrison Landfill

INITIAL CONDITIONS

YES	NO		
✓		[1]	Is there a corresponding Chain of Custody included with the samples?
✓		[2]	Are the samples in a container such as a cooler or ice chest?
✓		[3]	Are the custody seals intact? IF NO, please circle one of the following: missing broken N.A.
4.0 °C		[4]	Please specify the temperature inside the container.

SAMPLE INFORMATION

YES	NO		
✓		[5]	Are the samples properly refrigerated (where required), have they arrived on ice?
✓		[6]	Are the samples within holding times for the parameters listed on the COC? If NO, list parameters and associated samples:
✓		[7]	Are all of the sample bottles intact? If NO, specify sample numbers below: broken: leaking:
✓		[8]	Are all of the sample labels or numbers legible? If NO, specify:
✓		[9]	Do the contents of the container match the COC? If NO, specify:
✓		[10]	Is there enough sample sent for the analyses listed on the COC? If NO, specify:
✓		[11]	Are the samples preserved correctly (see Preservation Form for actual pH readings)?
		[12]	Are all soil VO(NJ) samples properly preserved in methanol with the correct soil weights (8g - 12g) and accompanied by dry soil?

OTHER

[13] Specify:

CORRECTIVE ACTIONS

NO.	ACTION

PRESERVATION DOCUMENTATION

Date Received: 11/9/01 | Filed By: RM

Client: LMS | Project: Harrison Landfill

Veritech Project #:

SAMPLE ID:	CONTAINER SIZE	CONTAINER TYPE (PG)	PARAMETER	PRESERVATIVE	pH
PC-3	1L	P	Metals	HNO_3	1
PC-4	1	1	1	1	1
LMW-1	1	1	1	1	1

INTERNAL CHAIN OF CUSTODY RECORD - REFRIGERATOR #12

veritech

Client ID: LMS

Location: W-2

COMMENTS

		REMOVED:				RETURNED:			
TEST	SAMPLE No.	DATE	TIME	SIGNATURE	ALTERNATE	DATE	TIME	SIGNATURE	ALTERNATE
TD-LI/Hg	46503-08	11/13/07	0850	DMo		11/13/07	1509	DMo	
metals filtered	46504,06,08	11/8/07	11	11		11	11	DMo	
Chloride	46503,05,07	11.16.01	9:05	mg		11.16.01	12:00	mg	

FOR LOGIN BATCH

AB 46503-508

\QAQC\NEWICOC2.DOC

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713A1

Lab Code: 14622

Analysis Date: 11/15/01

Matrix: Water

Lab Sample ID: AB46503
Client ID: PC-3 unfiltered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	530	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	150000	P
7440473	Chromium	0.80	68	P
7440484	Cobalt	0.14	22	P
7439896	Iron	20	45000	P
7439954	Magnesium	3.6	53000	P
7439965	Manganese	0.79	710	P
7440020	Nickel	0.21	45	P
7782492	Selenium	2.4	11	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	110	P
7440666	Zinc	7.9	100	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46503

Client ID: PC-3 unfiltered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	12000	P
7440235	Sodium	110	110000	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP(ARL 3560)

CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46503
Client ID: PC-3 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	110	P_
7439921	Lead	0.79	13	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46503
Client ID: PC-3 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	35000	P
7440382	Arsenic	2.0	3.3	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: H3713SW

Lab Code: 14622

Analysis Date: 11/15/2001

Matrix: Water

Lab Sample ID: AB46503
Client ID: PC-3 unfiltered

Level: low/med
Batch: 3713

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46504
Client ID: PC-3 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	340	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	0.33	P
7440702	Calcium	11	160000	P
7440473	Chromium	0.80	9.1	P
7440484	Cobalt	0.14	2.1	P
7439896	Iron	20	83	P
7439954	Magnesium	3.6	47000	P
7439965	Manganese	0.79	560	P
7440020	Nickel	0.21	2.9	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	5.2	P
7440622	Vanadium	0.49	23	P
7440666	Zinc	7.9	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46504
Client ID: PC-3 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	9000	P
7440235	Sodium	110	110000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/5/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46504
Client ID: PC-3 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	U	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46504
Client ID: PC-3 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	48	P_
7440382	Arsenic	2.0	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

46
12/5

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46504

Client ID: PC-3 filtered

Dilution: 1

% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

1-21-30

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46505
Client ID: PC-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	260	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	34000	P
7440473	Chromium	0.80	81	P
7440484	Cobalt	0.14	12	P
7439896	Iron	20	31000	P
7439954	Magnesium	3.6	19000	P
7439965	Manganese	0.79	290	P
7440020	Nickel	0.21	73	P
7782492	Selenium	2.4	12	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	73	P
7440666	Zinc	7.9	91	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713Z

Analysis Date: 11/16/01

Lab Sample ID: AB46505
Client ID: PC-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	8900	P
7440235	Sodium	110	48000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46505
Client ID: PC-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	47	P_
7439921	Lead	0.79	15	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713C

Lab Code: 14622

Analysis Date: 11/20/01

Matrix: Water

Lab Sample ID: AB46505
Client ID: PC-4 unfiltered
Dilution: 0.5
% Solid: 0

Level: low/med
Batch: 3713

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	21000	P
7440382	Arsenic	2.0	6.8	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

1715

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46505
Client ID: PC-4 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

1-2-30

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46506
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	100	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	36000	P
7440473	Chromium	0.80	4.9	P
7440484	Cobalt	0.14	0.56	P
7439896	Iron	20	84	P
7439954	Magnesium	3.6	12000	P
7439965	Manganese	0.79	80	P
7440020	Nickel	0.21	11	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	17	P
7440666	Zinc	7.9	9.1	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713Z

Lab Code: 14622

Analysis Date: 11/16/01

Matrix: Water

Lab Sample ID: AB46506
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Level: low/med
Batch: 3713

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	5300	P
7440235	Sodium	110	51000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713A2

Lab Code: 14622

Analysis Date: 11/15/01

Matrix: Water

Lab Sample ID: AB46506
Client ID: PC-4 filtered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	1.7	P_
7439921	Lead	0.79	U	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713C

Analysis Date: 11/20/01

Lab Sample ID: AB46506
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	120	P
7440382	Arsenic	2.0	3.8	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46506
Client ID: PC-4 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

1-21-3

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A1

Analysis Date: 11/15/01

Lab Sample ID: AB46507
Client ID: LMW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	200	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	U	P
7440702	Calcium	11	30000	P
7440473	Chromium	0.80	60	P
7440484	Cobalt	0.14	8.3	P
7439896	Iron	20	24000	P
7439954	Magnesium	3.6	16000	P
7439965	Manganese	0.79	210	P
7440020	Nickel	0.21	54	P
7782492	Selenium	2.4	5.0	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	58	P
7440666	Zinc	7.9	67	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713Z

Lab Code: 14622

Analysis Date: 11/16/01

Matrix: Water

Lab Sample ID: AB46507
Client ID: LMW-1 unfiltered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	7400	P_
7440235	Sodium	110	45000	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713A2

Lab Code: 14622

Analysis Date: 11/15/01

Matrix: Water

Lab Sample ID: AB46507
Client ID: LMW-1 unfiltered

Level: low/med

Dilution: 0.5

Batch: 3713

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	33	P_
7439921	Lead	0.79	8.2	P_

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech
Data File Name: W3713C

Lab Code: 14622
Analysis Date: 11/20/01

Matrix: Water
Lab Sample ID: AB46507
Client ID: LMW-1 unfiltered

Level: low/med
Dilution: 0.5

Batch: 3713
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	16000	P
7440382	Arsenic	2.0	4.1	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech
Data File Name: H3713SW

Lab Code: 14622
Analysis Date: 11/15/2001

Matrix: Water
Lab Sample ID: AB46507
Client ID: LMW-1 unfiltered

Level: low/med
Dilution: 1

Batch: 3713
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

10/24/20

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech
Data File Name: W3713A1

Lab Code: 14622
Analysis Date: 1/15/01

Matrix: Water
Lab Sample ID: AB46508
Client ID: LMW-1 filtered

Level: low/med
Dilution: 0.5

Batch: 3713
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.7	U	P
7440393	Barium	0.17	120	P
7440417	Beryllium	0.026	U	P
7440439	Cadmium	0.18	0.34	P
7440702	Calcium	11	36000	P
7440473	Chromium	0.80	1.7	P
7440484	Cobalt	0.14	0.94	P
7439896	Iron	20	140	P
7439954	Magnesium	3.6	12000	P
7439965	Manganese	0.79	82	P
7440020	Nickel	0.21	10	P
7782492	Selenium	2.4	U	P
7440224	Silver	0.30	U	P
7440280	Thallium	1.6	U	P
7440622	Vanadium	0.49	18	P
7440666	Zinc	7.9	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713Z

Lab Code: 14622

Analysis Date: 11/16/01

Matrix: Water

Lab Sample ID: AB46508
Client ID: LMW-1 filtered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	48	5200	P
7440235	Sodium	110	51000	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(ARL 3560)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: W3713A2

Analysis Date: 11/15/01

Lab Sample ID: AB46508
Client ID: LMW-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440508	Copper	0.34	2.3	P
7439921	Lead	0.79	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3713C

Lab Code: 14622

Analysis Date: 11/20/01

Matrix: Water

Lab Sample ID: AB46508
Client ID: LMW-1 filtered

Level: low/med
Batch: 3713

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	8.0	190	P
7440382	Arsenic	2.0	U	P

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments:_____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3713

Data File Name: H3713SW

Analysis Date: 11/15/2001

Lab Sample ID: AB46508
Client ID: LMW-1 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.23	U	CV

U - Indicates compound not found above detection/reporting limit
* - Indicates compound above calibration range
P - Indicates analyzed by ICP(OPTIMA 3000DV)
CV - Indicates analyzed by Cold Vapor

Comments: _____

12/12

BLANKS

Lab Name: Veritech

Data File Name: W3713A1

Lab Code: 14622

Analysis Date: 11/15/01

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3713 (1)	ICB M01BLK2	CCB	CCB	CCB	CCB			M
Antimony	0.0150000 U	0.0150000 U	0.0150000 U	0.0150000 U	0.0150000 U	0.0150000 U			P
Barium	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U			P
Beryllium	0.0150000 U	0.0150000 U	0.0150000 U	0.0150000 U	0.0150000 U	0.0150000 U			P
Cadmium	0.0035000 U	0.0035000 U	0.0035000 U	0.0035000 U	0.0035000 U	0.0035000 U			P
Calcium	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U			P
Chromium	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U			P
Cobalt	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U			P
Iron	0.2750000 U	0.2750000 U	0.2750000 U	0.2750000 U	0.2750000 U	0.2750000 U			P
Magnesium	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U			P
Manganese	0.0400000 U	0.0400000 U	0.0400000 U	0.0400000 U	0.0400000 U	0.0400000 U			P
Nickel	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U			P
Selenium	0.0400000 U	0.0400000 U	0.0400000 U	0.0400000 U	0.0400000 U	0.0400000 U			P
Silver	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U	0.0200000 U			P
Thallium	0.0100000 U	0.0100000 U	0.0100000 U	0.0100000 U	0.0100000 U	0.0100000 U			P
Vanadium	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U			P
Zinc	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U			P

BLANKS

Lab Name: Veritech

Data File Name: W3713Z

Lab Code: 14622

Analysis Date: 11/16/01

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3713 (1)	ICB M-01-BL	CCB	CCB	CCB	CCB			M
Potassium	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U			P
Sodium	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U	2.0000000 U			P

BLANKS

Lab Name: Veritech Data File Name: W3713A2

Lab Code: 14622 Analysis Date: 11/15/01

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3713 (1)	ICB M01BLK2	CCB	CCB	CCB	CCB			M
Copper	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U			P
Lead	0.0080000 U	0.0080000 U	0.0080000 U	0.0080000 U	0.0080000 U	0.0080000 U			P

BLANKS

Lab Name: Veritech

Data File Name: W3713C

Lab Code: 14622

Analysis Date: 11/20/01

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3713 (1)	ICB M01BLK2	CCB	CCB	CCB	CCB			M
Aluminum	0.1800000 U	0.1800000 U	0.1800000 U	0.1800000 U	0.1800000 U	0.1800000 U			P
Arsenic	0.0075000 U	0.0075000 U	0.0075000 U	0.0075000 U	0.0075000 U	0.0075000 U			P

BLANKS

Lab Name: Veritech Data File Name: H3713SW

Lab Code: 14622 Analysis Date: 11/15/2001

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3713 (1)	ICB	CCB	CCB	CCB				M
Mercury	0.7000000 U	0.7000000 U	0.7000000 U	0.7000000 U	0.7000000 U				C

Spike Sample Recovery

Lab Name: Veritech

Data File Name: W3713A1

Lab Code: 14622

Analysis Date: 11/15/01

ICP sample ID: 46349

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46349 Non Spike	46349 MS 1 Matrix Spike 1	46349 MS 2 Matrix Spike 2	Rec1	Rec2	M
Antimony	0.5000	75 - 125	0.0150000 U	0.4767580	0.4772500	95	95	P
Barium	0.5000	75 - 125	0.0707480	0.5281630	0.5387950	91	94	P
Beryllium	0.5000	75 - 125	0.0150000 U	0.4621210	0.4642820	92	93	P
Cadmium	0.5000	75 - 125	0.0035000 U	0.4644320	0.4659760	93	93	P
Calcium	50.000	75 - 125	90.7910000	129.9380000	132.6850000	78	84	P
Chromium	0.5000	75 - 125	0.0500000 U	0.4680770	0.4714250	94	94	P
Cobalt	0.5000	75 - 125	0.0200000 U	0.4727920	0.4744900	95	95	P
Iron	5.000	75 - 125	2.4711100	6.8039100	6.9795000	87	90	P
Magnesium	50.000	75 - 125	31.4600000	77.7773000	79.2094000	93	95	P
Manganese	0.5000	75 - 125	0.3745030	0.8255200	0.8647130	90	98	P
Nickel	0.5000	75 - 125	0.0500000 U	0.4669400	0.4688490	93	94	P
Selenium	0.5000	75 - 125	0.0400000 U	0.4751710	0.4838130	95	97	P
Silver	0.5000	75 - 125	0.0200000 U	0.4593220	0.4648610	92	93	P
Thallium	0.5000	75 - 125	0.0100000 U	0.4904010	0.4911370	98	98	P
Vanadium	0.5000	75 - 125	0.0500000 U	0.4807180	0.4865670	96	97	P
Zinc	0.5000	75 - 125	0.0500000 U	0.4932140	0.4961040	99	99	P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech Data File Name: W3713Z

Lab Code: 14622 Analysis Date: 11/16/01

ICP sample ID: 46349 Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46349 Non Spike	46349 MS 1 Matrix Spike 1	46349 MS 2 Matrix Spike 2	Rec1	Rec2	M
Potassium	50.000	75 - 125	8.3090000	57.4670000	58.5010000	98	100	P
Sodium	50.000	75 - 125	40.1830000	86.3560000	88.7080000	92	97	P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech

Data File Name: W3713A2

Lab Code: 14622

Analysis Date: 11/15/01

ICP sample ID: 46349

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46349 Non Spike	46349 MS 1 Matrix Spike 1	46349 MS 2 Matrix Spike 2	Rec1	Rec2	M
Copper	0.5000	75 - 125	0.0500000 U	0.4906990	0.4941280	98	99	P
Lead	0.5000	75 - 125	0.0080000 U	0.4736570	0.4793660	95	96	P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech Data File Name: W3713C

Lab Code: 14622 Analysis Date: 11/20/01

ICP sample ID: 46349 Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46349 Non Spike	46349 MS 1 Matrix Spike 1	46349 MS 2 Matrix Spike 2	Rec1	Rec2		M
Aluminum	5.000	75 - 125	1.1515800	6.0022300	6.1081000	97	99		P
Arsenic	0.5000	75 - 125	0.0075000 U	0.4933450	0.4945560	99	99		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Spike Sample Recovery

Lab Name: Veritech Data File Name: H3713SW

Lab Code: 14622 Analysis Date: 11/15/2001

ICP sample ID: 46351 Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	46351 Non Spike	46351 MS 1 Matrix Spike 1	46351 MS 2 Matrix Spike 2	Rec1	Rec2		M
Mercury	10.000	75 - 125	0.0000000 U	9.4292674	8.0820032	94	81		C

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: W3713A1

Lab Code: 14622

Analysis Date: 11/15/01

ICP sample ID: LCSW

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Antimony	0.5000	75-125	0.5051150	101		P
Barium	0.5000	75-125	0.4997820	100		P
Beryllium	0.5000	75-125	0.4953730	99		P
Cadmium	0.5000	75-125	0.4948970	99		P
Calcium	50.000	75-125	48.9418000	98		P
Chromium	0.5000	75-125	0.4955680	99		P
Cobalt	0.5000	75-125	0.5095640	102		P
Iron	5.000	75-125	5.0897000	102		P
Magnesium	50.000	75-125	51.4330000	103		P
Manganese	0.5000	75-125	0.5189020	104		P
Nickel	0.5000	75-125	0.5018140	100		P
Selenium	0.5000	75-125	0.4998360	100		P
Silver	0.5000	75-125	0.4860200	97		P
Thallium	0.5000	75-125	0.5161750	103		P
Vanadium	0.5000	75-125	0.5059080	101		P
Zinc	0.5000	75-125	0.5025400	101		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech Data File Name: W3713Z

Lab Code: 14622 Analysis Date: 11/16/01

ICP sample ID: LCSW Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Potassium	50.000	75-125	53.6520000	107		P
Sodium	50.000	75-125	54.6600000	109		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech Data File Name: W3713A2

Lab Code: 14622 Analysis Date: 11/15/01

ICP sample ID: LCSW Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Copper	0.5000	75-125	0.4993960	100		P
Lead	0.5000	75-125	0.4962060	99		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech Data File Name: W3713C

Lab Code: 14622 Analysis Date: 11/20/01

ICP sample ID: LCSW Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Aluminum	5.000	75-125	4.9068100	98		P
Arsenic	0.5000	75-125	0.5036920	101		P

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Laboratory Control Sample

Lab Name: Veritech

Data File Name: H3713SW

Lab Code: 14622

Analysis Date: 11/15/2001

ICP sample ID: LCSW

Batch: 3713

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	10.000	75-125	9.1055238	91		C

* - Indicates the analyte failed the control limit criteria
U - Indicates the analyte was not detected

Veritech Wet Chem Form 1 Summary

Lab #: AB46503

Lab #:	AB46503	Sample Matrix:	Aqueous
Sample ID:	PC-3 unfiltered	Date Received:	11/9/01

Test Group Name: Chloride EPA 325 — Date Prepared: 11/16/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	330	mg/l	0.96	1	11/16/01

Lab #:	AB46505	Sample Matrix:	Aqueous
Sample ID:	PC-4 unfiltered	Date Received:	11/9/01

Test Group Name: Chloride EPA 325 — Date Prepared: 11/16/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	89	mg/l	0.96	1	11/16/01

Lab #:	AB46507	Sample Matrix:	Aqueous
Sample ID:	LMW-1 unfiltered	Date Received:	11/9/01

Test Group Name: Chloride EPA 325 — Date Prepared: 11/16/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	91	mg/l	0.96	1	11/16/01

Analysis Type: CL-W
Batch Number: CL-W-9
Cal Curve Date:
Units: mg/l

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-11/16/01	50	90-110	NA	49.69665	99	NA	
CAL-01	CAL-01-11/09/01	50	90-110	NA	50.68074	101	NA	
DUP	AB46412	NA	NA	20	85.12395	NA	1.2	
MBS	MBS	50	75-125	NA	51.66483	103	NA	
MS	AB46412	50	75-125	NA	135.3127	102	NA	
MSD	AB46412	50	75-125	20	133.3445	98	1.5	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Titr Vol	Smp Vol	DF	NofT	Tit Blk	Prep Date	Prep By	Anal Date	Anal By
CAL-01-11/09/01	CAL-01		51		100	50.681	5.20	50	1	0.01388	.05			11/09/01	jds
MB-1-11/09/01	MB	MB-1-11/09/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46412	Sample	MB-1-11/09/01	84	0.98	100	84.14	8.60	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46412	DUP	MB-1-11/09/01	85	0.98	100	85.124	8.70	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46412	MS	MB-1-11/09/01	140	0.98	100	135.31	13.80	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46412	MSD	MB-1-11/09/01	130	0.98	100	133.34	13.60	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
MBS	MBS	MB-1-11/09/01	52	0.98	100	51.665	5.30	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46414	Sample	MB-1-11/09/01	77	0.98	100	77.251	7.90	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46416	Sample	MB-1-11/09/01	37	0.98	100	37.395	3.85	50	1	0.01388	.05	11/09/01	jds	11/09/01	jds
AB46418	Sample	MB-1-11/09/01	190	4.9	100	191.9	3.95	10	1	0.01388	.05	11/09/01	jds	11/09/01	jds
CAL-01-11/16/01	CAL-01		50		100	49.697	5.1	50	1	0.01388	.05			11/16/01	mg
MB-1-11/16/01	MB	MB-1-11/16/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46498	Sample	MB-1-11/16/01	3400	980	100	3444.3	0.4	0.05	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46500	Sample	MB-1-11/16/01	3400	980	100	3444.3	0.4	0.05	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46502	Sample	MB-1-11/16/01	1200	490	100	1230.1	0.3	0.1	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46503	Sample	MB-1-11/16/01	330	0.98	100	333.12	33.9	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46505	Sample	MB-1-11/16/01	89	0.98	100	89.06	9.1	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46507	Sample	MB-1-11/16/01	91	0.98	100	91.029	9.3	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46660	Sample	MB-1-11/16/01	68	0.98	100	68.394	7.0	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46661	Sample	MB-1-11/16/01	25	0.98	100	25.094	2.6	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46662	Sample	MB-1-11/16/01	110	0.98	100	113.66	11.6	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46663	Sample	MB-1-11/16/01	170	0.98	100	172.71	17.6	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46664	Sample	MB-1-11/16/01	130	0.98	100	132.36	13.5	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46665	Sample	MB-1-11/16/01	ND	0.98	100	0	0.05	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46666	Sample	MB-1-11/16/01	110	0.98	100	108.74	11.1	50	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46667	Sample	MB-1-11/16/01	4700	490	100	4674.4	1.0	0.1	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46668	Sample	MB-1-11/16/01	36000	2000	100	36411	1.9	0.025	1	0.01388	.05	11/16/01	mg	11/16/01	mg
AB46669	Sample	MB-1-11/16/01	2400	49	100	2386.4	4.9	1.0	1	0.01388	.05	11/16/01	mg	11/16/01	mg

Flag Codes: Ra - Recovery failed specified criteria (PVS/MBS/MS/MSD/ICV/CAL) Rp - RPD failed specified criteria.
Na - Not Applicable Nc - Not Checked ..either one or both values =ND