360035

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

Albany, New York

POST-CLOSURE QUARTERLY LANDFILL MONITORING

Third Quarter

Harrison Subresidency

D008873 P.I.N. 8806.51.301
Town of Harrison
Westchester County, New York

June 2001

Prepared By

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File No.: 446-156

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ALBANY, NEW YORK

HARRISON SUBRESIDENCY
WESTCHESTER COUNTY
POST-CLOSURE MONITORING RESULTS

D008873, PIN 8806.51.301

THIRD QUARTERLY REPORT
June 2001

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HARRISON SUBRESIDENCY
WESTCHESTER COUNTY
POST-CLOSURE QUARTERLY MONITORING RESULTS
THIRD QUARTER

D008873, PIN 8806.51.301

1.0 INTRODUCTION

1.1 Background

This report presents the results of the April 2001 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 third 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 after one full year to evaluate and/or modify the existing sampling and monitoring program.

1.3 First Quarter Post-Closure Monitoring

In October 2000, LMS conducted the first quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill (LMS January 2000). 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 concentrations of several TAL metals (i.e. barium, beryllium, chromium, iron, magnesium, manganese, mercury, selenium and sodium) exceeded the Class GA

0 2000 ft

SCALE
1 in. = 2000 ft

NEW YORK STATE

QUADRANGLE LOCATION

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

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Figure 1

Site Location

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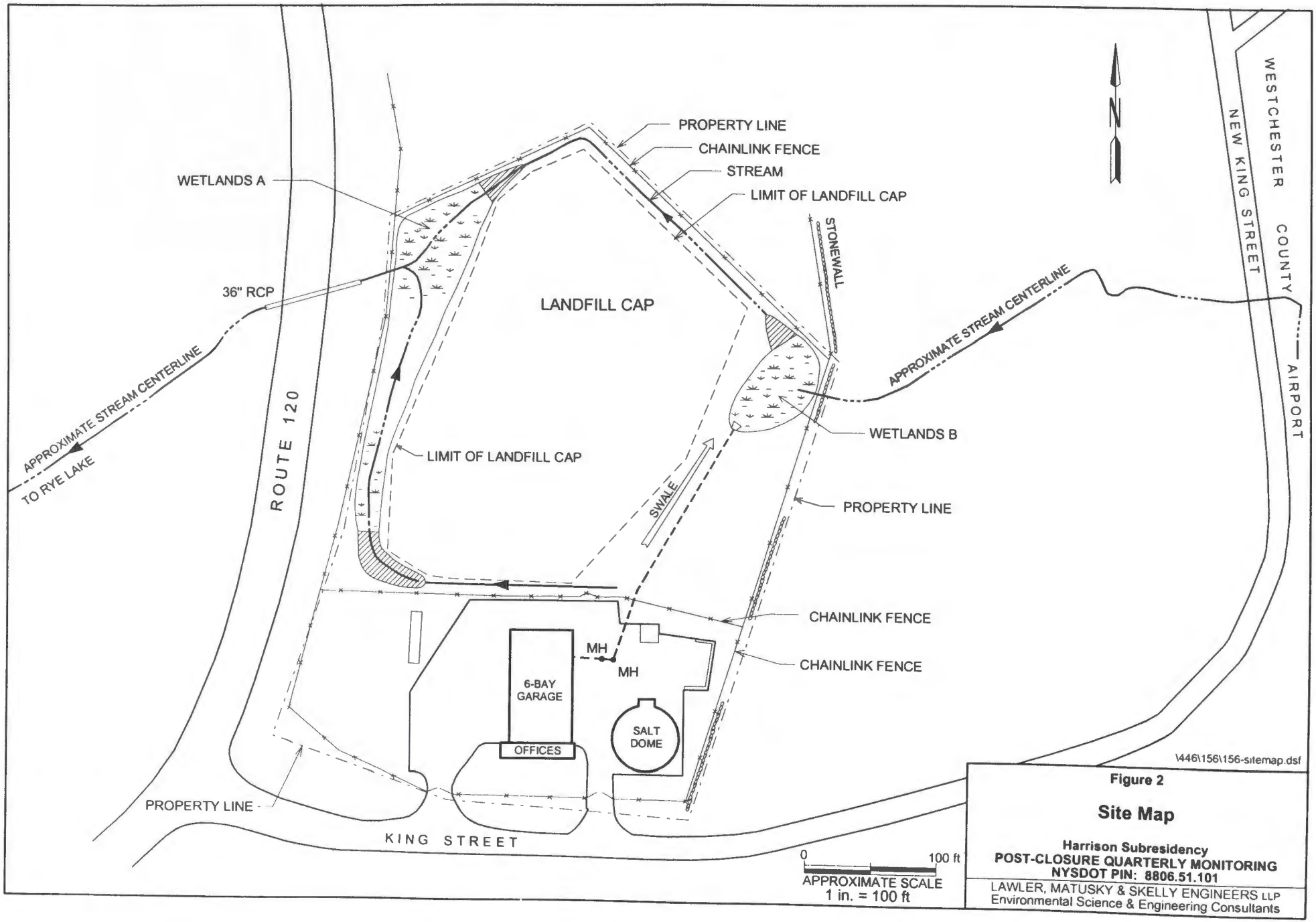

Figure 2

Site Map

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standards or guidance values in unfiltered groundwater and surface water samples. With the exception of selenium and the non-RCRA metals, iron, magnesium, manganese and sodium, no other metals were detected above the standards in the filtered groundwater and surface water samples. Elevated levels of magnesium and sodium were detected in a groundwater sample collected from the upgradient well LMW-2 in concentrations exceeding those detected in two on-site downgradient wells which suggests an additional off-site source. Chloride was detected, above the Class GA standard of 250 ppm, in a groundwater sample collected from the off-site well PC-3. This well is located close to Route 120 and the elevated levels of chloride detected in this well may be due to deicing activities in this area. Lead, manganese and silver were detected above the Lowest Effect Level (LEL) in three sediment samples collected on-site. The presence of metals above the LEL is considered a moderate impact. With the exception of selenium, the elevated concentrations of RCRA metals detected in the groundwater were associated with suspended particulates greater than 0.45 microns and were not in the dissolved phase of the groundwater.

1.4 Second Quarter Post-Closure Monitoring

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-site and two off-site monitoring wells (Figure 3), two downstream surface water locations and two corresponding sediment locations (Figure 4). All samples were analyzed for TAL metals and chloride. Analytical results indicated that chromium, iron, magnesium, manganese, selenium, sodium, and thallium were detected in the samples collected from groundwater and surface water. Elevated levels of iron, manganese, sodium and magnesium in the samples collected from the upgradient well LMW-2 suggest there may be a contributing external source to the concentrations detected in the downgradient wells. Elevated levels of sodium and chloride detected in an off-site well (PC-3), which is located close to Route 120, may be related to runoff from the highway. Of the TAL metals detected in the groundwater, only iron, manganese and sodium were detected above the standards and guidance values in the surface water and only manganese was detected in one sediment sample above its corresponding LEL. Manganese is not hazardous or a RCRA constituent and its presence in the sediment above the LEL is considered a minor impact. Analytical results indicate that, with the exception of thallium, there were no exceedences of RCRA metals in the filtered groundwater or surface water samples. The majority of the TAL metals, detected above the standards, were associated with suspended particulates greater than 0.45 microns and were not in the dissolved phase of the groundwater.

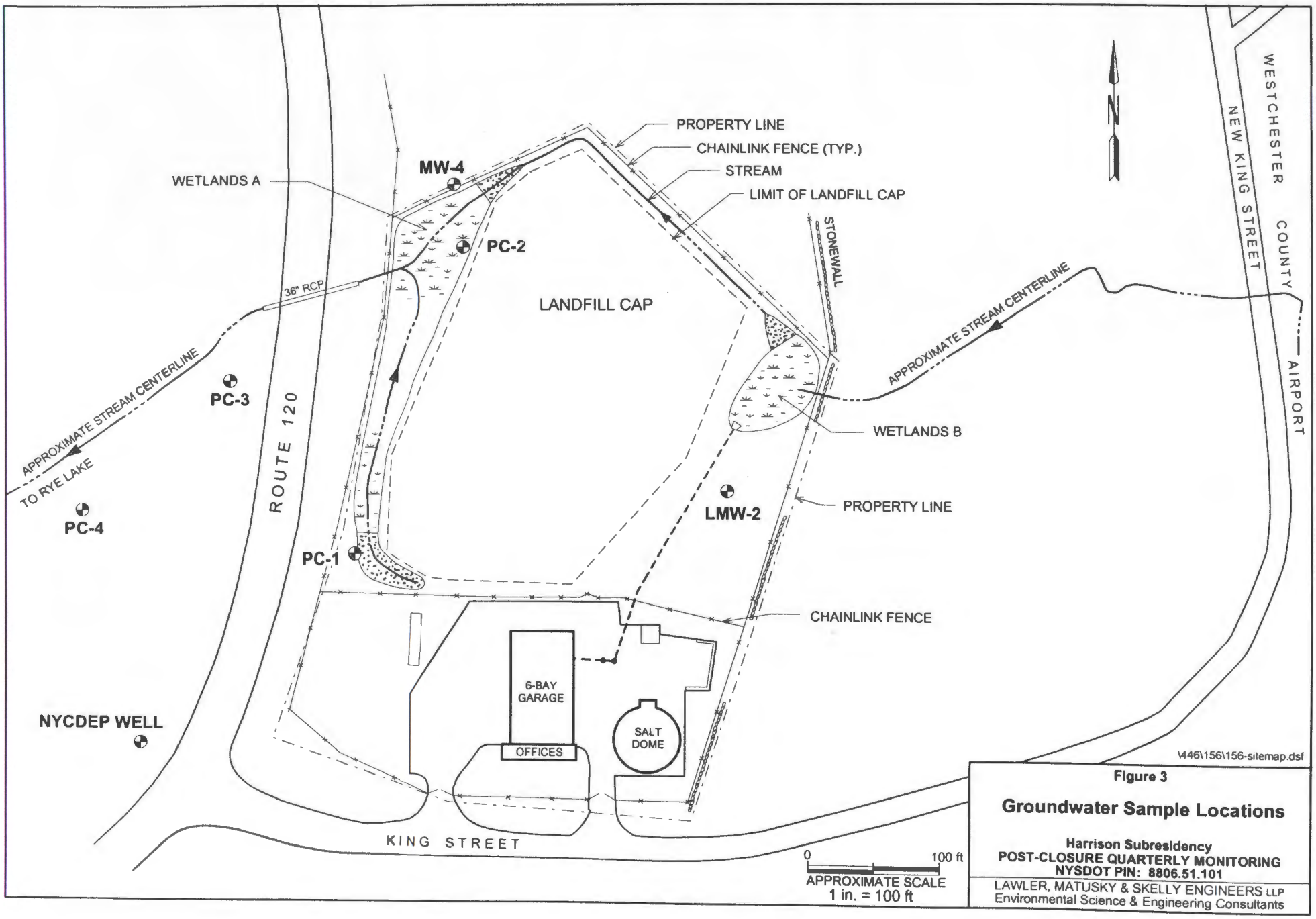

Figure 3

Groundwater Sample Locations

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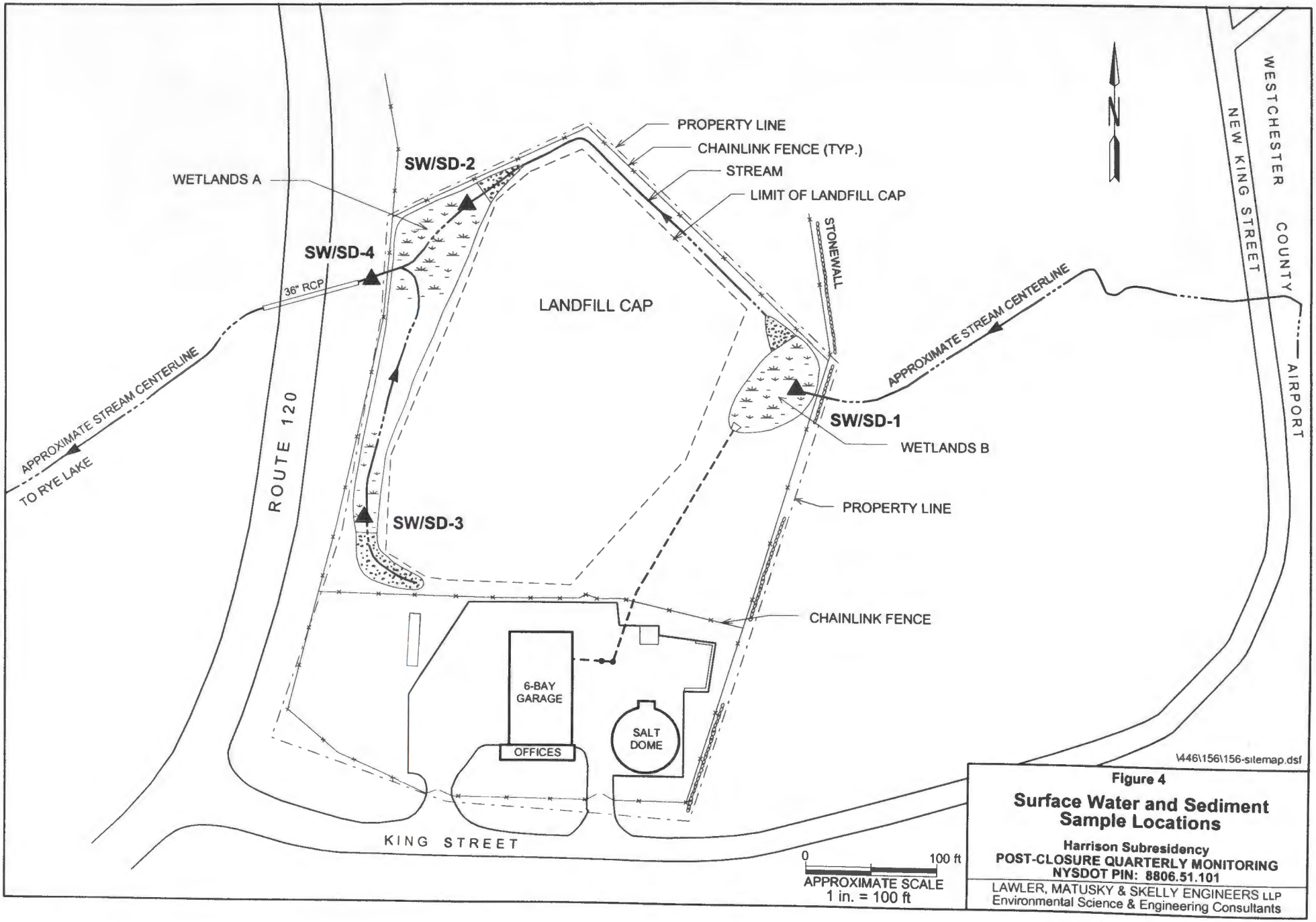

Figure 4

Surface Water and Sediment Sample Locations

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2.0 FIELD INVESTIGATION

2.1 Groundwater Investigation

Prior to landfill closure there were four wells on site; one upgradient well (LMW-2), and three downgradient wells (LMW-1, MW-3, and MW-4). Both LMW-1 and MW-3 were removed during the regrading of the landfill. Four new monitoring wells were installed in October 1998 to assist in the monitoring downgradient of the landfill. PC-1 and PC-2 were located in the wetlands area at the base of the western toe of the landfill slope while PC-3 and PC-4 were located on New York City Department of Environmental Protection (NYCDEP) property on the western side of Route 120 (Figure 3).

2.1.1 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 17 April 2001 to 18 April 2001.

The upgradient well LMW-2 and the downgradient well MW-4 were purged dry after four and five gallons respectively. The wells were allowed to recharge to more than 95% 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 metals (filtered and total) and chloride analyses.

Groundwater chemistry measurements (temperature, pH, conductivity, and turbidity) were recorded before, during, and after purging, with a measurement recorded for approximately every well volume (with the exception of LMW-2 and MW-4). Static water level measurements were also taken prior to and after purging each well. Groundwater purging information is recorded on the groundwater well sampling logs included in Attachment A.

2.2 Surface Water Sampling

From 17 April 2001 to 18 April 2001 three downstream surface water sampling points, SW-2, SW-3 and SW-4 (Figure 4) were sampled. All surface water samples were collected from approximately the same location staked out during the first quarterly sampling event.

SW-2 was collected from a point located at the northern portion of wetlands A (western side of the landfill). The flow at SW-2 was very low, <1 cubic foot per second (cfs), and limited to a small channel approximately 5 inches deep. SW-3 was collected from a stream located at the southwestern section of the landfill. The stream was approximately 5 in. deep and the flow was very low (< 1 cfs). 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 stream flowing into the culvert was approximately 5 in. deep and the flow was less than 1 cfs. Heavy oxidized iron staining was observed on the stream in this location. One upstream surface water sample (SW-1) was collected from an area near wetlands B. The stream flow was less than 1 cfs and the depth was approximately 5 in. 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 metals 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

Three downstream sediment samples (SD-2, SD-3 and SD-4) and one upstream sediment sample (SD-1) were collected for TAL metals and chloride analyses. Each sediment sample was collected subsequent to, and at the same location as, its corresponding surface water sample (Figure 4). A duplicate sample, SD-5, was collected from SD-2. The samples were collected using a dedicated laboratory-cleaned stainless steel trowel 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 analysis. 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% 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 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 several areas devoid of vegetation, was in good condition. The drainage swales were inspected and found to be in good condition. Oxidized iron staining was observed at the toe of the slope along the western section of the landfill and on the ground near PC-2. All four gas vents were also inspected and were found to be in good condition. No vermin or vector were noted on the landfill. However, what appeared to be rodent hole was observed at the southern section of the landfill.

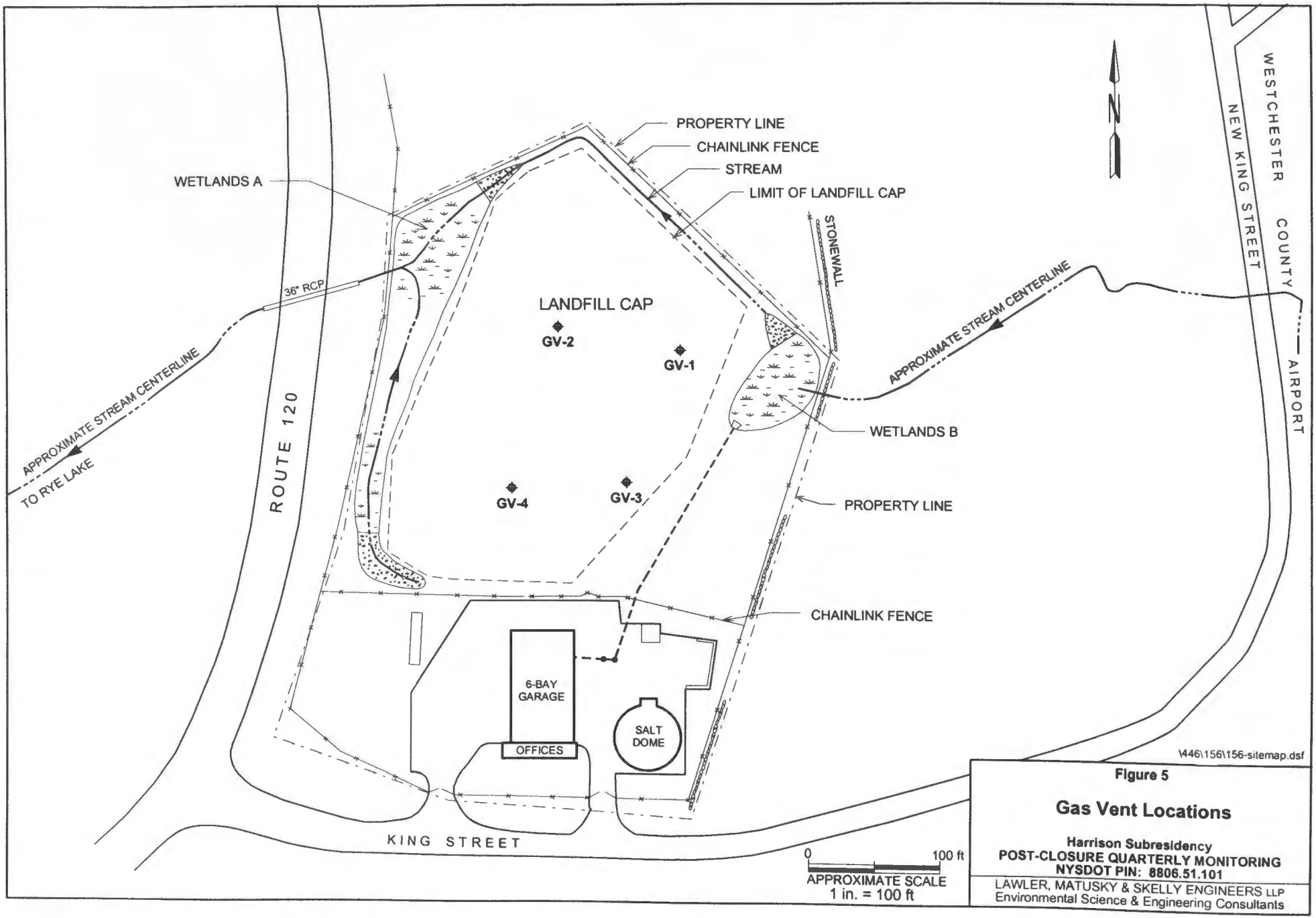

Figure 5

Gas Vent Locations

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2.6 Quality Assurance/Quality Control

An additional sediment sample, SD-5, was collected from the same location as SD-2 to assess laboratory precision and accuracy. The sample was analyzed for TAL metals and chloride. The relative percent difference (RPD) was calculated for each parameter that was detected in both the original and duplicate samples. The results indicate that the RPD was less than 20% (from 2.3% to 13%) which is within the acceptable range of percent difference. The sediment analytical results are included in Table 3.

3.0 ANALYTICAL RESULTS

3.1 Groundwater Results

The six filtered and six unfiltered groundwater samples collected on 17 April 2001 and 18 April 2001, designated as LMW-2, MW-4, PC-1, PC-2, PC-3 and PC-4, were analyzed for TAL metals and chloride. 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 twenty TAL metals were detected in the groundwater samples.

Aluminum was detected in the unfiltered groundwater samples collected from each well. The concentrations range from 970 parts per billion (ppb) in the on-site well MW-4 to 76000 ppb in PC-2. Aluminum was not detected in any of the filtered samples.

Antimony was detected in four unfiltered samples. The concentrations ranged from 3 ppb in the off-site well PC-4 to 6.8 ppb in the on-site well PC-2.

Arsenic was detected at 7.8 ppb in PC-2 and at 8 ppb in the off-site well PC-3. Arsenic was not detected in any of the filtered samples.

Barium was detected in both the filtered and unfiltered samples collected from all six wells. The concentrations range from 52 ppb in MW-4 to 850 ppb in PC-2 and PC-3. The concentrations of barium detected in the filtered samples were lower than the detected in the unfiltered samples.
Calcium was detected in all the unfiltered and filtered samples. The concentrations range from 45000 ppb in the filtered sample collected from PC-4 to 160000 ppb in the filtered sample collected from PC-3. With the exception of the concentration detected in PC-3, the concentration of calcium detected in the filtered samples was lower than that detected in the unfiltered samples.

Chromium was detected in the unfiltered samples collected from LMW-2, PC-1, PC-2, PC-3 and PC-4. The concentrations ranged from 29 ppb in PC-1 to 230 ppb in PC-2. Chromium was not detected in the filtered samples.

TABLE 1

GROUNDWATER DATA SUMMARY

Third Quarter (April 2001)

Harrison Subresidency

NYSDOT

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PARAMETER	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	26000	ND	970	ND	12000	ND	76000	ND	70000	ND	20000	ND	<5.0 - 1000	NS
Antimony	3.8	ND	ND	ND	ND	ND	6.8	ND	4.2	ND	3	ND	N/A	3
Arsenic	ND	ND	ND	ND	ND	ND	7.8	ND	8	ND	ND	ND	<1.0 - 30	25
Barium	550	170	170	52	170	59	850	150	850	250	260	85	10 - 500	1000
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10	3.0 GV
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	5
Calcium	110000	92000	59000	55000	81000	72000	78000	66000	97000	160000	48000	45000	1000 - 150000	NS
Chromium	100	ND	ND	ND	29	ND	230	ND	170	ND	72	ND	<1.0 - 5.0	50
Cobalt	28	ND	22	18	6.5	ND	64	4.5	110	12	16	2.3	<10	NS
Copper	49	4.6	ND	ND	29	4.6	140	ND	180	ND	42	ND	<1.0 - 3	200
Iron	55000	ND	120000	30000	21000	ND	200000	8300	110000	160	28000	210	10 - 10000	300 (m)
Lead	21	ND	18	9.2	11	ND	92	9.7	47	4.9	20	ND	<15	25
Magnesium	52000	34000	21000	20000	15000	9600	52000	21000	48000	42000	20000	12000	1000 - 50000	35000 GV
Manganese	2100	1200	43000	38000	500	ND	17000	11000	1100	530	690	450	<1.0 - 1000	300 (m)
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	0.7
Nickel	87	18	ND	ND	17	ND	140	ND	130	13	65	9	<10 - 50	100
Potassium	19000	5300	2500	2300	8400	5100	17000	4800	18000	8400	8000	4500	1000 - 10000	NS
Selenium	7.1	ND	35	25	ND	ND	26	7.2	9.8	ND	ND	ND	<1.0 - 10	10
Silver	7.3	ND	ND	ND	2.7	ND	13	ND	9.1	ND	2.6	ND	<5	50
Sodium	49000	45000	31000	29000	75000	69000	53000	45000	76000	88000	38000	36000	500 - 120000	20000
Thallium	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	N/A	0.5 GV
Vanadium	88	4.5	15	3.9	45	2.5	270	4.4	240	5.3	61	2.3	<1.0 - 10	NS
Zinc	120	22	4.4	ND	62	11	310	4.1	200	6.5	72	5.9	<10 - 2000	2000 GV
Chloride (mg/L)	32	*	54	*	44	*	52	*	250	*	72	*	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. NS - No standard.
(n) - Dragun, J., The Soil Chemistry of Hazardous Materials. * - Not analyzed.
N/A - Not applicable.
ND - Not detected at analytical detection limit.
DL- Dilution Factor

Cobalt was detected in both the filtered and unfiltered samples collected from all six wells. The concentrations range from 2.3 ppb in the filtered sample collected from PC-4 to 110 ppb in the unfiltered sample collected from the off-site well PC-3. The concentrations of cobalt detected in the filtered samples were lower than those detected in the unfiltered samples.

Copper was detected in both filtered and unfiltered samples. The concentrations range from 4.6 ppb in both the filtered samples collected from LMW-2 and PC-1 to 180 ppb in the unfiltered sample collected from the off-site well PC-3. All the concentrations of copper detected in the filtered samples were lower than those detected in the unfiltered samples.

Iron was detected at concentrations ranging from 160 ppb in the filtered sample collected from PC-3 to 200000 ppb in the unfiltered sample collected from PC-2. Iron concentrations detected in the filtered samples were lower than those detected in the unfiltered samples.

The concentrations of lead, detected in both the filtered and unfiltered samples ranged from 4.9 ppb in the filtered sample collected from PC-3 to 92 ppb in the unfiltered sample collected from PC-2. The concentration of lead detected in the filtered samples was lower than that detected in the unfiltered samples.

Magnesium was detected in both the filtered and unfiltered samples collected from all six wells. The concentrations range from 9600 ppb in the filtered sample collected from PC-1 to 52000 ppb in the unfiltered samples collected from the upgradient well LMW-2 and the downgradient well PC-2. All the concentrations of magnesium detected in the filtered samples were lower than the concentrations detected in the unfiltered samples.

Manganese was detected in both filtered and unfiltered samples. The lowest concentration was detected in the filtered sample collected from PC-4 at 450 ppb. The highest concentration, 43000 ppb, was detected in the unfiltered sample collected from MW-4. All the concentrations of manganese detected in the filtered samples were lower than the concentrations detected in the unfiltered samples.

The concentrations of nickel detected in the filtered and unfiltered range from 9 ppb in the filtered sample collected from PC-4 to 140 ppb in the unfiltered sample collected from PC-2. The concentrations of nickel detected in the filtered samples were lower than the concentrations detected in the unfiltered samples.

Potassium was detected in both the filtered and unfiltered samples collected from all six wells. The concentrations range from 2300 ppb in the filtered sample collected from MW-4 to 19000 ppb in the unfiltered sample collected from the upgradient well LMW-2. The concentrations of potassium detected in the filtered samples were lower than the concentrations detected in the unfiltered samples.

Concentrations of selenium were detected in both the filtered and unfiltered samples and range from 7.1 ppb (unfiltered LMW-2) to 35 ppb (unfiltered MW-4). The concentrations of selenium detected in the filtered samples were lower than those detected in the unfiltered samples.

Silver was detected in the unfiltered samples LMW-2, PC-1, PC-2, PC-3 and PC-4 at concentrations ranging from 2.6 ppb in PC-4 to 13 ppb in PC-2.

Sodium was detected in both the filtered and unfiltered samples collected from all six wells. The concentrations range from 29000 ppb in the filtered sample collected from MW-4 to 88000 ppb in the filtered sample collected from the off-site well PC-3. With the exception of the concentration of sodium detected in the filtered sample collected from PC-3, the concentrations of sodium detected in the filtered samples were lower than those detected in the unfiltered samples.

Thallium was detected in the unfiltered sample collected from PC-2 at 10 ppb. Thallium was not detected in the corresponding filtered sample.

Vanadium was detected in the filtered and unfiltered samples collected from all the wells. The concentrations range from 2.3 ppb in the filtered sample collected from PC-4 to 270 ppb in the unfiltered sample collected from PC-2. Vanadium concentrations detected in the filtered samples were lower than the concentrations detected in the unfiltered samples.

Zinc was detected in both filtered and unfiltered samples. The concentrations range from 4.1 ppb in the filtered sample collected from PC-2 to 310 ppb in the unfiltered sample collected from PC-2. The concentrations of zinc detected in the filtered samples were lower than those detected in the unfiltered samples.

Chloride was detected in all six groundwater samples. The concentrations ranged from 32 ppm in the upgradient well LMW-2 to 250 ppm in the off-site well PC-3.

The filtered and unfiltered analytical results suggest that a large portion of the TAL metals, detected in the samples, is associated with the suspended solids portion of the groundwater. Field-measured groundwater turbidities ranged from 5 to 500 nephelometric turbidity units (NTUs). Turbidity data is included in the well sampling logs located in Attachment A. Concentrations of the metals detected in the groundwater are presented on Table 1.

3.2 Surface Water Results

Four surface water samples were collected from 17 April 2001 to 18 April 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 twelve metals were detected in the surface water samples.

Aluminum was detected in all three downstream unfiltered surface water samples. The concentrations ranged from 300 ppb in SW-2 to 740 ppb in SW-4. There were no concentrations of aluminum detected in any of the filtered samples.

Barium was detected in both the unfiltered and filtered samples collected from all four sampling locations. The concentrations range from 31 ppb in the filtered sample collected from SW-4 to 59 ppb in the unfiltered sample SW-3. With the exception of the concentration of barium detected in the upstream filtered sample SW-1, the concentrations detected in the filtered samples were lower than those detected in the unfiltered samples.

Calcium was detected in both the unfiltered and filtered samples at concentrations ranging from 33000 ppb in the filtered sample collected from SW-4 to 78000 ppb in the unfiltered sample SW-3. With the exception of the concentration of calcium detected in the upstream sample SW-1, the concentrations detected in the filtered samples were lower than those detected in the unfiltered samples.

Copper was detected in both the filtered and unfiltered samples at concentrations ranging from 4 ppb in the filtered sample SW-3 to 120 ppb in the filtered sample collected from SW-4.

TABLE 2

SURFACE WATER DATA SUMMARY

Third Quarter (April 2001)

Harrison Subresidency

NYSDOT

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PARAMETER	SW-1	FIL SW-1	SW-2	FIL SW-2	SW-3	FIL SW-3	SW-4	FIL SW-4	NATURAL AMBIENT GROUNDWATER RANGES (n)	NYSDEC CLASS GA STANDARDS (a)
TAL METALS (ug/L)										
Aluminum	ND	ND	300	ND	550	ND	740	ND	<5.0 - 1000	NS
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	N/A	3
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	<1.0 - 30	25
Barium	45	48	45	36	59	49	44	31	10 - 600	1000
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	<10	3.0 GV
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	5
Calcium	39000	41000	44000	40000	78000	73000	35000	33000	1000 - 150000	NS
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	<1.0 - 5.0	50
Cobalt	ND	ND	ND	ND	ND	ND	ND	ND	<10	NS
Copper	17	15	4.5	4.7	5.7	4	4.5	120	<1.0 - 3	200
Iron	ND	ND	700	ND	780	ND	1800	ND	10 - 10000	300 (m)
Lead	ND	ND	ND	ND	8.1	ND	4.8	ND	<15	25
Magnesium	13000	13000	13000	11000	12000	11000	10000	9200	1000 - 50000	35000 GV
Manganese	50	46	270	15	180	ND	320	22	<1.0 - 1000	300 (m)
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	0.7
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	<10 - 50	100
Potassium	3000	3100	3000	2700	4500	4100	2800	2500	1000 - 10000	NS
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	<1.0 - 10	10
Silver	ND	ND	ND	ND	ND	ND	ND	ND	<5	50
Sodium	99000	100000	28000	26000	65000	60000	31000	30000	500 - 120000	20000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	N/A	0.5 GV
Vanadium	2.7	3.1	2.4	1.7	3.7	2.2	3.5	ND	<1.0 - 10	NS
Zinc	33	25	17	4.1	18	ND	22	4.1	<10 - 2000	2000 GV
Chloride (mg/L)	170	*	36	*	46	*	44	*	N/A	250

(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.
N/A - Not applicable.
ND - Not detected at analytical detection limit.

Concentrations of copper detected in filtered samples were higher than those detected in two unfiltered samples (SW-2 and SW-3) and lower than those detected in SW-1 and SW-3.

Iron was detected in all three downstream unfiltered samples at 700 ppb (SW-2), 780 ppb (SW-3) and 1800 ppb (SW-4). Iron was not detected in the upstream sample SW-1 or any of the filtered samples.

Lead was detected in two downstream unfiltered samples at 4.8 ppb (SW-4) and 8.1 ppb (SW-3).

Magnesium was detected in all unfiltered and filtered samples. The concentrations ranged from 9200 ppb in the filtered sample collected from SW-4 to 13000 ppb in the filtered and unfiltered samples collected from SW-1 and the unfiltered sample collected from SW-2. The concentrations of magnesium detected in the filtered samples were the same as, or lower than, those detected in the unfiltered samples.

Manganese was detected in all four unfiltered and three filtered samples. The concentrations ranged from 15 ppb in the filtered sample collected from SW-2 to 320 ppb in the unfiltered sample collected from SW-4. The concentrations of manganese detected in the filtered samples were lower than those detected in the unfiltered samples.

Potassium was detected all unfiltered and filtered samples. The concentrations ranged from 2500 ppb in the filtered sample collected from SW-4 to 4500 ppb in the unfiltered sample collected from SW-3. With the exception of SW-1 the concentrations of potassium detected in the filtered samples were lower than those detected in the unfiltered samples.

Sodium was detected in all unfiltered and filtered samples. The concentrations ranged from 26000 ppb in the filtered sample collected from SW-2 to 100000 ppb in the filtered sample collected from the upstream location (SW-1). With the exception of the concentration of sodium detected in the filtered sample collected from SW-1, the concentrations detected in the filtered samples were lower than those detected in the unfiltered samples.

Vanadium was detected in both the filtered and unfiltered samples. The concentrations ranged from 1.7 ppb in the filtered sample collected from SW-2 to 3.7 ppb in the unfiltered sample collected from SW-3. With the exception of the concentration of vanadium detected in the filtered sample collected from SW-1, the concentrations detected in the filtered samples are lower than those detected in the unfiltered samples.

Concentrations of zinc were detected in filtered and unfiltered samples. The concentrations ranged from 4.1 ppb in the filtered samples collected from SW-2 and SW-4 to 33 ppb in the unfiltered sample collected from SW-1. The concentrations detected in the filtered samples were lower than those detected in the unfiltered samples.

Chloride was detected in all four surface water samples. The highest concentration, 170 ppm, was detected in the sample collected from the upstream location, SW-1.

3.3 Sediment Data Results

The five sediment samples (one upstream and three downstream locations and a duplicate) were collected from 17 April 2001 to 18 April 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.

Eighteen TAL metals were detected in the sediment samples. The analytical results are presented on Table 3. Aluminum (3800 to 10000 ppm), arsenic (1.8 to 2.8 ppm), barium (31 to 55 ppm), calcium (4200 to 50000 ppm), chromium (5.2 to 13 ppm), cobalt (3.9 to 4.7 ppm), copper (7.9 to 33 ppm), iron (10000 to 15000 ppm), lead (15 to 43 ppm), magnesium (3300 to 26000 ppm), manganese (240 to 1000 ppm), nickel (8.5 to 11 ppm), potassium (770 to 1400 ppm), selenium (1.8 to 3 ppm), silver (0.49 to 2.1 ppm), vanadium (12 to 23 ppm) and zinc (29 to 230 ppm) were detected in all the sediment samples and the duplicate sample SD-5. With the exception of the concentrations of copper and zinc, detected in the sample collected from the upstream location SD-1, the highest concentrations of TAL metals were detected in the samples collected from the downstream locations SD-3 and SD-4. In addition, thallium was detected in the downstream sample SD-2 and its duplicate sample SD-5 at 1.4 ppm.

Chloride was detected in all four sediment samples and the duplicate sediment sample SD-5. The highest concentration of chloride was detected in the sample collected from the downstream location SD-3 at 260 ppm.

TABLE 3

SEDIMENT DATA SUMMARY

Third Quarter (April 2001)

Harrison Subresidency

NYSDOT

D008873, PIN 8806.51.101

PARAMETER	SD-1	SD-2	SD-3	SD-4	SD-5	Sediment Criteria (a) LEL[1]	Sediment Criteria (a) SEL[2]
TAL METALS (mg/kg)							
Aluminum	6100	4700	10000	5000	3800		
Antimony	ND	ND	ND	ND	ND	2	25
Arsenic	2.7	1.8	2.8	2.1	1.9	6	33
Barium	49	32	55	52	31		
Beryllium	ND	ND	ND	ND	ND		
Cadmium	ND	ND	ND	ND	ND	0.6	9
Calcium	32000	45000	4200	50000	45000		
Chromium	7.4	6.3	13	8.3	5.2	26	110
Cobalt	4.7	4.6	4.6	4.7	3.9		
Copper	33	10	11	11	7.9	16	110
Iron	13000	13000	13000	15000	10000	20000	40000
Lead	33	17	43	29	15	31.0	110
Magnesium	18000	22000	3300	26000	21000		
Manganese	910	650	240	1000	770	460	1100
Mercury [DL 1:167]	ND	ND	ND	ND	ND	0.15	1.3
Nickel	11	10	9.3	11	8.5	16	50
Potassium	1200	1300	770	1400	1000		
Selenium	2.7	2.1	2	3	1.8		
Silver	1.1	0.52	2.1	0.71	0.49	1	2.2
Sodium	ND	ND	ND	ND	ND		
Thallium	ND	1.4	ND	ND	1.4		
Vanadium	19	13	23	16	12		
Zinc	230	34	46	58	29	120	270
Chloride (mg/kg)	120	69	260	110	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 ten metals, detected in the unfiltered and filtered samples, occurred at concentrations exceeding their representative groundwater criteria (Table 1). As stated in section 3.1, a large portion of the TAL metals, detected in the samples, are associated with the suspended solids portion of the groundwater. Groundwater turbidity was measured during sample collection and ranged from 5 to 500 NTUs.

Antimony was detected above the Class GA standard of 3 ppb in four unfiltered samples. The highest concentration was detected in the on-site downgradient well PC-2 at 6.8 ppb. However antimony was not detected in the corresponding filtered samples.

Chromium, detected in the unfiltered samples, LMW-2, PC-2, PC-3 and PC-4, exceeded the Class GA standard of 50 ppb. The highest concentration was detected in PC-2 (230 ppb). Chromium was not detected in the corresponding filtered samples.

Iron and manganese exceeded the combined Class GA standard of 500 ppb in all unfiltered and five of the filtered samples. The highest combined concentration of iron and manganese was detected in the unfiltered sample collected from PC-2. However, all the combined concentrations of iron and manganese detected in the filtered samples were lower than those detected in the unfiltered samples.

Lead was detected above the Class GA standard of 25 ppb in the unfiltered samples collected from PC-2 (92 ppb) and PC-3 (47 ppb). The concentrations of lead detected in the corresponding filtered samples did not exceed the standard.

Magnesium exceeded the Class GA guidance value of 35000 ppb in one filtered and three unfiltered samples. The highest concentrations were detected in the upgradient well LMW-2 and the downgradient well PC-2 at 52000 ppb.

Nickel was detected above the Class GA standard of 100 ppb in the unfiltered samples collected from PC-2 (140 ppb) and the off-site well PC-3 (130 ppb). Nickel was not detected in the filtered sample collected from PC-2 and was detected below the standard in the sample collected from PC-3.

Selenium was detected above the Class GA standard of 10 ppb in the unfiltered samples collected from PC-2 (26 ppb) and MW-4 (35 ppb). Selenium was not detected above the standard in the filtered sample collected from PC-2 but was detected above the standard in the filtered sample collected from MW-4. The concentration detected in the filtered sample from MW-4 was lower than that detected in the unfiltered sample.

Sodium exceeded the standard of 20000 ppb in all filtered and unfiltered samples. The highest concentration was detected in the filtered sample collected from the off-site well PC-3 which is located close to Route 120. With the exception of the filtered sample collected from PC-3 the concentrations of sodium detected in the filtered samples were lower than those detected in the unfiltered samples.

Thallium, detected in the unfiltered sample collected from PC-2 (10 ppb) exceeded the guidance value of 0.5 ppb. Thallium was not detected in the corresponding filtered sample.

Antimony, chromium, iron, magnesium, manganese and sodium were detected above the Class GA standards in the upgradient background well LMW-2.

Chloride was detected at the Class GA standard of 250 ppm in the off-site well PC-3.

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 three metals, detected in the surface water samples, occurred at concentrations exceeding their respective criteria (Table 2). Iron and manganese exceeded the combined Class GA standard of 500 ppb in the downstream unfiltered samples collected from SW-2, SW-3 and SW-4. The highest combined iron and manganese concentration was detected in SW-4 (2120 ppb). Iron and manganese were not detected above the combined standard in the filtered samples. Sodium exceeded the Class GA standard of 20000 ppb in both the unfiltered and filtered samples collected from the upstream and downstream

locations. The highest sodium concentration was detected in the filtered sample collected from the upstream location (SW-1) at 100,000 ppb. With the exception of the concentration of sodium detected in SW-1, the concentrations detected in the filtered samples were lower than those detected in the unfiltered samples.

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 current NYSDEC Technical Guidance for Screening Contaminated Sediment (January 1999 Revision).

The results of the TAL metals analyses indicate that concentrations of copper, lead, manganese, silver and zinc exceeded the lowest effect level (LEL) sediment criteria. Copper was detected above the LEL of 16 ppm in the sample collected from the upstream location, SD-1. Lead was detected above the LEL of 31 ppm in the upstream sample SD-1 (33 ppm) and the downstream sample SD-3 (43 ppm). Manganese was detected above the LEL of 460 ppm in two downstream and one upstream sample. The highest concentration was detected in the downstream sample SD-4 at 1000 ppm. Silver was detected above the LEL of 1 ppm in the upstream sample SD-1 and downstream sample SD-3. Zinc was detected above the LEL of 120 ppm in the upstream sample SD-1.

There are no recommended sediment criteria for chloride.

5.0 COMPARISON WITH PREVIOUS STUDIES

5.1 Groundwater

Results of the first, second and third quarter groundwater sampling events (October 2000, January 2001 and April 2001) indicate that the concentrations of TAL metals of concern (i.e., those metals exceeding NYSDEC standards or guidance values) in the samples collected in April 2001 generally show a increase in antimony, chromium, iron, magnesium, manganese, lead, nickel and selenium. However the concentrations of barium, beryllium, copper, mercury, and sodium detected in April 2001 were generally lower than those detected in the two previous sampling events. Thallium was not detected in the samples collected in October 2000 but did exceed the guidance value in January 2001. Thallium also exceeded the guidance value in the samples collected in April 2001, but at a lower concentration than that detected in January 2001.

There were no exceedences of chloride in the samples collected from the groundwater in the first two quarters. However, chloride was detected at the standard of 250 ppm in a sample collected from the off-site well PC-3 in April 2001.

5.2 Surface Water

Between October 2000 and April 2001 the concentrations of the TAL metals of concern, chromium, iron and manganese, generally decreased in the samples collected from the surface water. The concentration of sodium, in excess of the NYSDEC standard, has increased. The largest increase was detected in samples collected from the upstream location SW-1, from 51,000 ppb (October 2000) to 99,000 ppb (April 2001). No surface water sample was collected from this location in January (water in the stream was frozen and under ice and snow).

5.3 Surface Sediments

Between October 2000 and April 2001 the concentrations of the TAL metals of concern (copper, manganese and zinc) generally increased in the samples collected from the sediment on the site. Copper and zinc exceedences occurred only in samples collected from the upstream location SD-1 in April 2001. Silver, detected above the LEL in SD-1 in October was not detected above the LEL in January but was detected at 2.1 ppm in the sample collected in April 2001. In general there has been a decrease in the concentration of lead detected in the sediment samples.

6.0 CONCLUSIONS

Groundwater samples collected downgradient of the landfill indicate that the landfill is releasing, and/or mobilizing from the soil, elevated levels of iron, manganese, magnesium and sodium (which are not hazardous or RCRA constituents). Elevated levels of iron, manganese, sodium and magnesium in the samples collected from the upgradient well LMW-2 suggest there may be a contributing external source to the concentrations detected in the downgradient wells. The concentration of magnesium detected in the upgradient well LMW-2 exceeded the concentrations detected in four downgradient wells. In addition, the concentration of sodium detected in the upstream surface water sample was higher than that detected in the downstream samples which suggests a contributing off-site source. Elevated levels of sodium and chloride detected in the samples collected from the off-site well PC-3, which is located close to Route 120, may be related to the salt dome south of the landfill and/or runoff from the highway. In addition antimony, chromium, lead, nickel, copper, silver, zinc, selenium and thallium were detected in the groundwater, surface water and sediment samples in concentrations exceeding their respective standards, guidance values and sediment criteria.. The filtered and unfiltered analytical results suggest that a large portion of the TAL metals, detected in the groundwater and surface water samples, is associated with the suspended solids faction (suspended particulates greater than 0.45 μm in size). None of the concentrations of TAL metals, detected in the sediment samples, exceeded their respective SELs. In addition, copper and zinc were detected in the upstream sediment sample SD-1 at a higher concentration than detected in the downstream samples. This suggests an off-site source of these TAL metals in the sediment.

ATTACHMENT A

LMS Well Sampling Log

Date:	4/17/01
Crew:	TMS/MP
Job No:	446-156
Project:	NYSDOT
Project Site:	Harrison SR Landfill

METERS USED

Temp.:	*TLC # 560*
pH:	99-06
Cond.:	*TLC # 560*
Turb.:	Monitek 21 PE

Well ID No.:	LMW-2
Well Condition:	Good
Well Depth/Diameter:	23.95/2"
Well Casing Type:	SS Stickup/PVC
Screened Interval:	Unknown
Casing Ht./Lock No.:	2246
Reference Pt.:	Top of PVC
Depth to Water (DTW)	10.3
Water Column Ht./Vol.	13.65/7.5
Purge Est.:	23 gal.
Purge Method(s):	Ded. Poly Bailer
Purge Date/Time(s):	-
Depth(s):	All
Rates (gpm):	< 1 gpm
Purged Volume:	4 gal.
DTW After Purging:	Well dry
Yield Rate:	L - M - H
Purge Observations:	Water clear then turbid Well dry at 4 gals.

DTW Before Sampling:	10.82
Sample Date/Time:	4/17/01@1435
Sampling Method:	Ded. Poly Bailer
Sampling Depth(s):	All
DTW After Sampling:	-
Chain-of-Custody No.(s):	-
Analytical Lab(s):	Veritech
Sampling Observations:	Water clearing

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	9.4	7.3	0.879	80
End				

SAMPLE ANALYSES

Parameters	Pres. Meth.	Filter
TAL Metals - Total	HNO3	No
TAL Metals - Filtered	*Ice @ 4°C	Yes
Chloride	Ice @ 4°C	No

* Preserved at Lab.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	8.8	7.6	0.839	10
4	9.1	7.8	0.874	400

Comments: HNU - At background

Air Temp:

Weather Conditions:

Crew Chief Signature Theresa M. Schneider Date: 4/17/01

LMS Well Sampling Log

Date:	4/17/01
Crew:	TMS/MP
Job No:	446-156
Project:	NYSDOT
Project Site:	Harrison SR Landfill

METERS USED

Temp.:	TLC # 560
pH:	99-06
Cond.:	TLC # 560
Turb.:	Monitek 21 P E

Well ID No.:	MW-4
Well Condition:	Good
Well Depth/Diameter:	15.05/2"
Well Casing Type:	SS Stickup/PVC
Screened Interval:	Unknown
Casing Ht./Lock No.:	2246
Reference Pt.:	Top of PVC
Depth to Water (DTW)	3.47
Water Column Ht./Vol.	11.58/6.36
Purge Est.:	19 gal.
Purge Method(s):	Ded. Poly Bailer
Purge Date/Time(s):	-
Depth(s):	All
Rates (gpm):	< 1
Purged Volume:	5 gal.
DTW After Purging:	Well dry
Yield Rate:	L - M - H
Purge Observations:	Water turbid

DTW Before Sampling:	3.51
Sample Date/Time:	4/17/01@1530
Sampling Method:	Ded. Poly Bailer
Sampling Depth(s):	All
DTW After Sampling:	-
Chain-of-Custody No.(s):	-
Analytical Lab(s):	Veritech
Sampling Observations:	Water clear

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	9.4	7.4	0.984	30
End				

SAMPLE ANALYSES

Parameters	Pres. Meth.	Filter
TAL Metals - Total	HNO3	No
TAL Metals - Filtered	*Ice @ 4°C	Yes
Chloride	Ice @ 4°C	No

* Preserved at Lab.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	8.1	7.4	1.013	100
5	8.5	6.8	1.006	250

Comments: HNU - At background

Air Temp:

Weather Conditions:

Crew Chief Signature: Theresa M Schneider Date: 4/17/01

LMS Well Sampling Log

Date:	4/17/01
Crew:	TMS/MP
Job No:	446-156
Project:	NYSDOT
Project Site:	Harrison SR Landfill

METERS USED

Temp.:	TLC # 11
pH:	98-16
Cond.:	TLC # 11
Turb.:	LMS # 001

Well ID No.:	PC-1
Well Condition:	Good
Well Depth/Diameter:	12.0/2"
Well Casing Type:	SS Stickup/PVC
Screened Interval:	2-12'
Casing Ht./Lock No.:	2402
Reference Pt.:	Top of PVC
Depth to Water (DTW)	4.32
Water Column Ht./Vol.	7.68/4.2
Purge Est.:	12gal.
Purge Method(s):	Ded. Poly Bailer
Purge Date/Time(s):	-
Depth(s):	All
Rates (gpm):	< 1
Purged Volume:	12 gal.
DTW After Purging:	5.8
Yield Rate:	L - M - H
Purge Observations:	Water clear then turbid

DTW Before Sampling:	5.8
Sample Date/Time:	4/17/01@1200
Sampling Method:	Ded. Poly Bailer
Sampling Depth(s):	All
DTW After Sampling:	-
Chain-of-Custody No.(s):	-
Analytical Lab(s):	Veritech
Sampling Observations:	Water turbid

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	8.4	7.8	0.752	195
End				

SAMPLE ANALYSES

Parameters	Pres. Meth.	Filter
TAL Metals - Total	HNO3	No
TAL Metals - Filtered	*Ice @ 4°C	Yes
Chloride	Ice @ 4°C	No

* Preserved at Lab.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0 #	9.7	7.6	0.480	5
4 9	8.6	7.6	0.765	300
8	8.5	7.6	0.765	300
12	8.1	7.8	0.75	300

Comments: HNU - At background

Air Temp:

Weather Conditions:

Crew Chief Signature: Theresa M Schneider Date: 4/17/01

LMS Well Sampling Log

Date:	4/18/01
Crew:	TMS/MP
Job No:	446-156
Project:	NYSDOT
Project Site:	Harrison SR Landfill

METERS USED

Temp.:	TLC # 560
pH:	99-06
Cond.:	TLC # 560
Turb.:	Monitek 21 PE

Well ID No.:	PC-2
Well Condition:	Casing Damaged
Well Depth/Diameter:	15.05/2"
Well Casing Type:	SS Stickup/PVC
Screened Interval:	5.05-15.05
Casing Ht./Lock No.:	2402
Reference Pt.:	Top of PVC
Depth to Water (DTW)	2.83
Water Column Ht./Vol.	13.22/7.2
Purge Est.:	22 gal.
Purge Method(s):	Pump w/ded. tubing
Purge Date/Time(s):	-
Depth(s):	All
Rates (gpm):	0.5 gpm
Purged Volume:	22 gal.
DTW After Purging:	3.32
Yield Rate:	L - M - H
Purge Observations:	Water tubid then clear

DTW Before Sampling:	3.32
Sample Date/Time:	1/18/01@1200
Sampling Method:	Ded. Poly tubing.
Sampling Depth(s):	All
DTW After Sampling:	-
Chain-of-Custody No.(s):	-
Analytical Lab(s):	Veritech
Sampling Observations:	Water clear

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	8.1	7.1	1.158	15
End				

SAMPLE ANALYSES

Parameters	Pres. Meth.	Filter
TAL Metals - Total	HNO3	No
TAL Metals - Filtered	*Ice @ 4°C	Yes
Chloride	Ice @ 4°C	No

* Preserved at Lab.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	8.7	7.4	0.847	150
7	8.5	7.4	0.955	30
14	8.3	7.4	1.16	15
22	8.1	7.1	1.158	15

Comments: HNU - At background

*Well is damaged.

Used 0.5 " diam. dedicated tubing to collect samples.

Air Temp:

Weather Conditions:

Crew Chief Signature Theresa M Schneider Date: 4/18/01

LMS Well Sampling Log

Date: 4/17/01
Crew: TMS/MP
Job No: 446-156
Project: NYSDOT
Project Site: Harrison SR Landfill

METERS USED

Temp.: TLC # 560
pH: 99-06
Cond.: TLC # 560
Turb.: Monitek 21 PE

Well ID No.: PC-3
Well Condition: Good/New
Well Depth/Diameter: 18.82/2"
Well Casing Type: SS Stickup/PVC
Screened Interval: 8.82 - 18.82
Casing Ht./Lock No.: 2402
Reference Pt.: Top of PVC
Depth to Water (DTW) 9.64
Water Column Ht./Vol. 9.18/5.04
Purge Est.: 15 gal.
Purge Method(s): Ded. Poly Bailer
Purge Date/Time(s): -

Depth(s): All
Rates (gpm): <1
Purged Volume: 15 gal.
DTW After Purging: 11.61
Yield Rate: L - M - H
Purge Observations: Water turbid

DTW Before Sampling: 11.61
Sample Date/Time: 4/17/01@1000
Sampling Method: Ded. Poly Bailer
Sampling Depth(s): All
DTW After Sampling: -
Chain-of-Custody No.(s): -
Analytical Lab(s): Veritech
Sampling Observations:
Water turbid

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	7.1	7.2	1.026	500
End				

SAMPLE ANALYSES

Parameters	Pres. Meth.	Filter
TAL Metals - Total	HNO3	No
TAL Metals - Filtered	*Ice @ 4°C	Yes
Chloride	Ice @ 4°C	No

* Preserved at Lab.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	8.3	6.6	2.590	50
5	7.4	7	1.263	500
10	6.8	7.2	1.103	500
15	6.9	7.2	1.23	325

Comments: HNU - At background

Air Temp:
Weather Conditions:

Crew Chief Signature Theresa M. Stancato Date: 4/17/01

LMS Well Sampling Log

Date: 4/17/01
Crew: TMS/MP
Job No: 446-156
Project: NYSDOT
Project Site: Harrison SR Landfill

METERS USED

Temp.: TLC # 560
pH: 99-06
Cond.: TLC # 560
Turb.: Monitek 21 PE

Well ID No.: PC-4
Well Condition: Good/New
Well Depth/Diameter: 16.94/2"
Well Casing Type: SS Stickup/PVC
Screened Interval: 6.94-16.94
Casing Ht./Lock No.: 2402
Reference Pt.: Top of PVC
Depth to Water (DTW) 8.32
Water Column Ht./Vol. 8.62/4.74
Purge Est.: 15 gal.
Purge Method(s): Ded. Poly Bailer
Purge Date/Time(s): -

Depth(s): All
Rates (gpm): < 1 gpm
Purged Volume: 15 gal.
DTW After Purging: 9.79
Yield Rate: L - M - H
Purge Observations: Water turbid

DTW Before Sampling: 9.79
Sample Date/Time: 4/17/01@1100
Sampling Method: Ded. Poly Bailer.
Sampling Depth(s): All
DTW After Sampling: -
Chain-of-Custody No.(s): -
Analytical Lab(s): Veritech
Sampling Observations:
Water turbid

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	7.9	7.6	0.519	150
End				

SAMPLE ANALYSES

Parameters	Pres. Meth.	Filter
TAL Metals - Total	HNO3	No
TAL Metals - Filtered	*Ice @ 4°C	Yes
Chloride	Ice @ 4°C	No

* Preserved at Lab.

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	8.3	7.6	0.472	220
5	8.3	7.5	0.494	200
10	8.3	7.4	0.513	175
15	8.1	7.4	0.524	150

Comments: HNU - At background

Air Temp:
Weather Conditions:

Crew Chief Signature Theresa M. Schneider Date: 4/17/01

ATTACHMENT B

Date: 4/17 - 4/18/01
Crew: Jms / MP
Site: Harrods, SR
Operation: Landfill

FIELD DATA SHEET FOR SURFACE WATER

pH No: 99-06
Therm. No: TLC - 560
Turbidity Meter No: Monitek 21 PE
Velocity Meter No:
Cond. Meter No. TLC - 560

	STATION No.	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (µmhos/cm)	TURB. (NTUs)	FLOW/ MEAS.	SAMPLE BOTTLES: SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	COMMENTS
4/17	SW-1	5"	5"	1445	9.0	7.4	0.840	2.5	<1 cfs	TAL Metals, Cl^-	F/T			
4/18	SW-2	5"	5"	1140	8.2	7.5	0.419	3.5	<1 cfs	TAL Metals, Cl^-	F/T			
4/18	SW-3	5"	5"	1045	10.4	7.6	0.705	3.0	<1 cfs	TAL Metals, Cl^-	F/T			
4/17	SW-4	5"	5"	1500	10.3	7.7	0.411	2.5	<1 cfs	TAL Metals, Cl^-	F/T			Rust stain on water. (from LF?)

Date: 4/17 - 4/18/2001
Crew: Fws/MP
Site: Harrison SK Landfill

FIELD DATA SHEET FOR SOIL/SEDIMENT SAMPLES

Oper:
Thermometer No:

STA. NO.	TIME	SMPL DPTH	METHOD	TEXT.	CLR.	ODOR	SAMPLE BOTTLES: SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	COMMENTS
SD-1	1445	3"	Dedicated Trowel	Loose/Gran.	Br	None Obser.	TAL Metals Cl^-	(1)			—
SD-2	1140	3"	↓	Loose/Gran.	Br/Gray	None Obser.	↓	(1)			—
SD-3	1045	3"	↓	Loose/Gran.	Dark Br	None Obser.	↓	(1)			—
SD-4	1522	3"	↓	Loose/Gran.	Br/Gray	None Obser.	↓	(1)			Water above sediment is "rust" colored
SD-5	1115	3"	↓	Loose/Gran.	Br/Gray	None Obser.	↓	(1)			Duplicate sample of SD-2
							Total	(5)			

ATTACHMENT C

AIR MONITORING FIELD DATA SHEET

Site Location: Harrison SR Landfill Date: 4/17/01 - 4/18/01

SAMPLE POINT	TIME (24 hr clock)	INITIALS	% LEL CGI	ppm PID	ppm FID		OBSERVATIONS
GV-1		JMS	< 10%	< 1.2	< 1.0		No readings above site background for the HNU & FID. No readings above pre-set alarms on CGI.
GV-2		JMS	< 10%	< 1.0	< 1.0		
GV-3		JMS	< 10%	< 1.3	< 1.0		
GV-4		JMS	< 10%	< 1.0	< 1.0		
SPL		JMS	< 10%	< 1.2	< 1.0		
EPL		JMS	< 10%	< 1.3	< 1.0		
NPL		JMS	< 10%	< 1.0	< 1.0		
WPL		JMS	< 10%	< 1.0	< 1.0		

Instrumentation:

CGI Gas Tech Genisis

PID HNU

FID Foxboro OVA 128

Notes:

NM - Not measured.

ppm - parts per million.

mg/m³ - milligrams per cubic meter.

LEL Lower Explosive Limit

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: 04/18/2001

AB31880
AB31881
AB31882
AB31883
AB31884
AB31885
AB31889
AB31891
AB31893
AB31895
AB31886
AB31887
AB31888
AB31890
AB31892
AB31894

Environmental Chemistry
Section

MAY 2 1 2001

Date: 05/18/2001
HCI Project: 04192010

SDG Narrative

Project: NYSDOT Harrison LF
Job: 446-156

Hampton-Clarke, Inc. (HCI) received the following Lawler, Metusky & Skelly Engineers samples on April 18, 2001:

LMS #	HCI #	Type	Analysis
LMW-2 (w) unfiltered	AB31880	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
LMW-2 (w) filtered	AB31881	Aqueous	TAL-METALS (6010B), HG (7470A)
SW-1 (w) unfiltered	AB31882	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
SW-1 (w) filtered	AB31883	Aqueous	TAL-METALS (6010B), HG (7470A)
MW-4 (w) unfiltered	AB31884	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
MW-4 (w) filtered	AB31885	Aqueous	TAL-METALS (6010B), HG (7470A)
SW-4 (w) unfiltered	AB31886	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
SW-4 (w) filtered	AB31887	Aqueous	TAL-METALS (6010B), HG (7470A)
SD-4 (s)	AB31888	Soil	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
PC-1 (w) unfiltered	AB31889	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
PC-1(w) filtered	AB31890	Aqueous	TAL-METALS (6010B), HG (7470A)
PC-3 (w) unfiltered	AB31891	Aqueous	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
PC-3(w) filtered	AB31892	Aqueous	TAL-METALS (6010B), HG (7470A)
PC-4 (w) unfiltered	AB31893	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
PC-4 (w) filtered	AB31894	Aqueous	TAL-METALS (6010B), HG (7470A)
SD-1 (s)	AB31895	Soil	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)

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 3316 (Soil):

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

Aluminum**	MS-283%	MSD-428%
Antimony	MS-55%	---
Calcium**	MS-22%	MSD-225%
Chromium	MS-65%	MSD-170%
Iron**	MS-764%	MSD-889%
Lead	MS-55%	---
Manganese	MS-134%	MSD-136%
Selenium	MS-73%	---
Silver	MS-74%	---
Zinc**	---	MSD-138%

** The sample concentration exceeded the spike amount added by a factor of four, therefore the spike recovery criteria does not apply.

The poor spike recovery for the other elements may be related to matrix interference, since the LCS and LCSD recoveries for those elements were within the QC limits.

The RPD between the sample and its duplicate within the batch exceeded the QC limit for Antimony 124%, Chromium 61%, Copper 74%, Iron 27%, Magnesium 21%, Manganese 35%, Nickel 40% and Zinc 25%. The RPD between the LCS and the LCSD for these elements had the following RPD values: 5.1%, 1.9%, 0.9%, 3.4%, 16%, 2.8%, 0.2%, and 17%. Since the RPD between the LCS and the LCSD fell within the QC limit, it suggests that the problem with the samples may be matrix related.

For Batch 3313 (Aqueous):

Sample AB31885 (MW-4 Filtered) was analyzed at a 5 times dilution for Manganese.

The Method Blank for this batch contained 0.292 mg/L of Sodium. Since the concentration of Sodium was less than 5 percent of the concentration in the samples.

The serial dilution exceeded the RPD criteria for the following elements: Aluminum, Calcium, Iron, Manganese, Vanadium, and Zinc. This suggests that there may be some matrix interference occurring in the sample.

The Matrix Spike and Matrix Spike Duplicate had a low recovery for Mercury, suggesting matrix interference since the LCSW and LCSWD had acceptable recoveries.

The RPD between the sample and its duplicate exceeded the QC limit for Zinc. This may be an anomaly since all other elements were within the QC limits.

Wet Chemistry

For batch 33s (Soil)

The RPD between the sample and its duplicate was just outside the QC limit with a difference of 22.3%. The batch was passed due to the acceptable percent recovery between the Matrix Spike and Matrix Spike Duplicate, which had a RPD of 0%.

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

Stan Gilewicz, Laboratory Director

5/21/01

Date

04192010

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:
ADDRESS:
TELEPHONE:
FAX:
PROJECT:
PROJECT MANAGER:
PROJECT LOCATION:
STATE:
PO NUMBER:

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
- ☐ FULL
- ☐ BUST
- ☐ EXCEL
- ☐ 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: H2SO4	HNO3	HCL	NaOH	Zinc + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB31880									1		F.D						
AB31881																	
AB31880																	
AB31882									1		F.D						
AB31883																	
AB31882																	
AB31884	U																
AB31885	F								1		F.D						
AB31886	U																
AB31887	F								1		F.D						
AB31888																	

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: 3.2°c

RELINQUISHED BY: AGENT OF:	DATE / TIME	RECEIVED BY: AGENT OF: Fate Dirf	DATE / TIME 4/13/01 9:20
RELINQUISHED BY: AGENT OF:	DATE / TIME	RECEIVED BY: AGENT OF:	DATE / TIME

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: _____
ADDRESS: _____
TELEPHONE: _____
FAX: _____
PROJECT: _____
PROJECT MANAGER: _____
PROJECT LOCATION: _____
STATE: _____
PO NUMBER: _____

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
- ☐ FULL
- ☐ BUST
- ☐ EXCEL
- ☐ 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: H_2SO_4	HNO_3	HCL	NaOH	Ziv. + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB 31889																	
31890																	
31889																	
31891																	
31892																	
31891																	
31893																	
31894																	
31893																	
31895																	

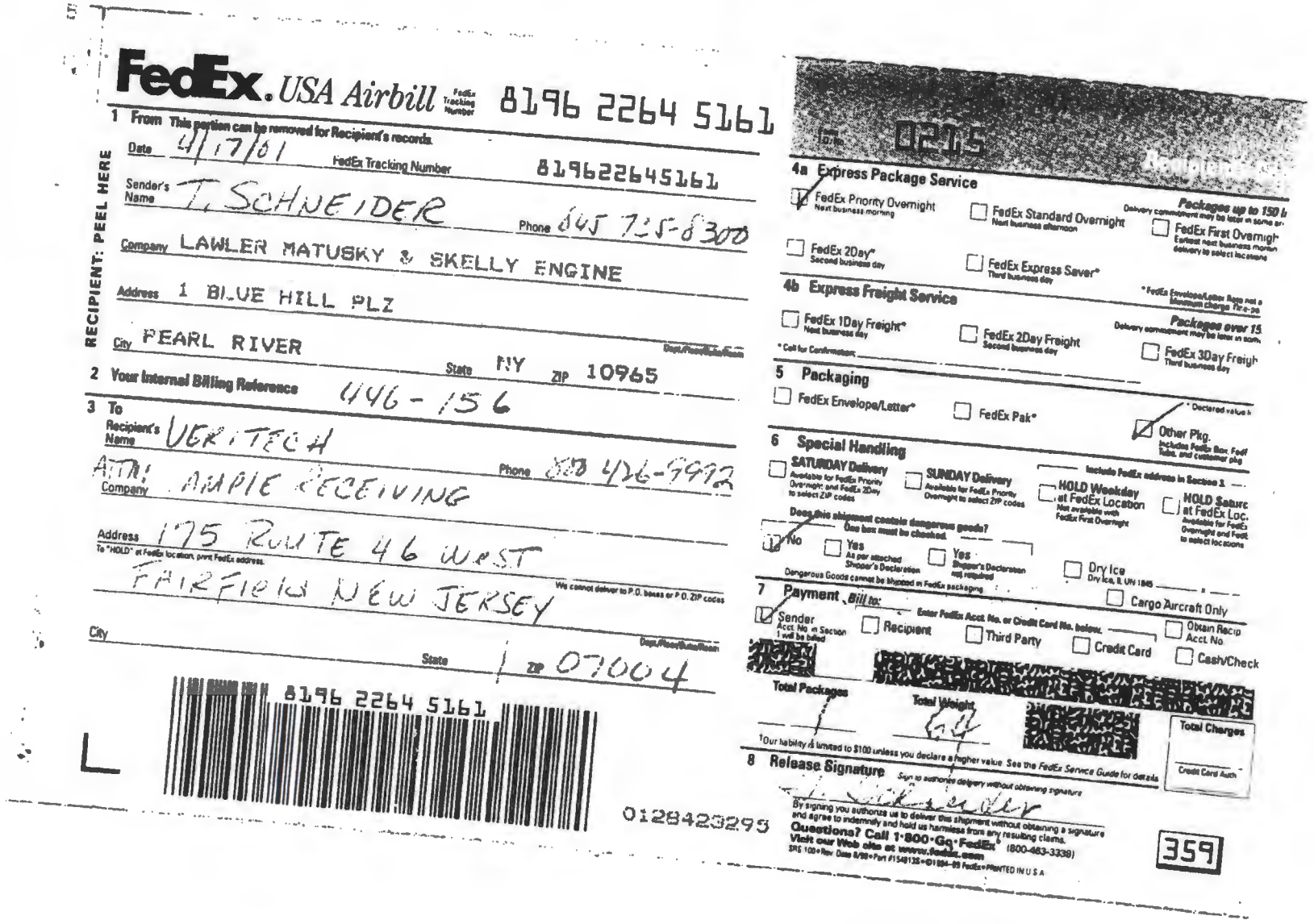
SAMPLER CERTIFIES THAT EACH SAMPLE RECEIVED PROPER FIELD PRESERVATION (IF REQUIRED) (INITIALS) _____

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

SPECIAL INSTRUCTIONS:

TEMPERATURE UPON RECEIPT: 3.2° C

RELINQUISHED BY: / AGENT OF:	DATE / TIME	RECEIVED BY: / AGENT OF: Frank Dinel	DATE / TIME 4/19/11 9:30
RELINQUISHED BY: / AGENT OF:	DATE / TIME	RECEIVED BY: / AGENT OF:	DATE / TIME



FedEx. USA Airbill FedEx Tracking Number 8196 2264 5161

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 4/17/01 FedEx Tracking Number 819622645161

Sender's Name T. SCHNEIDER Phone 845 725-8300

Company LAWLER MATUSKY & SKELLY ENGINE

Address 1 BLUE HILL PLZ

City PEARL RIVER State NY ZIP 10965

2 Your Internal Billing Reference 046-156

3 To

Recipient's Name VERITECH Phone 800 426-9992

Company ATTN: AMPIE RECEIVING

Address 175 ROUTE 46 WEST

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes

City FAIRFIELD NEW JERSEY State NJ ZIP 07004

8196 2264 5161

0128423293

0215

4a Express Package Service

- [x] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day* — Second business day
- [ ] FedEx Express Saver* — Third business day

Packages up to 150 lbs. Delivery commitment may be later in some areas

4b Express Freight Service

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

Packages over 150 lbs. Delivery commitment may be later in some areas

* Call for Confirmation:

5 Packaging

- [ ] FedEx Envelope/Letter*
- [ ] FedEx Pak*
- [x] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg

* Declared value limit

6 Special Handling

- [ ] SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — Available for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Include FedEx address in Section 3.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845

Dangerous Goods cannot be shipped in FedEx packaging.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [x] Sender — Acct. No. in Section 1 will be billed
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Obtain Recipient Acct. No.
- [ ] Cash/Check
- [ ] Cargo Aircraft Only

Total Packages 1 Total Weight 44 Total Charges

Credit Card Auth.

Our liability is limited to $100 unless you declare a higher value. See the FedEx Service Guide for details.

8 Release Signature Sign to authorize delivery without obtaining signature

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Call 1-800-Go-FedEx® (800-463-3339)

Visit our Web site at www.fedex.com

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CONDITION UPON RECEIPT FORM **Veritech**

Date Received: 4/13/01 Filed By: F. D
Client: LAWLER, Matusky Project/Account: [illegible]
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.
3.2 °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

YES	NO		
		[13]	Specify:

CORRECTIVE ACTIONS

NO.	ACTION

veritech laboratories

PRESERVATION DOCUMENTATION

Date Received: 4/18/01

Client: Sawzler, Mutinsky

Veritech Project #:

Filed By: F.D

Project: NY Sdot

SAMPLE ID:	CONTAINER SIZE	CONTAINER TYPE (PG)	PARAMETER	PRESERVATIVE	pH
Lmw-2	1L	P	Metals	HNO_3	1
SW-1					
MW-4					
SW-4					
PC-1					
PC-3					
PC-4					

INTERNAL CHAIN OF CUSTODY RECORD - REFRIGERATOR 2 [illegible]ch

Client ID: LAWLER Natusky

Location: B-3

COMMENTS

2-Boxes

TEST	SAMPLE No.	REMOVED: DATE	TIME	SIGNATURE	ALTERNATE	RETURNED: DATE	TIME	SIGNATURE	ALTERNATE
TD-W/ /wHg	31880, 82, 84, 86, 89, 91, 93	4/23/01	1000	[illegible]		4/23/01	1200	[illegible]	
Metals Filtration	31881, 83, 85, 87, 90, 92, 94	4/23/01	1000	[illegible]		4/23/01	1200	[illegible]	
TD-W/ /wHg	31881, 84, 85, 87, 90, 92, 94	4/23/01	1000	[illegible]		4/23/01	1200	[illegible]	
TD-S/ /SHg	31888, 895	4/23/01	1230	[illegible]		4/23/01	1500	[illegible]	
T-W/	31880, 72, 84, 86, 89, 91, 93	4/23/01	0845	[illegible]		4.25.01	11:05	TW	
metals Filtration	31881, 83, 85, 87, 90, 92, 94	↓	↓			4.25.01	11:05	TW	
TD-W/	31881, 83, 85, 87, 90, 92, 94	↓	↓	↓		4.25.01	11:05	TW	
O/G	31888, 95	4.25.01	10:00	mg		4.25.01	11:00	mg	
-Cl	31888, 95	4/25/01	1440	[illegible]		4/25/01	1720	[illegible]	
Chloride	31880, 82, 84, 86, 89, 91, 93	4.27.01	11:00	mg		4/27/01	15:00	[illegible]	

FOR LOGIN BATCH

AB 31880-95

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31880
Client ID: MW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	3.8	P
7440393	Barium	10	550	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	110000	P
7440473	Chromium	10	100	P
7440484	Cobalt	1.5	28	P
7440508	Copper	3.7	49	P
7439896	Iron	120	55000	P
7439921	Lead	3.6	21	P
7439954	Magnesium	160	52000	P
7440020	Nickel	5.7	87	P
7440224	Silver	2.2	7.3	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	88	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31880
Client ID: MW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	26000	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	7.1	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31880
Client ID: MW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	2100	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB31880
Client ID: MW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	19000	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31880
Client ID: MW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	49000	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: _____

4/01

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31880
Client ID: MW-2 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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
Data File Name: W3313A

Lab Code: 14622
Analysis Date: 04/23/2001

Matrix: Water
Lab Sample ID: AB31881
Client ID: MW-2

Level: low/med
Dilution: 0.5

Batch: 3313
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	170	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	92000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	4.6	P
7439896	Iron	120	U	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	34000	P
7440020	Nickel	5.7	18	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	4.5	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: _____

1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech
Data File Name: A3318A

Lab Code: 14622
Analysis Date: 04/25/2001

Matrix: Water
Lab Sample ID: AB31881
Client ID: MW-2

Level: low/med
Dilution: 0.5

Batch: 3313
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: S3316A

Lab Code: 14622
Analysis Date: 04/24/2001

Matrix: Water
Lab Sample ID: AB31881
Client ID: MW-2

Level: low/med
Dilution: 0.5

Batch: 3313
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	1200	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31881
Client ID: MW-2

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
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: _____

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31881

Client ID: MW-2

Level: low/med

Dilution: 1

Batch: 3313

% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	45	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	39000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	17	P
7439896	Iron	120	U	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	13000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	50	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	33	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: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	3000	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	99000	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31882
Client ID: SW-1 unfiltered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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:_____
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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	48	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	41000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	15	P
7439896	Iron	120	U	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	13000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	3.1	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	46	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	3100	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	100000	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31883
Client ID: SW-1 filtered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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:_____
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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31884
Client ID: MW-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	170	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	59000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	22	P
7440508	Copper	3.7	U	P
7439896	Iron	120	120000	P
7439921	Lead	3.6	18	P
7439954	Magnesium	160	21000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31884
Client ID: MW-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	970	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	35	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31884
Client ID: MW-4 unfiltered

Level: low/med

Dilution: 2.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	45	43000	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31884
Client ID: MW-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	4.4	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: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB31884
Client ID: MW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	2500	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: 3313

Data File Name: W3313Z

Analysis Date: 4/30/01

Lab Sample ID: AB31884
Client ID: MW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	31000	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: _____

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31884

Client ID: MW-4 unfiltered

Dilution: 1

% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31885
Client ID: MW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	52	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	55000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	18	P
7440508	Copper	3.7	U	P
7439896	Iron	120	30000	P
7439921	Lead	3.6	9.2	P
7439954	Magnesium	160	20000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	3.9	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

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31885
Client ID: MW-4 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB31885
Client ID: MW-4 filtered
Dilution: 2.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	45	38000	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: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB31885
Client ID: MW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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

Data File Name: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31885
Client ID: MW-4 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	29000	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31885
Client ID: MW-4 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	44	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	35000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	4.5	P
7439896	Iron	120	1800	P
7439921	Lead	3.6	4.8	P
7439954	Magnesium	160	10000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	3.5	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	740	P_
7440382	Arsenic	2.8	U	P_
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	320	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: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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: Water

Level: low/med
Batch: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	2800	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: 3313

Data File Name: W3313Z

Analysis Date: 4/30/01

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	31000	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31886
Client ID: SW-4 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	31	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	33000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	U	P
7439896	Iron	120	120	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	9200	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	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: Water

Level: low/med
Batch: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	2500	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: 3313

Data File Name: W3313Z

Analysis Date: 4/30/01

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	30000	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31887
Client ID: SW-4 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: Soil

Level: low/med
Batch: 3316

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31888
Client ID: SD-4
Dilution: 100
% Solid: 67

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.0	U	P
7440382	Arsenic	1.5	2.1	P
7440393	Barium	4.0	52	P
7440439	Cadmium	0.38	U	P
7440473	Chromium	1.7	8.3	P
7440484	Cobalt	0.56	4.7	P
7440508	Copper	1.1	11	P
7439921	Lead	2.8	29	P
7440020	Nickel	0.96	11	P
7782492	Selenium	0.72	3.0	P
7440224	Silver	0.56	0.71	P
7440280	Thallium	1.5	U	P
7440622	Vanadium	5.2	16	P
7440666	Zinc	10	58	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3316

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31888
Client ID: SD-4
Dilution: 100
% Solid: 67

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440417	Beryllium	0.41	U	P
7439965	Manganese	2.9	1000	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: 3316

Data File Name: S3316Z

Analysis Date: 4/24/01

Lab Sample ID: AB31888
Client ID: SD-4
Dilution: 100
% Solid: 67

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	71	5000	P
7440702	Calcium	200	50000	P
7439896	Iron	97	15000	P
7439954	Magnesium	54	26000	P
7440097	Potassium	45	1400	P
7440235	Sodium	300	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med

Batch: 3316

Data File Name: H3316S

Analysis Date: 04/25/2001

Lab Sample ID: AB31888

Client ID: SD-4

Dilution: 167

% Solid: 67

Concentration Units: mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.054	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	170	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	81000	P
7440473	Chromium	10	29	P
7440484	Cobalt	1.5	6.5	P
7440508	Copper	3.7	29	P
7439896	Iron	120	21000	P
7439921	Lead	3.6	11	P
7439954	Magnesium	160	15000	P
7440020	Nickel	5.7	17	P
7440224	Silver	2.2	2.7	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	45	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	12000	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	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: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	62	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	8400	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	75000	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31889
Client ID: PC-1 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31890
Client ID: PC-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	59	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	72000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	4.6	P
7439896	Iron	120	U	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	9600	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	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

Data File Name: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31890
Client ID: PC-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31890
Client ID: PC-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	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

Data File Name: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31890
Client ID: PC-1 filtered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	11	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: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB31890
Client ID: PC-1 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	5100	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31890
Client ID: PC-1 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	69000	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31890
Client ID: PC-1 filtered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	4.2	P
7440393	Barium	10	850	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	97000	P
7440473	Chromium	10	170	P
7440484	Cobalt	1.5	110	P
7440508	Copper	3.7	180	P
7439896	Iron	120	110000	P
7439921	Lead	3.6	47	P
7439954	Magnesium	160	48000	P
7440020	Nickel	5.7	130	P
7440224	Silver	2.2	9.1	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	240	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	70000	P
7440382	Arsenic	2.8	8.0	P
7782492	Selenium	4.2	9.8	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	1100	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	200	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	18000	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	76000	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31891
Client ID: PC-3 unfiltered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB31892
Client ID: PC-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	250	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	160000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	12	P
7440508	Copper	3.7	U	P
7439896	Iron	120	160	P
7439921	Lead	3.6	4.9	P
7439954	Magnesium	160	42000	P
7440020	Nickel	5.7	13	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	5.3	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31892
Client ID: PC-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31892
Client ID: PC-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	530	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB31892
Client ID: PC-3 filtered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	6.5	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

Data File Name: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB31892
Client ID: PC-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	8400	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31892
Client ID: PC-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	88000	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31892
Client ID: PC-3 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	3.0	P
7440393	Barium	10	260	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	48000	P
7440473	Chromium	10	72	P
7440484	Cobalt	1.5	16	P
7440508	Copper	3.7	42	P
7439896	Iron	120	28000	P
7439921	Lead	3.6	20	P
7439954	Magnesium	160	20000	P
7440020	Nickel	5.7	65	P
7440224	Silver	2.2	2.6	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	61	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	20000	P_
7440382	Arsenic	2.8	U	P_
7782492	Selenium	4.2	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	690	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: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	72	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	8000	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	38000	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB31893
Client ID: PC-4 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB31894
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	85	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	45000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	2.3	P
7440508	Copper	3.7	U	P
7439896	Iron	120	210	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	12000	P
7440020	Nickel	5.7	9.0	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB31894
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB31894
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	450	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: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB31894
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	5.9	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: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB31894
Client ID: PC-4 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	4500	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB31894
Client ID: PC-4 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	36000	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: W3313A

Lab Code: 14622
Analysis Date: 04/23/2001

Matrix: Soil
Lab Sample ID: AB31895
Client ID: SD-1

Level: low/med
Dilution: 100

Batch: 3316
% Solid: 60

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.2	U	P
7440382	Arsenic	1.7	2.7	P
7440393	Barium	4.5	49	P
7440439	Cadmium	0.43	U	P
7440473	Chromium	1.9	7.4	P
7440484	Cobalt	0.62	4.7	P
7440508	Copper	1.2	33	P
7439921	Lead	3.1	33	P
7440020	Nickel	1.1	11	P
7782492	Selenium	0.81	2.7	P
7440224	Silver	0.63	1.1	P
7440280	Thallium	1.7	U	P
7440622	Vanadium	5.8	19	P
7440666	Zinc	11	230	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Soil

Lab Sample ID: AB31895
Client ID: SD-1

Level: low/med
Batch: 3316

Dilution: 100
% Solid: 60

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440417	Beryllium	0.46	U	P
7439965	Manganese	3.2	910	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: 3316

Data File Name: H3316S

Analysis Date: 04/25/2001

Lab Sample ID: AB31895
Client ID: SD-1
Dilution: 167
% Solid: 60

Concentration Units: mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.060	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: _____

B 5/21/01

Veritech Wet Chem Form 1 Summary

Lab #: AB31893

Lab #: AB31893 | Sample Matrix: Aqueous

Sample ID: PC-4 unfiltered | Date Received: 4/18/01

Test Group Name: Chloride EPA 325 | Date Prepared: 4/27/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	72	mg/l	1.0	1	4/27/01

Lab #: AB31895 | Sample Matrix: Soil

Sample ID: SD-1 | Date Received: 4/18/01

Test Group Name: % Solids SM2540G | Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	60	Percen		1	4/25/01

Test Group Name: Chloride 9250 | Date Prepared: 4/25/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	120	mg/kg	83	1	5/1/01

BLANKS

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB			M
Antimony	0.0022750 U	0.0045500 U	0.0045500 U	0.0045500 U	0.0045500 U	0.0045500 U		P
Barium	0.0100500 U	0.0201000 U	0.0201000 U	0.0201000 U	0.0201000 U	0.0201000 U		P
Beryllium	0.0014400 U	0.0028800 U	0.0028800 U	0.0028800 U	0.0028800 U	0.0028800 U		P
Cadmium	0.0014650 U	0.0029300 U	0.0029300 U	0.0029300 U	0.0029300 U	0.0029300 U		P
Calcium	0.3725000 U	0.7450000 U	0.7450000 U	0.7450000 U	0.7450000 U	0.7450000 U		P
Chromium	0.0099500 U	0.0199000 U	0.0199000 U	0.0199000 U	0.0199000 U	0.0199000 U		P
Cobalt	0.0015100 U	0.0030200 U	0.0030200 U	0.0030200 U	0.0030200 U	0.0030200 U		P
Copper	0.0037300 U	0.0074600 U	0.0074600 U	0.0074600 U	0.0074600 U	0.0074600 U		P
Iron	0.1220000 U	0.2440000 U	0.2440000 U	0.2440000 U	0.2440000 U	0.2440000 U		P
Lead	0.0035850 U	0.0071700 U	0.0071700 U	0.0071700 U	0.0071700 U	0.0071700 U		P
Magnesium	0.1620000 U	0.3240000 U	0.3240000 U	0.3240000 U	0.3240000 U	0.3240000 U		P
Nickel	0.0057500 U	0.0115000 U	0.0115000 U	0.0115000 U	0.0115000 U	0.0115000 U		P
Silver	0.0022250 U	0.0044500 U	0.0044500 U	0.0044500 U	0.0044500 U	0.0044500 U		P
Thallium	0.0045250 U	0.0090500 U	0.0090500 U	0.0090500 U	0.0090500 U	0.0090500 U		P
Vanadium	0.0014600 U	0.0029200 U	0.0029200 U	0.0029200 U	0.0029200 U	0.0029200 U		P

Lab Name: Veritech

Data File Name: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB	CCB	CCB	CCB	M
Aluminum	0.0890000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	=
Arsenic	0.0028050 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	P
Selenium	0.0041650 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	P

Lab Name: Veritech Data File Name: S3316A

Lab Code: 14622 Analysis Date: 04/24/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB	CCB	CCB	CCB	M
Manganese	0.0090000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	P

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BLANKS

Lab Name: Veritech

Data File Name: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB			
Manganese		0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U		M
Zinc	0.0040150 U	0.0080300 U	0.0080300 U	0.0080300 U	0.0080300 U	0.0080300 U		P
								P

Lab Name: Veritech

Data File Name: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M00-BLK	CCB	CCB	CCB	CCB			M = P
Potassium	0.3165000 U	0.6330000 U	0.6330000 U	0.6330000 U	0.6330000 U	0.6330000 U			

BLANKS

Lab Name: Veritech

Data File Name: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-00-BL	CCB	CCB	CCB			
Sodium	0.2920000	0.2100000 U	0.2100000 U	0.2100000 U	0.2100000 U	0.2100000 U		

Lab Name: Veritech

Data File Name: M3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313 (1)	ICB	CCB	CCB	CCB				M
Mercury	0.7000000 U	0.7000000 U	0.7000000 U	0.7000000 U	0.7000000 U				C

3
BLANKS

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3316mg/kg	ICB M-01-BL	CCB	CCB	CCB	CCB	CCB	CCB	M
Antimony	2.0000000 U	0.0200000 U	0.0200000 U	0.0200000 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	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	0.1000000 U	0.1000000 U	0.1000000 U	P
Cadmium	0.6000000 U	0.0060000 U	0.0060000 U	0.0060000 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	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	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	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	0.0500000 U	0.0500000 U	0.0500000 U	P
Nickel	5.0000000 U	0.0500000 U	0.0500000 U	0.0500000 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	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	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	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	0.1000000 U	0.1000000 U	0.1000000 U	P
Zinc	10.000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	P

BLANKS

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	CCB							
								M
Antimony	0.0200000 U							P
Arsenic	0.0200000 U							P
Barium	0.1000000 U							P
Cadmium	0.0060000 U							P
Chromium	0.0500000 U							P
Cobalt	0.0250000 U							P
Copper	0.0500000 U							P
Lead	0.0500000 U							P
Nickel	0.0500000 U							P
Selenium	0.0200000 U							P
Silver	0.0250000 U							P
Thallium	0.0120000 U							P
Vanadium	0.1000000 U							P
Zinc	0.1000000 U							P

Lab Name: Veritech

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3316mg/kg	ICB M-01-BL	CCB	CCB	CCB				M
Beryllium	0.6000000 U	0.0060000 U	0.0060000 U	0.0060000 U	0.0060000 U				=
Manganese	16.000000 U	0.1600000 U	0.1600000 U	0.1600000 U	0.1600000 U				P
									P

Lab Name: Veritech

Lab Code: 14622

Data File Name: S3316Z

Analysis Date: 4/24/01

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB331dmg/kg	ICB M-00-BL	CCB	CCB	CCB				M
Aluminum	300.00000 U	3.0000000 U	3.0000000 U	3.0000000 U	3.0000000 U				=
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

Lab Name: Veritech

Data File Name: M33168

Lab Code: 14622

Analysis Date: 04/25/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3316 Mg/Kg	ICB	CCB	CCB	CCB				M
Mercury	0.1419500 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U				C

Spike Sample Recovery

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Antimony	0.5000	75 - 125	0.0045500 U	0.4667443	0.4586832	93	92		M
Barium	0.5000	75 - 125	0.0904755	0.5532396	0.5433235	93	91		P
Beryllium	0.5000	75 - 125	0.0028800 U	0.4537694	0.4447063	91	89		P
Cadmium	0.5000	75 - 125	0.0029300 U	0.4543951	0.4453092	91	89		P
Calcium	50.000	75 - 125	78.2268653	122.4998080	120.0049830	89	84		P
Chromium	0.5000	75 - 125	0.0199000 U	0.4552611	0.4444495	91	89		P
Cobalt	0.5000	75 - 125	0.0030200 U	0.4673979	0.4577431	93	92		P
Copper	0.5000	75 - 125	0.0330067	0.5001343	0.4922375	93	92		P
Iron	5.000	75 - 125	0.2440000 U	4.7707559	4.7460941	95	95		P
Lead	0.5000	75 - 125	0.0071700 U	0.4567638	0.4493627	91	90		P
Magnesium	50.000	75 - 125	25.8021707	70.4534691	69.1174746	89	87		P
Nickel	0.5000	75 - 125	0.0115000 U	0.4621593	0.4517872	92	90		P
Silver	0.5000	75 - 125	0.0044500 U	0.4432141	0.4345533	89	87		P
Thallium	0.5000	75 - 125	0.0090500 U	0.4439648	0.4348479	89	87		P
Vanadium	0.5000	75 - 125	0.0054327	0.4544224	0.4454928	90	88		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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Aluminum	5.000	75 - 125	0.1780000 U	4.3093177	4.2500577	86	85		M
Arsenic	0.5000	75 - 125	0.0056100 U	0.4410733	0.4328301	88	87		P
Selenium	0.5000	75 - 125	0.0083300 U	0.4348286	0.4268046	87	85		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Manganese	0.5000	75 - 125	0.1006839	0.5610524	0.5580467	92	91		M 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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Zinc	0.5000	75 - 125	0.0655306	0.5392356	0.5204109	95	91		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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Potassium	50.000	75 - 125	5.9205317	52.9650192	52.5934287	94	93		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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Sodium	50.000	75 - 125	197.0420000	242.1100000	238.0580000	90	82		M 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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: 31884

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31884 Non Spike	31884 MS 1 Matrix Spike 1	31884 MS 2 Matrix Spike 2	Rec1	Rec2	M C
Mercury	10.000	75 - 125	0.1400000 U	5.9208882	5.9836940	59*	60*	C

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

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Spike Sample Recovery

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		
Antimony	0.5000	75 - 125	0.4797360	0.7571888	0.9359407	55*	91		M
Arsenic	0.5000	75 - 125	0.0326059	0.4170331	0.4386822	77	81		P
Barium	0.5000	75 - 125	0.4238794	0.8233968	0.8995710	80	95		P
Cadmium	0.5000	75 - 125	0.0060000 U	0.3746664	0.4076604	75	82		P
Chromium	0.5000	75 - 125	1.3823638	1.7095456	2.2340330	65*	170*		P
Cobalt	0.5000	75 - 125	0.0421043	0.4332324	0.4570721	78	83		P
Copper	0.5000	75 - 125	0.4407912	0.8585777	0.8916969	84	90		P
Lead	0.5000	75 - 125	1.4677081	1.7451382	1.8810172	55*	83		P
Nickel	0.5000	75 - 125	0.1399724	0.5463304	0.5770899	81	87		P
Selenium	0.5000	75 - 125	0.0313246	0.3970888	0.4197114	73*	78		P
Silver	0.5000	75 - 125	0.0250000 U	0.3717222	0.3942247	74*	79		P
Thallium	0.5000	75 - 125	0.0120000 U	0.3735098	0.3982503	75	80		P
Vanadium	0.5000	75 - 125	0.2774811	0.6811806	0.7770236	81	100		P
Zinc	0.5000	75 - 125	2.1938523	2.6165829	2.8817880	85	138*		P

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

Spike Sample Recovery

Lab Name: Veritech

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		
Beryllium	0.5000	75 - 125	0.0060000 U	0.4137389	0.4468708	83	89		M
Manganese	0.5000	75 - 125	1.6688580	2.3403109	2.3472878	134*	136*		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: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		M
Aluminum	5.000	75 - 125	64.0320000	78.1740000	85.4160000	283*	428*		P
Calcium	50.000	75 - 125	710.9390000	721.8710000	823.3800000	22*	225*		P
Iron	5.000	75 - 125	144.2220000	182.4360000	188.6490000	764*	889*		P
Magnesium	50.000	75 - 125	70.6320000	115.0110000	128.9430000	89	117		P
Potassium	50.000	75 - 125	10.6470000	56.0510000	61.6370000	91	102		P
Sodium	50.000	75 - 125	5.0000000 U	47.3950000	51.7170000	95	103		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: H3316S

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		M C
Mercury	10.000	75 - 125	4.4020493	14.9736821	14.1713518	106	98		

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

Laboratory Control Sample

Lab Name: Veritech

Data File Name: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Aluminum	5.000	75-125	4.7122113	94		P
Arsenic	0.5000	75-125	0.4491005	90		P
Selenium	0.5000	75-125	0.4451298	89		P

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

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Laboratory Control Sample

Lab Name: Veritech

Data File Name: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Aluminum	5.000	75-125	4.7196616	94		M
Arsenic	0.5000	75-125	0.4489542	90		P
Selenium	0.5000	75-125	0.4472718	89		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Manganese	0.5000	75-125	0.4742312	95		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Manganese	0.5000	75-125	0.4737878	95		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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Zinc	0.5000	75-125	0.4941425	99		M 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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Zinc	0.5000	75-125	0.5068081	101		M 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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Potassium	50.000	75-125	45.4662447	91		M
					P	

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

Laboratory Control Sample

150

Lab Name: Veritech

Data File Name: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Potassium	50.000	75-125	45.6859975	91		M
						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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	
Sodium	50.000	75-125	46.9980000	94	M 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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	M
Sodium	50.000	75-125	47.0830000	94	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	10.000	75-125	9.9738056	100		M C

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

5/24/01

7

Laboratory Control Sample

Lab Name: Veritech

Data File Name: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSWmr

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	10.000	75-125	11.2610900	113	M	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: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCS 100

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	
Antimony	90.9	24.8- 157	82.6181780	91	P
Arsenic	51.1	38.0- 64.3	51.6155280	101	P
Barium	264	203- 324	256.8886800	97	P
Cadmium	56.2	43.3- 69.1	55.5114620	99	P
Chromium	31.4	25.1- 37.7	27.2794440	87	P
Cobalt	43.1	34.2- 51.7	43.8136060	102	P
Copper	133	109- 156	131.2513740	99	P
Lead	67.1	51.1- 83.2	69.7961610	104	P
Nickel	99.5	77.9- 121	102.7991940	103	P
Selenium	52.7	39.0- 66.3	53.4457780	101	P
Silver	54.5	40.6- 68.6	55.3234620	102	P
Thallium	106	60.5- 151	108.4533980	102	P
Vanadium	56.1	38.2- 74.0	47.6320050	85	P
Zinc	85.3	66.0- 105	73.5376850	86	P

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

4/30/01

Laboratory Control Sample

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCS 100 MR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	
Antimony	90.9	24.8- 157	78.5033430	86	M
Arsenic	51.1	38.0- 64.3	52.6505770	103	P
Barium	264	203- 324	261.0345990	99	P
Cadmium	56.2	43.3- 69.1	55.2272560	98	P
Chromium	31.4	25.1- 37.7	27.7961830	89	P
Cobalt	43.1	34.2- 51.7	43.8427150	102	P
Copper	133	109- 156	132.3815590	100	P
Lead	67.1	51.1- 83.2	72.2741680	108	P
Nickel	99.5	77.9- 121	102.9565440	103	P
Selenium	52.7	39.0- 66.3	53.4914760	102	P
Silver	54.5	40.6- 68.6	55.3109100	101	P
Thallium	106	60.5- 151	109.7983500	104	P
Vanadium	56.1	38.2- 74.0	46.6372480	83	P
Zinc	85.3	66.0- 105	87.4333190	103	P

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

4/30/01

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCS 100

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	
Beryllium	150	118- 184	153.0364990	102	M
Manganese	307	248- 365	291.5486530	95	P

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

4/30/01

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCS 100 MR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Beryllium	150	118- 184	151.9790270	101		M
Manganese	307	248- 365	299.7767640	98		P

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

4/30/01

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

ICP sample ID: LCS 100

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	8420	3370- 13400	5279.2000000	63		P
Calcium	10500	7840- 13100	10746.3000000	102		P
Iron	13000	7900- 18100	9499.7000000	73		P
Magnesium	2810	2270- 3350	2756.9000000	98		P
Potassium	3280	2560- 4000	2687.1000000	82		P
Sodium	779	528- 1030	754.1000000	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: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

ICP sample ID: LCS 100 MR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	8420	3370- 13400	4919.6000000	58		P
Calcium	10500	7840- 13100	11038.6000000	105		P
Iron	13000	7900- 18100	9185.7000000	71		P
Magnesium	2810	2270- 3350	2356.1000000	84		P
Potassium	3280	2560- 4000	2748.8000000	84		P
Sodium	779	528- 1030	749.7000000	96		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: H3316S

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCS

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	3940	2690- 5210	3717.3413597	94		C

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

7

Laboratory Control Sample

Lab Name: Veritech

Data File Name: H3316S.TXT

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCSMR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	3940	2690- 5210	3425.8083074	87		M C

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

Wet Chemistry QC Summary Form

Parameter: Chloride
Matrix: Aqueous
Batch: 088w

Method Blank Summary: U = Undetected below MDL

Units	MDL	Result	QC Sample MDL
mg/l	1.0	U	1.0

Duplicate Summary: QC Sample: AB31880

Sample result	C	Duplicate Result	C	RPD
31.6		30.6		3.2

Spike Summary:

	Spiked Result	Sample Result	C	Amount Added	% Recovery
Method Blank Spike	51.7		U	50	103
Matrix Spike	81.8	31.6		50	100
Matrix Spike Dup	83.8	31.6		50	104

Wet Chemistry QC Summary Form

Parameter: Chloride =
Matrix: Soil
Batch: 33s

Method Blank Summary:

Units	PQL	RESULT
mg/kg	50	U

QC Sample	
AB31895	
Soilds	60
Sample PQL	
83	

Duplicate Summary:

Original Sample	C	Duplicate Sample	C	RPD
118		148		22.3

Spike Summary:

	Spiked Result	Sample Result	C	Amount Added	% Recovery
Method Blank Spike	51		U	50	103
Matrix Spike	888	118		833	107
Matrix Spike Dup	888	118		833	107

INVOICE

Bill To: Lawler, Metusky & Skelly Engineers
Accounts Payable
Maria Heincz
One Blue Hill Plaza
P.O. Box 1509
Pearl River
NY 10965

From: Veritech (Div. of Hampton-Clarke)
175 Route 46 West, Unit D
Fairfield, NJ 07004
(973) 244-9770

NJDEP #14622 NYDOH #11408

Invoice Number: 04192010
Date: 05/21/2001
Sales Rep: RG

PO Number: 446-156
Project: Harrison Landfill

The following charges are due for the indicated samples which were submitted to this laboratory on: 04/18/2001

AB31880 AB31894
AB31881 AB31895
AB31882
AB31883
AB31884
AB31885
AB31886
AB31887
AB31888
AB31889
AB31890
AB31891
AB31892
AB31893

Test Group Name	Quantity	Unit Price	Total Price
%SOLIDS	2	$0.00	$0.00
CHLORIDE-S	2	$18.00	$36.00
CHLORIDE-W	7	$18.00	$126.00
HG-SOIL	16	$13.00	$208.00
METALS-TAL-S	16	$102.00	$1,632.00

Analysis charges subtotal for this invoice:	$2,002.00
SampleFee:	$0.00
OtherFee:	$0.00
Rush Surcharge Percent:	0
Discount Percent	0
Total Amount due on this invoice:	$2,002.00

Remit payment to: Veritech (Div. of Hampton-Clarke)
175 Route 46 West, Unit D
Fairfield, NJ 07004
Attention: Accounts Receivable
(973) 244-9770

Federal ID: 222679402

All Payments Are Due Within 30 Days From Date of Invoice

HCl-Invoice (Department Summary)

18-May-01

LabSection	Project#	Lab#	TestGroupID	Adjusted Price
Metals				
	04192010	AB31880	HG-SOIL	$13.00
	04192010	AB31880	METALS-TAL-S	$102.00
	04192010	AB31881	HG-SOIL	$13.00
	04192010	AB31881	METALS-TAL-S	$102.00
	04192010	AB31882	HG-SOIL	$13.00
	04192010	AB31882	METALS-TAL-S	$102.00
	04192010	AB31883	HG-SOIL	$13.00
	04192010	AB31883	METALS-TAL-S	$102.00
	04192010	AB31884	HG-SOIL	$13.00
	04192010	AB31884	METALS-TAL-S	$102.00
	04192010	AB31885	HG-SOIL	$13.00
	04192010	AB31885	METALS-TAL-S	$102.00
	04192010	AB31886	HG-SOIL	$13.00
	04192010	AB31886	METALS-TAL-S	$102.00
	04192010	AB31887	HG-SOIL	$13.00
	04192010	AB31887	METALS-TAL-S	$102.00
	04192010	AB31888	HG-SOIL	$13.00
	04192010	AB31888	METALS-TAL-S	$102.00
	04192010	AB31889	HG-SOIL	$13.00
	04192010	AB31889	METALS-TAL-S	$102.00
	04192010	AB31890	HG-SOIL	$13.00
	04192010	AB31890	METALS-TAL-S	$102.00
	04192010	AB31891	HG-SOIL	$13.00
	04192010	AB31891	METALS-TAL-S	$102.00
	04192010	AB31892	HG-SOIL	$13.00
	04192010	AB31892	METALS-TAL-S	$102.00
	04192010	AB31893	HG-SOIL	$13.00
	04192010	AB31893	METALS-TAL-S	$102.00
	04192010	AB31894	HG-SOIL	$13.00
	04192010	AB31894	METALS-TAL-S	$102.00
	04192010	AB31895	HG-SOIL	$13.00
	04192010	AB31895	METALS-TAL-S	$102.00
				$1,840.00
				91.91%
Wet Chem				
	04192010	AB31880	CHLORIDE-W	$18.00
	04192010	AB31882	CHLORIDE-W	$18.00
	04192010	AB31884	CHLORIDE-W	$18.00
	04192010	AB31886	CHLORIDE-W	$18.00
	04192010	AB31888	%SOLIDS	$0.00
	04192010	AB31888	CHLORIDE-S	$18.00
	04192010	AB31889	CHLORIDE-W	$18.00
	04192010	AB31891	CHLORIDE-W	$18.00
	04192010	AB31893	CHLORIDE-W	$18.00
	04192010	AB31895	%SOLIDS	$0.00
	04192010	AB31895	CHLORIDE-S	$18.00

LabSection	Project#	Lab#	TestGroupID	Adjusted Price
				$162.00
				8.09%
			Grand Total:	
				$2,002.00

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 Land Fill
PO Number:

Samples submitted on: 4/18/01

AB32104
AB32105
AB32097
AB32098
AB32099
AB32100
AB32101
AB32102
AB32103

Date: 5/16/01
HCI Project: 04211721

For Batch 3313 (Aqueous):

The Method Blank for this batch contained 0.292 mg/L of Sodium. Since the concentration of Sodium was less than 5 percent of the concentration in the samples.

The serial dilution exceeded the RPD criteria for the following elements: Aluminum, Calcium, Iron, Manganese, Vanadium, and Zinc. This suggests that there may be some matrix interference occurring in the sample.

The Matrix Spike and Matrix Spike Duplicate had a low recovery for Mercury, suggesting matrix interference since the LCSW and LCSWD had acceptable recoveries.

The RPD between the sample and its duplicate exceeded the QC limit for Zinc. This may be an anomaly since all other elements were within the QC limits.

Wet Chemistry

For batch 33s (Soil)

The RPD between the sample and its duplicate was just outside the QC limit with a difference of 22.3%. The batch was passed due to the acceptable percent recovery between the Matrix Spike and Matrix Spike Duplicate, which had a RPD of 0%.

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

5/21/01
Date

SDG Narrative

Project: NYSDOT Harrison LF
Job: 446-156

Hampton-Clarke, Inc. (HCI) received the following Lawler, Metusky & Skelly Engineers samples on April 19, 2001:

LMS #	HCl #	Type	Analysis
SW-3 (w) unfiltered	AB32097	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SW-3 (w) filtered	AB32098	Aqueous	TAL-METALS (6010B), HG (7470A)
SD-3 (s)	AB32099	Soil	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
SW-2 (w) unfiltered	AB32100	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
SW-2 (w) filtered	AB32101	Aqueous	TAL-METALS (6010B), HG (7470A)
SD-2 (s)	AB32102	Soil	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
SD-5 (s)	AB32103	Soil	TAL-METALS (6010B), HG (7471A), CHLORIDE (EPA 325)
PC-2 (w) unfiltered	AB32104	Aqueous	TAL-METALS (6010B), HG (7470A), CHLORIDE (EPA 325)
PC-2 (w) filtered	AB32105	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 3316 (Soil):

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

Aluminum**	MS-283%	MSD-428%
Antimony	MS-55%	---
Calcium**	MS-22%	MSD-225%
Chromium	MS-65%	MSD-170%
Iron**	MS-764%	MSD-889%
Lead	MS-55%	---
Manganese	MS-134%	MSD-136%
Selenium	MS-73%	---
Silver	MS-74%	---
Zinc**	---	MSD-138%

** The sample concentration exceeded the spike amount added by a factor of four, therefore the spike recovery criteria does not apply.

The poor spike recovery for the other elements may be related to matrix interference, since the LCS and LCSD recoveries for those elements were within the QC limits.

The RPD between the sample and its duplicate within the batch exceeded the QC limit for Antimony 124%, Chromium 61%, Copper 74%, Iron 27%, Magnesium 21%, Manganese 35%, Nickel 40% and Zinc 25%. The RPD between the LCS and the LCSD for these elements had the following RPD values: 5.1%, 1.9%, 0.9%, 3.4%, 16%, 2.8%, 0.2%, and 17%. Since the RPD between the LCS and the LCSD fell within the QC limit, it suggests that the problem with the samples may be matrix related.

For Batch 3313 (Aqueous):

The Method Blank for this batch contained 0.292 mg/L of Sodium. Since the concentration of Sodium was less than 5 percent of the concentration in the samples.

The serial dilution exceeded the RPD criteria for the following elements: Aluminum, Calcium, Iron, Manganese, Vanadium, and Zinc. This suggests that there may be some matrix interference occurring in the sample.

The Matrix Spike and Matrix Spike Duplicate had a low recovery for Mercury, suggesting matrix interference since the LCSW and LCSWD had acceptable recoveries.

The RPD between the sample and its duplicate exceeded the QC limit for Zinc. This may be an anomaly since all other elements were within the QC limits.

Wet Chemistry

For batch 33s (Soil)

The RPD between the sample and its duplicate was just outside the QC limit with a difference of 22.3%. The batch was passed due to the acceptable percent recovery between the Matrix Spike and Matrix Spike Duplicate, which had a RPD of 0%.

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

5/21/01
Date

04211721

LAWLER, MATUSKY & SKELLY ENGINEERS LLP

Page ____ of ____

CHAIN OF CUSTODY RECORD

Project No.	*Project:*	*Collection Site:*
LMS Facility:	*Field Personnel:*	

SAMPLE TYPE (Circle):
Drinking Water *Stream/Pond* *Monitoring Wells* *Bottom Sediment* *Industrial Waste* *River/Ocean*
Treatment Facility *Soil* *Coliform (T)* *Coliform (F)* *Other*_____

SAMPLE ID NUMBER	DATE	TIME	SAMPLE SITE	PARAMETERS	SAMPLE PREP	
					PRESERVATIVE	FILTER (Y/N)
AB32097			3			
32098						
32097						
32099			3			
32100						
32101						
32100						
32102						
32103						
32104						
32105						
32104						

Relinquished By:	Date/Time:	No. Bottles:	Received By:
Relinquished By:		Date/Time:	Received By:
Messenger:	Shipped To:	Received at Lab By:	Date/Time:

Remarks:
changed sample IDs per T. Schneider 4/20/01 mb.

One Blue Hill Plaza, Pearl River, New York
(845) 735-8300
Sample Drop Off: 53 Hudson Avenue, Nyack, New York 10960

CONDITION UPON RECEIPT FORM

Veritech

Date Received: 4/19/01   Filed By: [illegible signature]

Client: LMS   Project/Account: NYSDOT

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.
2.9 °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: SW-3 was Received instead of SW-1 and SD3 was Received instead of SD-1
✓		[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
9	Inform Tracy [illegible]

PRESERVATION DOCUMENTATION

Date Received: 4/2/01
Filed By: F.J
Client: LMS
Project: NYSDot
Veritech Project #:

SAMPLE ID:	CONTAINER SIZE	CONTAINER TYPE (PG)	PARAMETER	PRESERVATIVE	pH
PC-2	1L	P	Metals	HNO_3	1
SW-2	↓	↓	↓	↓	↓
SW-3	↓	↓	↓	↓	↓

INTERNAL CHAIN OF CUSTODY RECORD • REFRIGERAT 2 ch

Client ID: LM+S Location: E-3

COMMENTS

		REMOVED:				RETURNED:			
TEST	SAMPLE No.	DATE	TIME	SIGNATURE	ALTERNATE	DATE	TIME	SIGNATURE	ALTERNATE
TPH Gl / BTEX	32097, 00, 104	4/23/01	1015			4/23/01	1200		
TPH Extractable	32098, 101, 105	4/23/01	1015			4/23/01	1200		
TPH Gl / BTEX	32098, 101, 105	"	"			4/23/01	1200		
TPH Gl / BTEX	32099, 102, 103	4/23/01	1230			4/23/01	1500		
"103	32099, 102, 103	4.25.01	10:00	MQ		4.25.01	11:00	MQ	
TPH Gl	32097, 00, 104	4.25.01	9:00	JW		4.25.01	11:05	JW	
Total Metals	32098, 101, 105	4.25.01	9:00	JW		4.25.01	11:05	JW	
TPH Gl	32097, 101, 105	4.25.01	9:00	JW		4.25.01	11:05	JW	
Cl	32099, 102, 103	4/25/01	1440			4/25/01	1770		
Chloride	32097, 32100, 32104	4.27.01	11:00	MQ		4/27/01	15:00		

FOR LOGIN BATCH

AB 32097-105

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med

Batch: 3313

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB32097

Client ID: SW-3 unfiltered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	59	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	78000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	5.7	P
7439896	Iron	120	780	P
7439921	Lead	3.6	8.1	P
7439954	Magnesium	160	12000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	3.7	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB32097
Client ID: SW-3 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	550	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB32097
Client ID: SW-3 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	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

Data File Name: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB32097
Client ID: SW-3 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	18	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB32097
Client ID: SW-3 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	4500	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB32097
Client ID: SW-3 unfiltered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB32098
Client ID: SW-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	49	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	73000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	4.0	P
7439896	Iron	120	U	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	11000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	2.2	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB32098
Client ID: SW-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB32098

Client ID: SW-3 filtered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	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

Data File Name: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB32098
Client ID: SW-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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

Data File Name: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB32098
Client ID: SW-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	4100	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB32098
Client ID: SW-3 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	60000	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: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB32098

Client ID: SW-3 filtered

Dilution: 1

% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Soil

Lab Sample ID: AB32099
Client ID: SD-3
Dilution: 100
% Solid: 55

Level: low/med
Batch: 3316

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	1.3	U	P
7440382	Arsenic	1.9	2.8	P
7440393	Barium	4.9	55	P
7440439	Cadmium	0.47	U	P
7440473	Chromium	2.1	13	P
7440484	Cobalt	0.68	4.6	P
7440508	Copper	1.3	11	P
7439921	Lead	3.4	43	P
7440020	Nickel	1.2	9.3	P
7782492	Selenium	0.88	2.0	P
7440224	Silver	0.68	2.1	P
7440280	Thallium	1.9	U	P
7440622	Vanadium	6.3	23	P
7440666	Zinc	12	46	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Soil

Lab Sample ID: AB32099
Client ID: SD-3

Level: low/med

Dilution: 100

Batch: 3316

% Solid: 55

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440417	Beryllium	0.50	U	P
7439965	Manganese	3.5	240	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: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

Matrix: Soil

Lab Sample ID: AB32099
Client ID: SD-3

Level: low/med
Batch: 3316

Dilution: 100
% Solid: 55

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	87	10000	P
7440702	Calcium	240	4200	P
7439896	Iron	120	13000	P
7439954	Magnesium	66	3300	P
7440097	Potassium	54	770	P
7440235	Sodium	370	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: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3316

Data File Name: H3316S

Analysis Date: 04/25/2001

Lab Sample ID: AB32099
Client ID: SD-3
Dilution: 167
% Solid: 55

Concentration Units: mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.065	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB32100
Client ID: SW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	45	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	44000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	4.5	P
7439896	Iron	120	700	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	13000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	2.4	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB32100
Client ID: SW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	300	P_
7440382	Arsenic	2.8	U	P_
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB32100

Client ID: SW-2 unfiltered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	270	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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

Matrix: Water

Lab Sample ID: AB32100
Client ID: SW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	17	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB32100
Client ID: SW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	3000	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: 3313

Data File Name: W3313Z

Analysis Date: 4/30/01

Lab Sample ID: AB32100
Client ID: SW-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	28000	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB32100
Client ID: SW-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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
Data File Name: W3313A

Lab Code: 14622
Analysis Date: 04/23/2001

Matrix: Water
Lab Sample ID: AB32101
Client ID: SW-2 filtered

Level: low/med
Dilution: 0.5

Batch: 3313
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	36	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	40000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	U	P
7440508	Copper	3.7	4.7	P
7439896	Iron	120	U	P
7439921	Lead	3.6	U	P
7439954	Magnesium	160	11000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	1.7	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB32101
Client ID: SW-2 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	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: 3313

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB32101

Client ID: SW-2 filtered

Dilution: 0.5

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	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: _____

1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech
Data File Name: W3313B

Lab Code: 14622
Analysis Date: 04/28/2001

Matrix: Water
Lab Sample ID: AB32101
Client ID: SW-2 filtered

Level: low/med
Dilution: 0.5

Batch: 3313
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB32101
Client ID: SW-2 filtered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	2700	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB32101
Client ID: SW-2 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440235	Sodium	110	26000	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB32101
Client ID: SW-2 filtered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Soil

Lab Sample ID: AB32102
Client ID: SD-2

Level: low/med
Batch: 3316

Dilution: 100
% Solid: 77

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	0.91	U	P
7440382	Arsenic	1.3	1.8	P
7440393	Barium	3.5	32	P
7440439	Cadmium	0.33	U	P
7440473	Chromium	1.5	6.3	P
7440484	Cobalt	0.48	4.6	P
7440508	Copper	0.93	10	P
7439921	Lead	2.4	17	P
7440020	Nickel	0.84	10	P
7782492	Selenium	0.63	2.1	P
7440224	Silver	0.49	0.52	P
7440280	Thallium	1.3	1.4	P
7440622	Vanadium	4.5	13	P
7440666	Zinc	8.7	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

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Soil

Lab Sample ID: AB32102
Client ID: SD-2

Level: low/med
Batch: 3316

Dilution: 100
% Solid: 77

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440417	Beryllium	0.36	U	P
7439965	Manganese	2.5	650	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: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

Matrix: Soil

Lab Sample ID: AB32102
Client ID: SD-2

Level: low/med
Batch: 3316

Dilution: 100
% Solid: 77

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	62	4700	P
7440702	Calcium	170	45000	P
7439896	Iron	84	13000	P
7439954	Magnesium	47	22000	P
7440097	Potassium	39	1300	P
7440235	Sodium	270	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: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med
Batch: 3316

Data File Name: H3316S

Analysis Date: 04/25/2001

Lab Sample ID: AB32102
Client ID: SD-2
Dilution: 167
% Solid: 77

Concentration Units: mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.047	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: _____

B 5/21/01

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Soil

Level: low/med

Batch: 3316

Data File Name: W3313A

Analysis Date: 04/23/2001

Lab Sample ID: AB32103

Client ID: SD-5

Dilution: 100

% Solid: 79

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	0.88	U	P
7440382	Arsenic	1.3	1.9	P
7440393	Barium	3.4	31	P
7440439	Cadmium	0.32	U	P
7440473	Chromium	1.4	5.2	P
7440484	Cobalt	0.47	3.9	P
7440508	Copper	0.90	7.9	P
7439921	Lead	2.4	15	P
7440020	Nickel	0.82	8.5	P
7782492	Selenium	0.61	1.8	P
7440224	Silver	0.47	0.49	P
7440280	Thallium	1.3	1.4	P
7440622	Vanadium	4.4	12	P
7440666	Zinc	8.5	29	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: 3316

Data File Name: S3316A

Analysis Date: 04/24/2001

Lab Sample ID: AB32103
Client ID: SD-5
Dilution: 100
% Solid: 79

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7440417	Beryllium	0.35	U	P
7439965	Manganese	2.4	770	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: 3316

Data File Name: S3316Z

Analysis Date: 4/24/01

Lab Sample ID: AB32103
Client ID: SD-5
Dilution: 100
% Solid: 79

Concentration Units: Mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	61	3800	P
7440702	Calcium	170	45000	P
7439896	Iron	82	10000	P
7439954	Magnesium	46	21000	P
7440097	Potassium	38	1000	P
7440235	Sodium	260	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: _____

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: H3316S

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Soil

Lab Sample ID: AB32103
Client ID: SD-5

Level: low/med
Batch: 3316

Dilution: 167
% Solid: 79

Concentration Units: mg/Kg

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.045	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
Data File Name: W3313A

Lab Code: 14622
Analysis Date: 04/23/2001

Matrix: Water
Lab Sample ID: AB32104
Client ID: PC-2 unfiltered

Level: low/med
Dilution: 0.5

Batch: 3313
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	6.8	P
7440393	Barium	10	850	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	78000	P
7440473	Chromium	10	230	P
7440484	Cobalt	1.5	64	P
7440508	Copper	3.7	140	P
7439896	Iron	120	200000	P
7439921	Lead	3.6	92	P
7439954	Magnesium	160	52000	P
7440020	Nickel	5.7	140	P
7440224	Silver	2.2	13	P
7440280	Thallium	4.5	10	P
7440622	Vanadium	1.5	270	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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

Matrix: Water

Lab Sample ID: AB32104
Client ID: PC-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	76000	P
7440382	Arsenic	2.8	7.8	P
7782492	Selenium	4.2	26	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB32104
Client ID: PC-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	17000	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: _____

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INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB32104
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	310	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: 3313

Data File Name: W3313C

Analysis Date: 04/30/2001

Lab Sample ID: AB32104
Client ID: PC-2 unfiltered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	17000	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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB32104
Client ID: PC-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
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: _____

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB32104
Client ID: PC-2 unfiltered

Level: low/med
Batch: 3313

Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Matrix: Water

Lab Sample ID: AB32105
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Level: low/med
Batch: 3313

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440360	Antimony	2.3	U	P
7440393	Barium	10	150	P
7440417	Beryllium	1.4	U	P
7440439	Cadmium	1.5	U	P
7440702	Calcium	370	66000	P
7440473	Chromium	10	U	P
7440484	Cobalt	1.5	4.5	P
7440508	Copper	3.7	U	P
7439896	Iron	120	8300	P
7439921	Lead	3.6	9.7	P
7439954	Magnesium	160	21000	P
7440020	Nickel	5.7	U	P
7440224	Silver	2.2	U	P
7440280	Thallium	4.5	U	P
7440622	Vanadium	1.5	4.4	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: 3313

Data File Name: A3318A

Analysis Date: 04/25/2001

Lab Sample ID: AB32105
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7429905	Aluminum	89	U	P
7440382	Arsenic	2.8	U	P
7782492	Selenium	4.2	7.2	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Matrix: Water

Lab Sample ID: AB32105
Client ID: PC-2 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7439965	Manganese	9.0	11000	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: 3313

Data File Name: W3313B

Analysis Date: 04/28/2001

Lab Sample ID: AB32105
Client ID: PC-2 filtered
Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440666	Zinc	4.0	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

Matrix: Water

Lab Sample ID: AB32105
Client ID: PC-2 filtered

Level: low/med
Batch: 3313

Dilution: 0.5
% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
7440097	Potassium	320	4800	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

INORGANIC ANALYSIS DATA SHEET

Lab Name: Veritech

Data File Name: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

Matrix: Water

Lab Sample ID: AB32105

Client ID: PC-2 filtered

Level: low/med

Dilution: 0.5

Batch: 3313

% Solid: 0

Concentration Units: ug/L

Cas No.	Analyte	MDL	Concentration	M
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

Lab Code: 14622

Matrix: Water

Level: low/med
Batch: 3313

Data File Name: H3313SW

Analysis Date: 04/24/2001

Lab Sample ID: AB32105
Client ID: PC-2 filtered
Dilution: 1
% Solid: 0

Concentration Units: Ug/L

Cas No.	Analyte	MDL	Concentration	M
7439976	Mercury	0.14	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: _____

5/24/1

Veritech Wet Chem Form 1 Summary

Lab #: AB32097

Sample ID: SW-3 unfiltered

Sample Matrix: Aqueous

Date Received: 4/18/01

Test Group Name: Chloride EPA 325

Date Prepared: 4/27/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	46	mg/L	1.0	1	4/27/01

Lab #: AB32099

Sample ID: SD-3

Sample Matrix: Soil

Date Received: 4/18/01

Test Group Name: % Solids SM2540G

Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	55	Percen		1	4/25/01

Test Group Name: Chloride 9250

Date Prepared: 4/25/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	260	mg/kg	91	1	5/1/01

Lab #: AB32100

Sample ID: SW-2 unfiltered

Sample Matrix: Aqueous

Date Received: 4/18/01

Test Group Name: Chloride EPA 325

Date Prepared: 4/27/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	36	mg/L	1.0	1	4/27/01

Lab #: AB32102

Sample ID: SD-2

Sample Matrix: Soil

Date Received: 4/18/01

Test Group Name: % Solids SM2540G

Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	77	Percen		1	4/25/01

Test Group Name: Chloride 9250

Date Prepared: 4/25/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	69	mg/kg	65	1	5/1/01

Lab #: AB32103

Sample ID: SD-5

Sample Matrix: Soil

Date Received: 4/18/01

Test Group Name: % Solids SM2540G

Date Prepared:

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
% Solids	79	Percen		1	4/25/01

Test Group Name: Chloride 9250

Date Prepared: 4/25/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	ND	mg/kg	63	1	5/1/01

Lab #: AB32104

Sample ID: PC-2 unfiltered

Sample Matrix: Aqueous

Date Received: 4/18/01

Test Group Name: Chloride EPA 325

Date Prepared: 4/27/01

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	52	mg/L	1.0	1	4/27/01

Lab Name: Veritech Data File Name: W3313A

Lab Code: 14622 Analysis Date: 04/23/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB				M
Antimony	0.0022750 U	0.0045500 U	0.0045500 U	0.0045500 U	0.0045500 U	0.0045500 U			P
Barium	0.0100500 U	0.0201000 U	0.0201000 U	0.0201000 U	0.0201000 U	0.0201000 U			P
Beryllium	0.0014400 U	0.0028800 U	0.0028800 U	0.0028800 U	0.0028800 U	0.0028800 U			P
Cadmium	0.0014650 U	0.0029300 U	0.0029300 U	0.0029300 U	0.0029300 U	0.0029300 U			P
Calcium	0.3725000 U	0.7450000 U	0.7450000 U	0.7450000 U	0.7450000 U	0.7450000 U			P
Chromium	0.0099500 U	0.0199000 U	0.0199000 U	0.0199000 U	0.0199000 U	0.0199000 U			P
Cobalt	0.0015100 U	0.0030200 U	0.0030200 U	0.0030200 U	0.0030200 U	0.0030200 U			P
Copper	0.0037300 U	0.0074600 U	0.0074600 U	0.0074600 U	0.0074600 U	0.0074600 U			P
Iron	0.1220000 U	0.2440000 U	0.2440000 U	0.2440000 U	0.2440000 U	0.2440000 U			P
Lead	0.0035850 U	0.0071700 U	0.0071700 U	0.0071700 U	0.0071700 U	0.0071700 U			P
Magnesium	0.1620000 U	0.3240000 U	0.3240000 U	0.3240000 U	0.3240000 U	0.3240000 U			P
Nickel	0.0057500 U	0.0115000 U	0.0115000 U	0.0115000 U	0.0115000 U	0.0115000 U			P
Silver	0.0022250 U	0.0044500 U	0.0044500 U	0.0044500 U	0.0044500 U	0.0044500 U			P
Thallium	0.0045250 U	0.0090500 U	0.0090500 U	0.0090500 U	0.0090500 U	0.0090500 U			P
Vanadium	0.0014600 U	0.0029200 U	0.0029200 U	0.0029200 U	0.0029200 U	0.0029200 U			P

Lab Name: Veritech Data File Name: A3318A

Lab Code: 14622 Analysis Date: 04/25/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB	CCB	CCB	CCB	M
Aluminum	0.0890000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	0.1780000 U	P
Arsenic	0.0028050 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	0.0056100 U	P
Selenium	0.0041650 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	0.0083300 U	P

BLANKS

Lab Name: Veritech Data File Name: S3316A

Lab Code: 14622 Analysis Date: 04/24/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB	CCB	CCB	M
Manganese	0.0090000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	P

BLANKS

Lab Name: Veritech Data File Name: W3313B

Lab Code: 14622 Analysis Date: 04/28/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-01-BL	CCB	CCB	CCB	CCB			M
Manganese		0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U	0.0180000 U			P
Zinc	0.0040150 U	0.0080300 U	0.0080300 U	0.0080300 U	0.0080300 U	0.0080300 U			P

Lab Name: Veritech Data File Name: W3313C

Lab Code: 14622 Analysis Date: 04/30/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB MDO-BLK	CCB	CCB	CCB	CCB			M
Potassium	0.3165000 U	0.6330000 U	0.6330000 U	0.6330000 U	0.6330000 U	0.6330000 U			P

BLANKS

Lab Name: Veritech Data File Name: W3313Z

Lab Code: 14622 Analysis Date: 4/30/01

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313(.5)	ICB M-00-BL	CCB	CCB	CCB	CCB			M
Sodium	0.2920000	0.2100000 U	0.2100000 U	0.2100000 U	0.2100000 U	0.2100000 U			P

3
BLANKS

Lab Name: Veritech

Data File Name: M3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3313 (1)	ICB	CCB	CCB	CCB				M
Mercury	0.7000000 U	0.7000000 U	0.7000000 U	0.7000000 U	0.7000000 U				C

BLANKS

Lab Name: Veritech Data File Name: W3313A

Lab Code: 14622 Analysis Date: 04/23/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3316mg/kg	ICB M-01-BL	CCB	CCB	CCB	CCB	CCB	CCB	M
Antimony	2.0000000 U	0.0200000 U	0.0200000 U	0.0200000 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	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	0.1000000 U	0.1000000 U	0.1000000 U	P
Cadmium	0.6000000 U	0.0060000 U	0.0060000 U	0.0060000 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	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	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	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	0.0500000 U	0.0500000 U	0.0500000 U	P
Nickel	5.0000000 U	0.0500000 U	0.0500000 U	0.0500000 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	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	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	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	0.1000000 U	0.1000000 U	0.1000000 U	P
Zinc	10.000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	0.1000000 U	P

3
BLANKS

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	CCB							M
Antimony	0.0200000 U							P
Arsenic	0.0200000 U							P
Barium	0.1000000 U							P
Cadmium	0.0060000 U							P
Chromium	0.0500000 U							P
Cobalt	0.0250000 U							P
Copper	0.0500000 U							P
Lead	0.0500000 U							P
Nickel	0.0500000 U							P
Selenium	0.0200000 U							P
Silver	0.0250000 U							P
Thallium	0.0120000 U							P
Vanadium	0.1000000 U							P
Zinc	0.1000000 U							P

3
BLANKS

Lab Name: Veritech

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3316mg/kg	ICB M-01-SL	CCB	CCB	CCB				
Beryllium	0.6000000 U	0.0060000 U	0.0060000 U	0.0060000 U	0.0060000 U				M
Manganese	16.000000 U	0.1600000 U	0.1600000 U	0.1600000 U	0.1600000 U				P
									P

3
BLANKS

Lab Name: Veritech

Data File Name: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB3316mg/kg	ICB M-00-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

3
BLANKS

Lab Name: Veritech

Data File Name: M33168

Lab Code: 14622

Analysis Date: 04/25/2001

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	MB 3316 Mg/Kg	ICB	CCB	CCB	CCB				M
Mercury	0.1419500 U	0.0500000 U	0.0500000 U	0.0500000 U	0.0500000 U				C

FORM III - IN ILM02.0

Spike Sample Recovery

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		M
Antimony	0.5000	75 - 125	0.0045500 U	0.4667443	0.4586832	93	92		P
Barium	0.5000	75 - 125	0.0904755	0.5532396	0.5433235	93	91		P
Beryllium	0.5000	75 - 125	0.0028800 U	0.4537694	0.4447063	91	89		P
Cadmium	0.5000	75 - 125	0.0029300 U	0.4543951	0.4453092	91	89		P
Calcium	50.000	75 - 125	78.2268653	122.4998080	120.0049830	89	84		P
Chromium	0.5000	75 - 125	0.0199000 U	0.4552611	0.4444495	91	89		P
Cobalt	0.5000	75 - 125	0.0030200 U	0.4673979	0.4577431	93	92		P
Copper	0.5000	75 - 125	0.0330067	0.5001343	0.4922375	93	92		P
Iron	5.000	75 - 125	0.2440000 U	4.7707559	4.7460941	95	95		P
Lead	0.5000	75 - 125	0.0071700 U	0.4567638	0.4493627	91	90		P
Magnesium	50.000	75 - 125	25.8021707	70.4534691	69.1174746	89	87		P
Nickel	0.5000	75 - 125	0.0115000 U	0.4621593	0.4517872	92	90		P
Silver	0.5000	75 - 125	0.0044500 U	0.4432141	0.4345533	89	87		P
Thallium	0.5000	75 - 125	0.0090500 U	0.4439648	0.4348479	89	87		P
Vanadium	0.5000	75 - 125	0.0054327	0.4544224	0.4454928	90	88		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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Aluminum	5.000	75 - 125	0.1780000 U	4.3093177	4.2500577	86	85		M
Arsenic	0.5000	75 - 125	0.0056100 U	0.4410733	0.4328301	88	87		P
Selenium	0.5000	75 - 125	0.0083300 U	0.4348286	0.4268046	87	85		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Manganese	0.5000	75 - 125	0.1006839	0.5610524	0.5580467	92	91		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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Zinc	0.5000	75 - 125	0.0655306	0.5392356	0.5204109	95	91		M 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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Potassium	50.000	75 - 125	5.9205317	52.9650192	52.5934287	94	93		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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

ICP sample ID: 31882

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31882 Non Spike	31882 MS 1 Matrix Spike 1	31882 MS 2 Matrix Spike 2	Rec1	Rec2		
Sodium	50.000	75 - 125	197.0420000	242.1100000	238.0580000	90	82	M	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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: 31884

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31884 Non Spike	31884 MS 1 Matrix Spike 1	31884 MS 2 Matrix Spike 2	Rec1	Rec2	M	C
Mercury	10.000	75 - 125	0.1400000 U	5.9208882	5.9836940	59*	60*		

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

Spike Sample Recovery

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		M
Antimony	0.5000	75 - 125	0.4797360	0.7571888	0.9359407	55*	91		P
Arsenic	0.5000	75 - 125	0.0326059	0.4170331	0.4386822	77	81		P
Barium	0.5000	75 - 125	0.4238794	0.8233968	0.8995710	80	95		P
Cadmium	0.5000	75 - 125	0.0060000 U	0.3746664	0.4076604	75	82		P
Chromium	0.5000	75 - 125	1.3823638	1.7095456	2.2340330	65*	170*		P
Cobalt	0.5000	75 - 125	0.0421043	0.4332324	0.4570721	78	83		P
Copper	0.5000	75 - 125	0.4407912	0.8585777	0.8916969	84	90		P
Lead	0.5000	75 - 125	1.4677081	1.7451382	1.8810172	55*	83		P
Nickel	0.5000	75 - 125	0.1399724	0.5463304	0.5770899	81	87		P
Selenium	0.5000	75 - 125	0.0313246	0.3970888	0.4197114	73*	78		P
Silver	0.5000	75 - 125	0.0250000 U	0.3717222	0.3942247	74*	79		P
Thallium	0.5000	75 - 125	0.0120000 U	0.3735098	0.3982503	75	80		P
Vanadium	0.5000	75 - 125	0.2774811	0.6811806	0.7770236	81	100		P
Zinc	0.5000	75 - 125	2.1938523	2.6165829	2.8817880	85	138*		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		
Beryllium	0.5000	75 - 125	0.0060000 U	0.4137389	0.4468708	83	89		P
Manganese	0.5000	75 - 125	1.6688580	2.3403109	2.3472878	134*	136*		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: S3316Z

Lab Code: 14622 Analysis Date: 4/24/01

ICP sample ID: 31978 Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2		
Aluminum	5.000	75 - 125	64.0320000	78.1740000	85.4160000	283*	428*		P
Calcium	50.000	75 - 125	710.9390000	721.8710000	823.3800000	22*	225*		P
Iron	5.000	75 - 125	144.2220000	182.4360000	188.6490000	764*	889*		P
Magnesium	50.000	75 - 125	70.6320000	115.0110000	128.9430000	89	117		P
Potassium	50.000	75 - 125	10.6470000	56.0510000	61.6370000	91	102		P
Sodium	50.000	75 - 125	5.0000000 U	47.3950000	51.7170000	95	103		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: H3316S

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: 31978

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Amt Added	QC Limits	31978 Non Spike	31978 MS 1 Matrix Spike 1	31978 MS 2 Matrix Spike 2	Rec1	Rec2	M	C
Mercury	10.000	75 - 125	4.4020493	14.9736821	14.1713518	106	98		

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

Laboratory Control Sample

Lab Name: Veritech Data File Name: W3313A

Lab Code: 14622 Analysis Date: 04/23/2001

ICP sample ID: LCSW Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	M
Antimony	0.5000	75-125	0.4723343	94	P
Barium	0.5000	75-125	0.4743864	95	P
Beryllium	0.5000	75-125	0.4603696	92	P
Cadmium	0.5000	75-125	0.4604989	92	P
Calcium	50.000	75-125	47.6308423	95	P
Chromium	0.5000	75-125	0.4636376	93	P
Cobalt	0.5000	75-125	0.4708513	94	P
Copper	0.5000	75-125	0.4708388	94	P
Iron	5.000	75-125	4.9102876	98	P
Lead	0.5000	75-125	0.4700722	94	P
Magnesium	50.000	75-125	46.4199535	93	P
Nickel	0.5000	75-125	0.4718197	94	P
Silver	0.5000	75-125	0.4469262	89	P
Thallium	0.5000	75-125	0.4668130	93	P
Vanadium	0.5000	75-125	0.4585720	92	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: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Antimony	0.5000	75-125	0.4743829	95		P
Barium	0.5000	75-125	0.4788062	96		P
Beryllium	0.5000	75-125	0.4594828	92		P
Cadmium	0.5000	75-125	0.4663543	93		P
Calcium	50.000	75-125	47.9433644	96		P
Chromium	0.5000	75-125	0.4708727	94		P
Cobalt	0.5000	75-125	0.4773025	95		P
Copper	0.5000	75-125	0.4755912	95		P
Iron	5.000	75-125	5.0731712	101		P
Lead	0.5000	75-125	0.4724887	94		P
Magnesium	50.000	75-125	46.8436066	94		P
Nickel	0.5000	75-125	0.4768768	95		P
Silver	0.5000	75-125	0.4505269	90		P
Thallium	0.5000	75-125	0.4739346	95		P
Vanadium	0.5000	75-125	0.4638071	93		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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	5.000	75-125	4.7122113	94		P
Arsenic	0.5000	75-125	0.4491005	90		P
Selenium	0.5000	75-125	0.4451298	89		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: A3318A

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	5.000	75-125	4.7196616	94		P
Arsenic	0.5000	75-125	0.4489542	90		P
Selenium	0.5000	75-125	0.4472718	89		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Manganese	0.5000	75-125	0.4742312	95		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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Manganese	0.5000	75-125	0.4737878	95		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: W3313B

Lab Code: 14622

Analysis Date: 04/28/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Zinc	0.5000	75-125	0.4941425	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: W3313B

Lab Code: 14622 Analysis Date: 04/28/2001

ICP sample ID: LCSW MR Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Zinc	0.5000	75-125	0.5068081	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	
Potassium	50.000	75-125	45.4662447	91	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: W3313C

Lab Code: 14622

Analysis Date: 04/30/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Potassium	50.000	75-125	45.6859975	91		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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Sodium	50.000	75-125	46.9980000	94		M
						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: W3313Z

Lab Code: 14622

Analysis Date: 4/30/01

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Sodium	50.000	75-125	47.0830000	94		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: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	10.000	75-125	9.9738056	100		C

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

5/24/01

Laboratory Control Sample

Lab Name: Veritech

Data File Name: H3313SW

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCSWmr

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	10.000	75-125	11.2610900	113		M 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: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCS 100

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits		Found	Rec	M
Antimony	90.9	24.8-	157	82.6181780	91	P
Arsenic	51.1	38.0-	64.3	51.6155280	101	P
Barium	264	203-	324	256.8886800	97	P
Cadmium	56.2	43.3-	69.1	55.5114620	99	P
Chromium	31.4	25.1-	37.7	27.2794440	87	P
Cobalt	43.1	34.2-	51.7	43.8136060	102	P
Copper	133	109-	156	131.2513740	99	P
Lead	67.1	51.1-	83.2	69.7961610	104	P
Nickel	99.5	77.9-	121	102.7991940	103	P
Selenium	52.7	39.0-	66.3	53.4457780	101	P
Silver	54.5	40.6-	68.6	55.3234620	102	P
Thallium	106	60.5-	151	108.4533980	102	P
Vanadium	56.1	38.2-	74.0	47.6320050	85	P
Zinc	85.3	66.0-	105	73.5376850	86	P

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

4/30

Laboratory Control Sample

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCS 100 MR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits		Found	Rec	M
Antimony	90.9	24.8-	157	78.5033430	86	P
Arsenic	51.1	38.0-	64.3	52.6505770	103	P
Barium	264	203-	324	261.0345990	99	P
Cadmium	56.2	43.3-	69.1	55.2272560	98	P
Chromium	31.4	25.1-	37.7	27.7961830	89	P
Cobalt	43.1	34.2-	51.7	43.8427150	102	P
Copper	133	109-	156	132.3815590	100	P
Lead	67.1	51.1-	83.2	72.2741680	108	P
Nickel	99.5	77.9-	121	102.9565440	103	P
Selenium	52.7	39.0-	66.3	53.4914760	102	P
Silver	54.5	40.6-	68.6	55.3109100	101	P
Thallium	106	60.5-	151	109.7983500	104	P
Vanadium	56.1	38.2-	74.0	46.6372480	83	P
Zinc	85.3	66.0-	105	87.4333190	103	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: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCS 100

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Beryllium	150	118- 184	153.0364990	102		P
Manganese	307	248- 365	291.5486530	95		P

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

7

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3316A

Lab Code: 14622

Analysis Date: 04/24/2001

ICP sample ID: LCS 100 MR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits		Found	Rec		
Beryllium	150	118-	184	151.9790270	101		P
Manganese	307	248-	365	299.7767640	98		P

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

4/30

Laboratory Control Sample

Lab Name: Veritech

Data File Name: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

ICP sample ID: LCS 100

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	8420	3370- 13400	5279.2000000	63		P
Calcium	10500	7840- 13100	10746.3000000	102		P
Iron	13000	7900- 18100	9499.7000000	73		P
Magnesium	2810	2270- 3350	2756.9000000	98		P
Potassium	3280	2560- 4000	2687.1000000	82		P
Sodium	779	528- 1030	754.1000000	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: S3316Z

Lab Code: 14622

Analysis Date: 4/24/01

ICP sample ID: LCS 100 MR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		M
Aluminum	8420	3370- 13400	4919.6000000	58		P
Calcium	10500	7840- 13100	11038.6000000	105		P
Iron	13000	7900- 18100	9185.7000000	71		P
Magnesium	2810	2270- 3350	2356.1000000	84		P
Potassium	3280	2560- 4000	2748.8000000	84		P
Sodium	779	528- 1030	749.7000000	96		P

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

Laboratory Control Sample

901

Lab Name: Veritech

Data File Name: H3316S

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCS

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	M
Mercury	3940	2690- 5210	3717.3413597	94	C

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

B
5/2/01

Laboratory Control Sample

Lab Name: Veritech

Data File Name: H3316S.TXT

Lab Code: 14622

Analysis Date: 04/25/2001

ICP sample ID: LCSMR

Batch: 3316

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Mercury	3940	2690- 5210	3425.8083074	87		C

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

Wet Chemistry QC Summary Form

Parameter: Chloride
Matrix: Soil
Batch: 33s

Method Blank Summary:

Units	PQL	RESULT
mg/kg	50	U

QC Sample	
AB31895	
Soilds	60
Sample PQL	
83	

Duplicate Summary:

Original Sample	C	Duplicate Sample	C	RPD
118		148		22.3

Spike Summary:

	Spiked Result	Sample Result	C	Amount Added	% Recovery
Method Blank Spike	51		U	50	103
Matrix Spike	888	118		833	92
Matrix Spike Dup	888	118		833	92

Wet Chemistry QC Summary Form

Parameter: Chloride
Matrix: Aqueous
Batch: 087W

Method Blank Summary: U = Undetected below MDL

Units	MDL	Result	QC Sample MDL
mg/l	1.0	U	1.0

Duplicate Summary: QC Sample: AB30741

Sample result	C	Duplicate Result	C	RPD
16.1		15.6		3.2

Spike Summary:

	Spiked Result	Sample Result	C	Amount Added	% Recovery
Method Blank Spike	51.7		U	50	103
Matrix Spike	65.2	16.1		50	98
Matrix Spike Dup	67.2	16.1		50	102

Laboratory Control Sample

Lab Name: Veritech

Data File Name: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCSW

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec	M
Antimony	0.5000	75-125	0.4723343	94	P
Barium	0.5000	75-125	0.4743864	95	P
Beryllium	0.5000	75-125	0.4603696	92	P
Cadmium	0.5000	75-125	0.4604989	92	P
Calcium	50.000	75-125	47.6308423	95	P
Chromium	0.5000	75-125	0.4636376	93	P
Cobalt	0.5000	75-125	0.4708513	94	P
Copper	0.5000	75-125	0.4708388	94	P
Iron	5.000	75-125	4.9102876	98	P
Lead	0.5000	75-125	0.4700722	94	P
Magnesium	50.000	75-125	46.4199535	93	P
Nickel	0.5000	75-125	0.4718197	94	P
Silver	0.5000	75-125	0.4469262	89	P
Thallium	0.5000	75-125	0.4668130	93	P
Vanadium	0.5000	75-125	0.4585720	92	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: W3313A

Lab Code: 14622

Analysis Date: 04/23/2001

ICP sample ID: LCSW MR

Batch: 3313

All Concentration Units in PPM except Mercury in PPB

Analyte	Spike Amount	QC Limits	Found	Rec		
Antimony	0.5000	75-125	0.4743829	95		M
Barium	0.5000	75-125	0.4788062	96		P
Beryllium	0.5000	75-125	0.4594828	92		P
Cadmium	0.5000	75-125	0.4663543	93		P
Calcium	50.000	75-125	47.9433644	96		P
Chromium	0.5000	75-125	0.4708727	94		P
Cobalt	0.5000	75-125	0.4773025	95		P
Copper	0.5000	75-125	0.4755912	95		P
Iron	5.000	75-125	5.0731712	101		P
Lead	0.5000	75-125	0.4724887	94		P
Magnesium	50.000	75-125	46.8436066	94		P
Nickel	0.5000	75-125	0.4768768	95		P
Silver	0.5000	75-125	0.4505269	90		P
Thallium	0.5000	75-125	0.4739346	95		P
Vanadium	0.5000	75-125	0.4638071	93		P

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