NEW YORK STATE DEPARTMENT OF TRANSPORTATION

Albany, New York

360035

POST-CLOSURE QUARTERLY LANDFILL MONITORING

Second Year Third Quarter

Harrison Subresidency

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

July 2002

Prepared By

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

File No.: 446-304

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ALBANY, NEW YORK

HARRISON SUBRESIDENCY
WESTCHESTER COUNTY
POST-CLOSURE MONITORING RESULTS

D008873, PIN 8806.51.301

SECOND YEAR, THIRD QUARTERLY REPORT

July 2002

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

D008873, PIN 8806.51.301

EXECUTIVE SUMMARY

This report presents the results of the 22 and 23 May 2002 second year, third quarter post-closure sampling and monitoring conducted at the Harrison Subresidency site located in the town of Harrison, Westchester County, New York. The objectives of the post-closure sampling and monitoring program are to; 1) evaluate the environmental impacts of the landfill; 2) meet the post-closure monitoring requirements of the NYSDEC and; 3) provide NYSDEC with data to evaluate and/or modify the existing sampling and monitoring program. As part of this program six wells (LMW-2, MW-4, PC-1, PC-2, PC-3 and PC-4) and four surface water/sediment locations (SW/SD-1, SW/SD-2, SW/SD-3 and SW/SD-4) were sampled for Target Analyte List (TAL) metals and chloride.

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

Chloride was detected just above the NYS standard in the groundwater sample collected from the on-site monitoring well PC-1.

Surface water analytical results indicate that the non-RCRA metals, iron, manganese and sodium were detected at levels that exceeded the NYS standards. The elevated levels of these metals detected in the upstream sample SW-1 suggest a contributing off-site source.

Chloride was not detected above the standard in the surface water samples.

The RCRA metals lead and silver were detected in two sediment samples (lead and silver in SD-3 and silver in SD-1) above their respective lower effect levels (LELs) but were not detected above the NYS standards in the corresponding surface water samples. The elevated concentration of silver detected in the sample collected from the upstream location SD-1 suggests a contributing external source. The non-RCRA metals copper and manganese were detected in two sediment samples (copper in SD-3 and manganese in SD-2) above their respective lowest effect levels (LELs) but were not detected above the NYS standards in the corresponding surface water samples.

There is no sediment criterion for chloride.

1.0 INTRODUCTION

1.1 Background

This report presents the results of the 22 and 23 May 2002 second year, third quarter post-closure sampling and monitoring conducted at the Harrison Subresidency site located in the town of Harrison, Westchester County, New York (Figure 1). The site, a seasonal highway maintenance support and salt storage facility operated by the New York State Department of Transportation (NYSDOT), includes approximately 2.6 acres of landfill area (Figure 2) that was closed in December 1998 in compliance with New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 360 regulations. The second year, 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 to evaluate and/or modify the existing sampling and monitoring program.

1.3 First Year Quarterly Post-Closure Monitoring

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

1.4 Second Year First Quarterly Post-Closure Monitoring

LMS conducted the second year first quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill on 7 and 8 November 2001. Samples were collected from four on-site and two off-site monitoring wells, three surface water locations and four sediment locations. The analytical results indicated that two RCRA metals, selenium and chromium, were detected in the groundwater above their respective New York State (NYS) Class

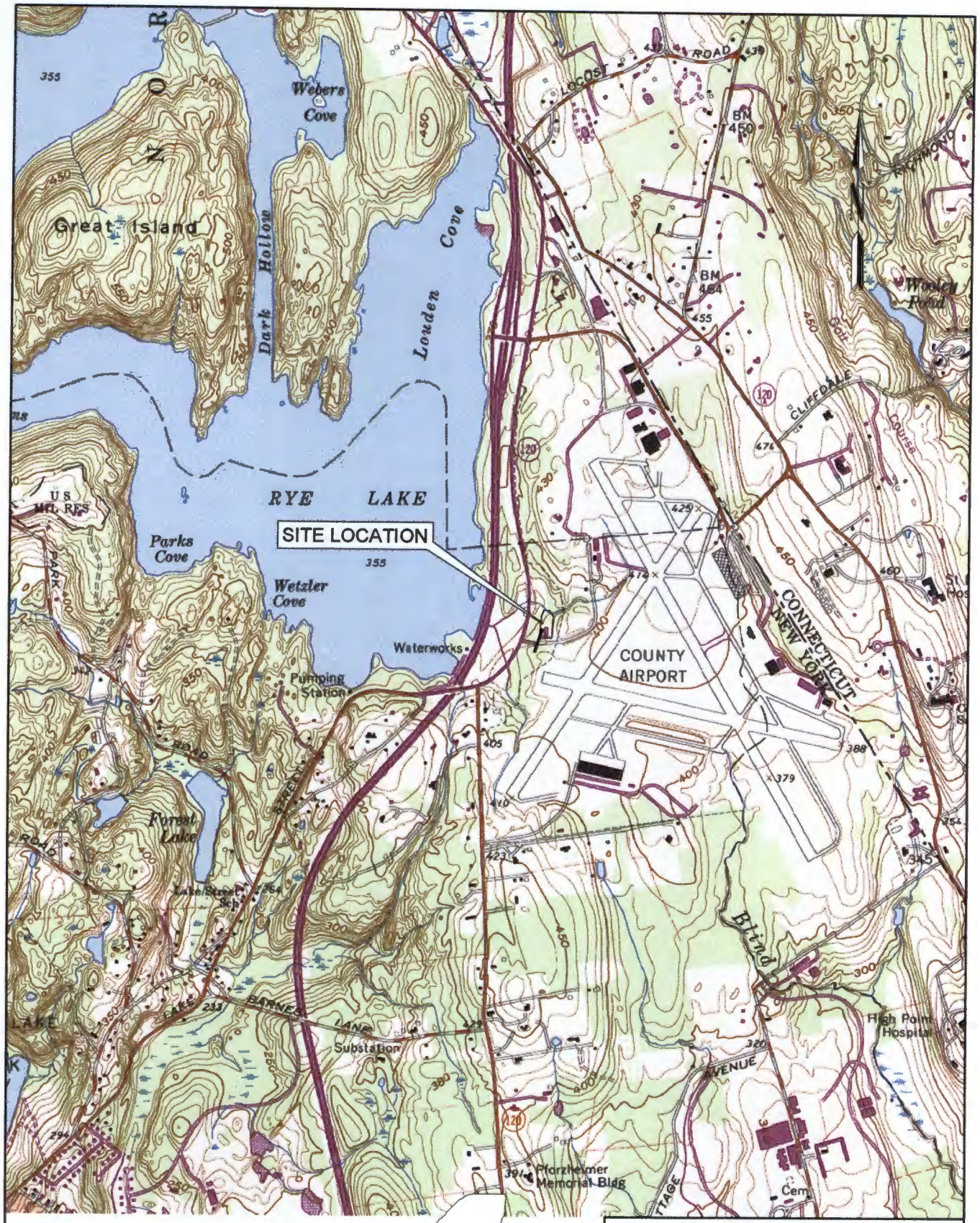

Figure 1

Site Location

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN 8806.51.301

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

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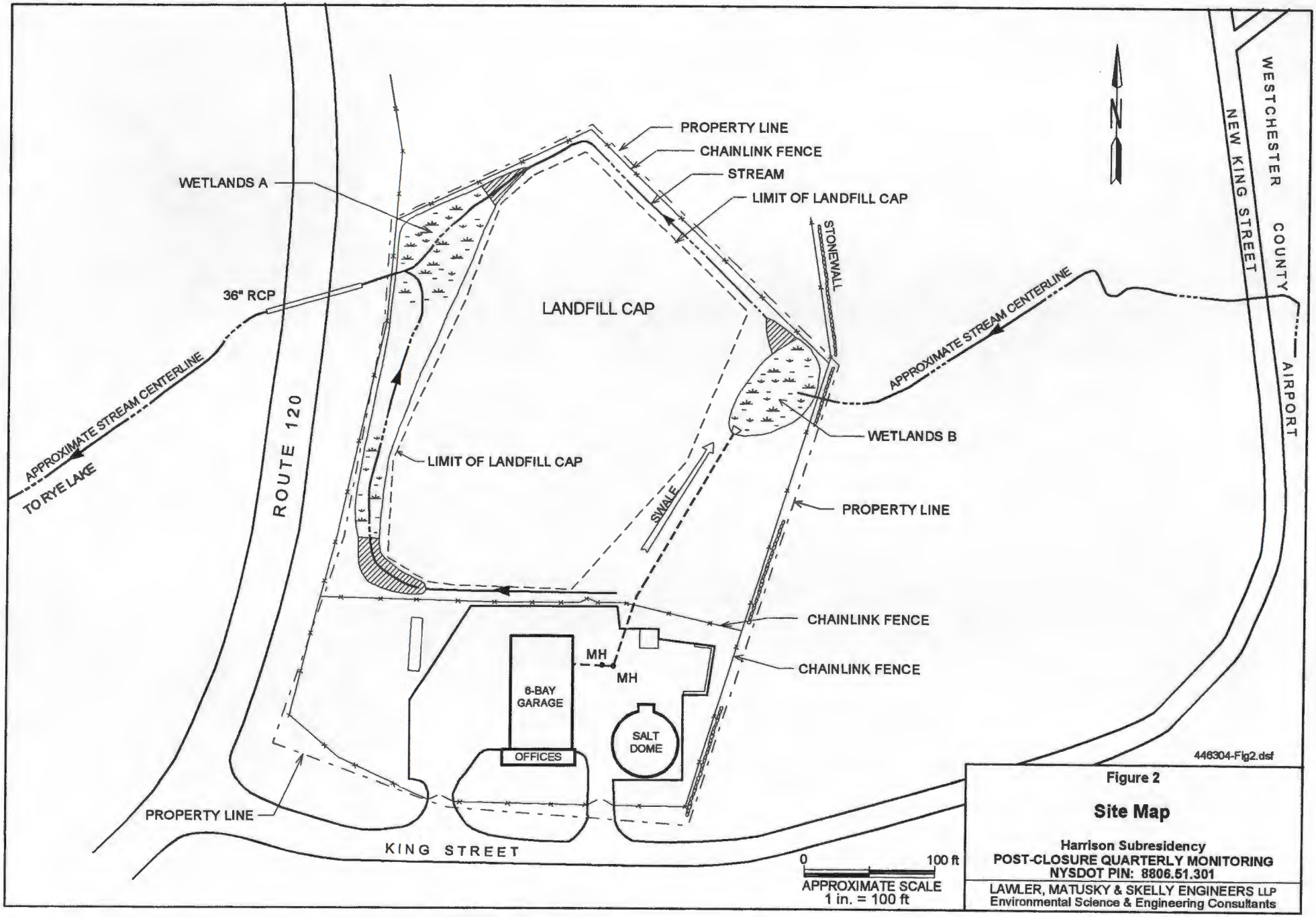

Figure 2

Site Map

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
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GA standard. Chromium was not detected in the filtered samples and selenium was detected in only one filtered sample, PC-2, slightly above the standard. In general, the data indicates that a large portion of the TAL metals detected in the groundwater were associated with the suspended solids faction (which typically do not migrate) and were not detected in the dissolved phase or were detected at a lower concentration. Chloride was detected in excess of the NYS standard of 250 ppm in the off-site well PC-3.

Surface water analytical results indicated that the RCRA metal lead was detected above the NYS standard in the sample collected from SW-2. However, lead was not detected in the downstream surface water sample (SW-4) which indicated there was no off-site surface water migration of lead from the landfill.

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

1.5 Second Year Second Quarterly Post-Closure Monitoring

LMS conducted the second year second quarterly post-closure monitoring of the groundwater, surface water and sediment at the landfill on the 5th and 6th of February 2002. Six wells (LMW-2, MW-4, PC-1, PC-2, PC-3 and PC-4) and four surface water/sediment locations (SW/SD-1, SW/SD-2, SD-3 and SW/SD-4) were sampled for Target Analyte List (TAL) metals and chloride.

The analytical results indicate that the RCRA metals antimony and chromium were detected in the groundwater above their respective New York State (NYS) Class GA standard. Chromium was not detected in the filtered samples and antimony was detected slightly above the standard in one filtered sample, PC-2. Concentrations of iron, magnesium, manganese and sodium (which are non-RCRA constituents) were detected in excess of the NYS standards in the filtered and unfiltered groundwater samples. However, in general, the data indicates that a large portion of the TAL metals detected in the groundwater are associated with the suspended solids faction (which typically do not migrate) and were not detected in the dissolved phase or were detected at a lower concentration. Chloride was not detected in excess of the NYS standard in the groundwater samples.

Surface water analytical results indicate that the RCRA metals antimony, chromium and lead were detected above their respective NYS standard. Chromium and lead were detected above the standard in the upstream sample SW-1, which suggests a contributing off-site source. Antimony was detected in the unfiltered downstream surface water sample (SW-4) slightly above the standard. In addition, concentrations of the non-RCRA metals, iron, magnesium, manganese and sodium were detected at levels that exceeded the NYS standards. Chloride was not detected above the standard in the surface water samples.

The RCRA metals lead and nickel were detected in two sediment samples (lead in SD-2 and nickel in SD-2 and SD-3) above their respective lower effect levels (LELs) but were not detected above the NYS standards in the corresponding surface water sample collected from SW-2. The stream at SW-3 was dry and therefore a corresponding surface water sample was not collected from this location. The non-RCRA metals copper and manganese were detected in the downstream sediment samples above their respective lowest effect levels (LELs) but were not detected above the NYS standards in the surface water samples. There is no sediment criterion for chloride.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control
625 Broadway Road, Albany, New York 12233-7014
Phone: (518) 402-9564 FAX: (518) 402-9022

Erin M. Crotty
Commissioner

TRANSMITTAL SLIP

TO: Endre Mahamooth
NYSDEC
New Paltz

FROM: Daniel Eaton

DATE: Dec. 06, 2002

SUBJECT: Harrison Subresidencey SITE ID #: 336035

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NOTE: Attached is a copy of the O&M report for the landfill at the Harrison Subresidency site.

KEY ITEMS:

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FOR ACTION AS INDICATED:

__	Please Handle	__	Comments
__	Prepare Reply	__	Signature
__	Prepare Reply for _____	__	File
__	Signature	__	Return to me
XXX	Information	__	As requested
__	Approval	__	_____
__	Prepare final/draft in _____ Copies	__	_____

2.0 FIELD INVESTIGATION

2.1 Monitoring Well Sampling

On May 22nd and 23rd, as part of the quarterly post-closure sampling and monitoring program, six monitoring wells (Figure 3) were purged and sampled for Target Analyte List (TAL) metals and chloride

The upgradient well LMW-2 was purged dry after 4.5 gallons. The well was allowed to recharge to more than 85% before sampling. The downgradient well MW-4 was purged dry after 6.5 gallons and was allowed to recover to more than 80% before sampling. PC-1, PC-2, PC-3 and PC-4 were each purged of three well volumes prior to sampling. Well purging was performed by hand using a dedicated bailer or with a submersible pump. PC-2 was purged with a peristaltic pump because of a damaged casing (the well casing at PC-2 had sheared sideways allowing only a gap of about 2 cm down the well). After purging, samples were collected using dedicated disposable bailers. The samples were preserved on ice to 4°C and sent, under chain of custody, to a New York State Department of Health (NYSDOH)-approved laboratory for TAL metal (filtered and total) and chloride analyses.

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

2.2 Surface Water Sampling

Four surface water sampling points (SW-1, SW-2, SW-3 and SW-4) were sampled for TAL metals (total and filtered) and chloride.

SW-1 was collected from a point located at the eastern section of wetlands B. SW-2 was collected from a point located at the northern portion of wetlands A (western side of the landfill). SW-3 was collected from the southern section of wetlands A at the western side of the landfill. SW-4 was collected from a point located approximately 17 ft. northeast of the 36-in. reinforced concrete pipe (RCP) culvert that diverts the stream southwest under Route 120 to Rye Lake. The

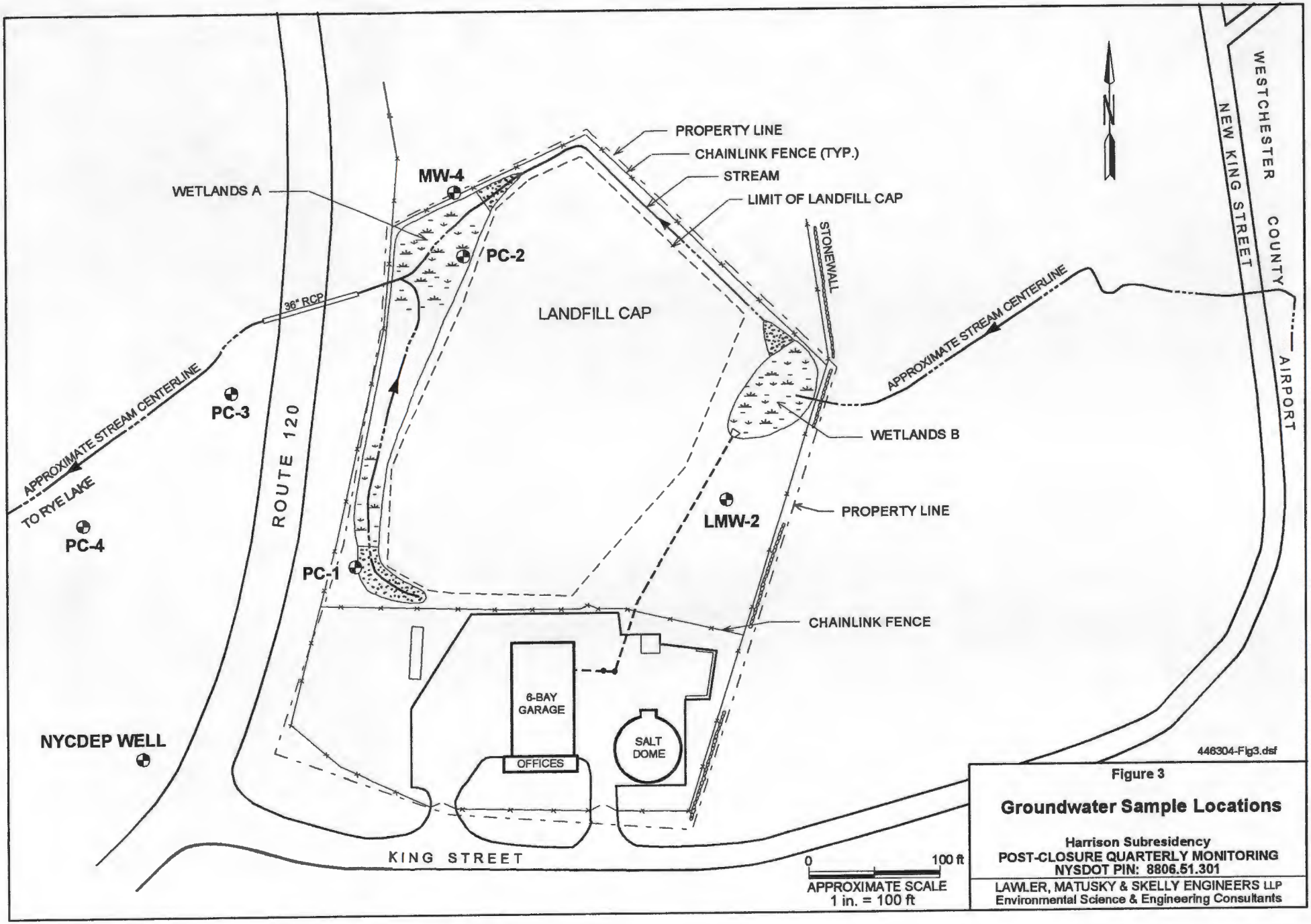

Figure 3

Groundwater Sample Locations

Harrison Subresidency
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flow at SW-1, SW-2, SW-3 and SW-4 was very low (<1 cubic foot per second (cfs)) and limited to a small channel approximately 6 to 8 inches deep.

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

2.3 Sediment Sampling

Four sediment samples (Figure 4) and a duplicate sample, SD-5 (duplicate of SD-2), were collected for TAL metal and chloride analyses. Each sediment sample was collected subsequent to, and at the same location as, its corresponding surface water sample. The samples were collected using a dedicated laboratory-cleaned stainless steel spoon and were 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.

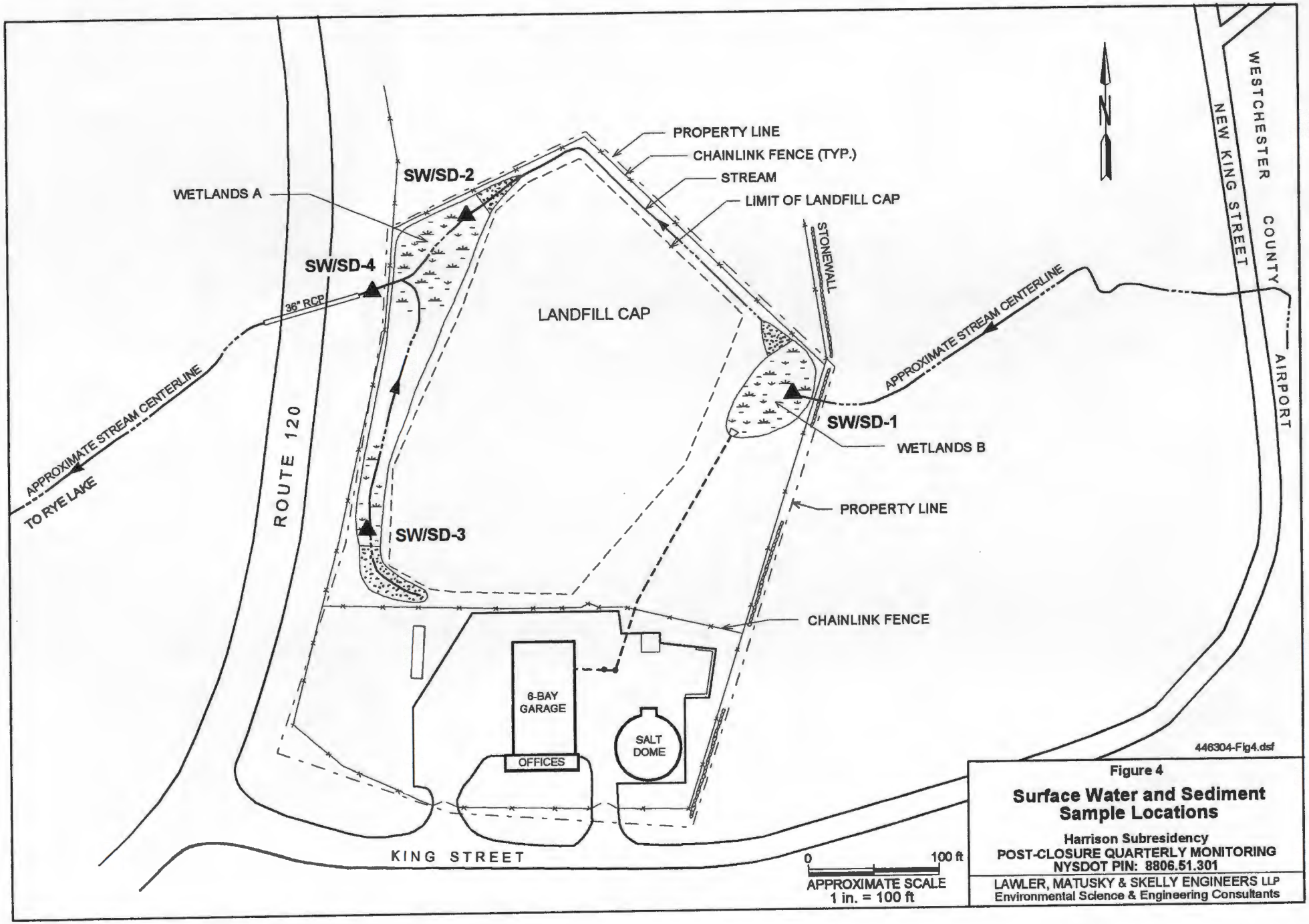

Figure 4

Surface Water and Sediment Sample Locations

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
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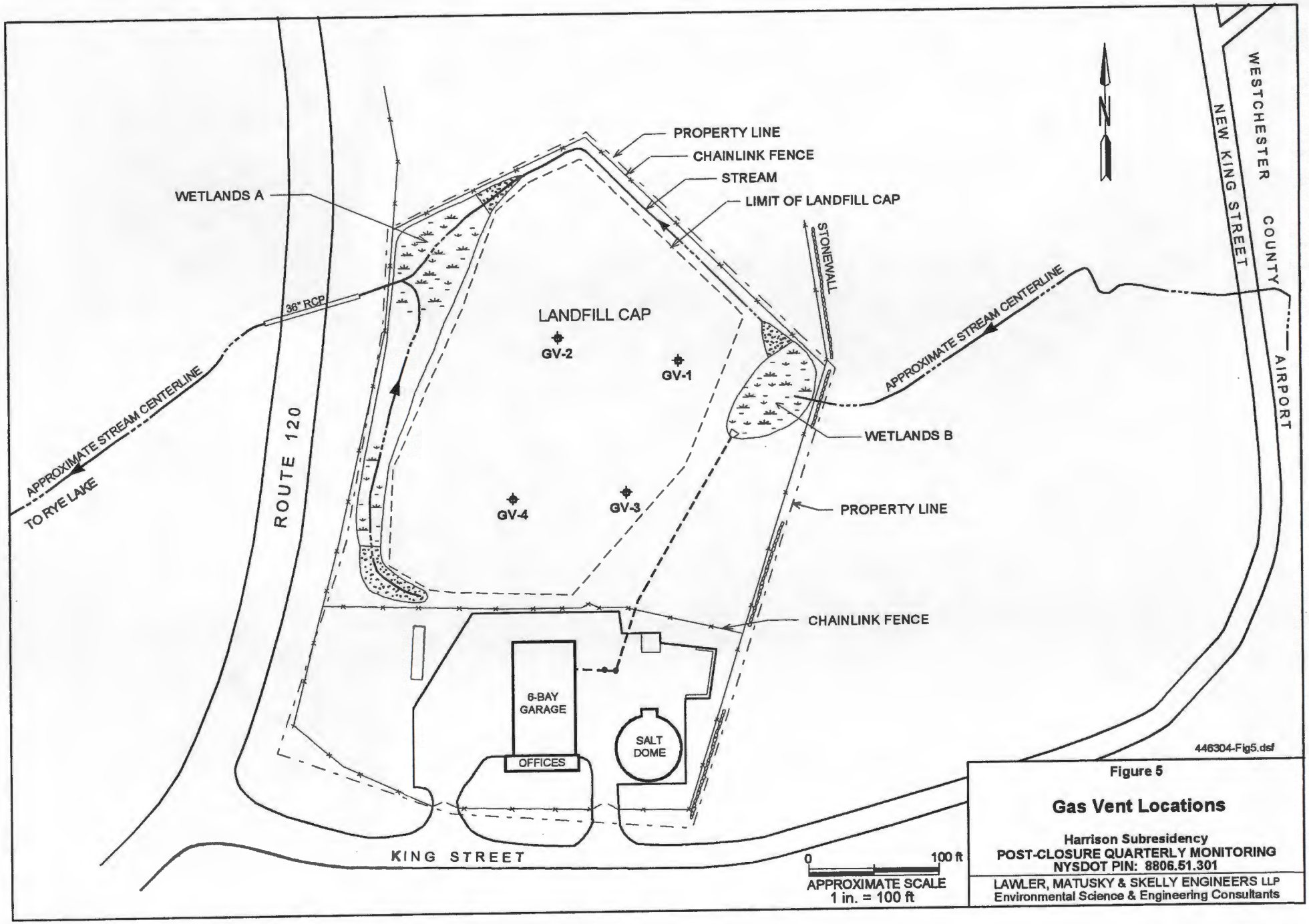

Figure 5

Gas Vent Locations

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN: 8806.51.301

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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 levels at the vents or the perimeter of the landfill. An air monitoring field data sheet is included in Attachment C.

2.5 Inspections

All six groundwater monitoring wells were inspected and, with the exception of PC-2, were found to be in good condition. As noted in Section 2.1 the well casing at PC-2 had sheared sideways allowing only a gap of about 2 cm down the well. The landfill cap, drainage swales, and gas vents were also inspected. No vermin or vector were noted on the landfill.

3.0 ANALYTICAL RESULTS

3.1 Groundwater Results

Filtered and unfiltered groundwater samples were collected from four on-site (LMW-2, MW-4, PC-1 and PC-2) and two off-site (PC-3 and PC-4) monitoring wells and 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 analysis indicate that sixteen TAL metals were detected in the groundwater samples. Antimony, arsenic, beryllium, cadmium, mercury, silver and thallium were not detected in the filtered and unfiltered groundwater samples. With some exceptions [barium (PC-1), calcium (PC-1 and PC-4), lead (MW-4), magnesium (PC-1 and PC-2), potassium (PC-1 and PC-2), sodium (LMW-2, PC-1, PC-2 and PC-4) and vanadium (PC-1)] the concentrations of TAL metals detected in the filtered ground water samples were lower than those detected in the unfiltered samples.

Chloride was detected in all the unfiltered groundwater samples. The highest concentration, 280 parts per million (ppm) was detected in PC-1.

3.2 Surface Water Results

Four surface water samples were collected and analyzed for TAL metals (filtered and unfiltered) and chloride 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 analysis indicates that ten TAL metals were detected in the surface water samples. Antimony, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver and thallium were not detected in the filtered and unfiltered surface water samples. With some exceptions [barium, calcium, magnesium, sodium (SW-1) and zinc (SW-3)] the concentrations of TAL metals detected in the filtered surface water samples were lower than those detected in the unfiltered samples. The highest concentration of chloride (210 ppm) was detected in SW-1 and SW-3.

TABLE 1

GROUNDWATER DATA SUMMARY

Second Year - Third Quarter (May 2002)

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	2000	ND	1500	ND	ND	ND	260	ND	3500	ND	22000	ND	<5.0 - 1000	NS
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	3
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.0 - 30	25
Barium	220	180	180	64	130	140	200	80	210	150	310	110	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	110000	56000	54000	130000	140000	72000	71000	100000	92000	62000	63000	1000 - 150000	NS
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90	ND	<1.0 - 5.0	50
Cobalt	ND	ND	21	19	ND	ND	ND	ND	12	8.1	22	ND	<10	NS
Copper	10	ND	ND	ND	5.9	ND	ND	ND	10	ND	56	ND	<1.0 - 3	200
Iron	3400	ND	120000	25000	ND	ND	84000	23000	9800	1300	39000	ND	10 - 10000	300 (m)
Lead	ND	ND	ND	4.7	ND	ND	6.5	4.2	ND	ND	26	ND	<15	25
Magnesium	42000	41000	20000	20000	18000	20000	23000	24000	31000	26000	25000	17000	1000 - 50000	35000 GV
Manganese	660	610	35000	33000	110	110	17000	16000	1100	1000	730	410	<1.0 - 1000	300 (m)
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	0.7
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	20	16	80	ND	<10 - 50	100
Potassium	6100	5100	2400	2200	7300	7900	3600	3800	7900	6800	9600	5900	1000 - 10000	NS
Selenium	ND	ND	18	ND	ND	ND	15	ND	ND	ND	ND	ND	<1.0 - 10	10
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	50
Sodium	57000	58000	32000	32000	160000	170000	62000	64000	100000	99000	50000	54000	500 - 120000	20000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	0.5 GV
Vanadium	14	8.4	8.7	ND	5.3	6	5.7	ND	18	5	75	ND	<1.0 - 10	NS
Zinc	ND	ND	34	ND	ND	ND	53	ND	ND	ND	110	ND	<10 - 2000	2000 GV
Chloride (mg/L)	31	*	46	*	280	*	67	*	180	*	110	*	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.

TABLE 2

SURFACE WATER DATA SUMMARY

Second Year - Third Quarter (May 2002)

Harrison Subresidency

NYSDOT

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	150	ND	ND	ND	140	ND	210	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	53	63	35	32	74	65	36	29	10 - 500	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	66000	69000	45000	42000	110000	110000	41000	37000	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	ND	ND	ND	ND	ND	ND	ND	ND	<1.0 - 3	200
Iron	320	ND	230	ND	140	ND	480	ND	10 - 10000	300 (m)
Lead	ND	ND	ND	ND	ND	ND	ND	ND	<15	25
Magnesium	21000	22000	13000	12000	18000	17000	12000	11000	1000 - 50000	35000 GV
Manganese	360	340	110	12	29	11	140	16	<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	3700	3600	3200	3100	5500	5000	3100	2800	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	81000	110000	33000	32000	120000	120000	35000	32000	500 - 120000	20000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	N/A	0.5 GV
Vanadium	ND	ND	ND	ND	4.6	ND	ND	ND	<1.0 - 10	NS
Zinc	ND	ND	ND	ND	ND	53	ND	ND	<10 - 2000	2000 GV
Chloride (mg/L)	210	*	36	*	210	*	41	*	N/A	250

* - Not analyzed.

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

GV - Guidance value.

(m) - Sum of iron and manganese not to exceed 500 ug/l.

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

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

N/A - Not applicable

NS - No standard

3.3 Sediment Data Results

Four sediment samples and one blind duplicate sample were collected and analyzed for TAL metals and chloride 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.

Sixteen TAL metals were detected in the sediment samples (antimony, beryllium, cadmium, mercury, selenium, sodium and thallium were not detected). The highest concentrations of TAL metals were detected in the sample collected from SD-2. This is attributable mostly in part to the elevated concentrations of calcium and magnesium detected in this sample. SD-2 is immediately downgradient of a stream segment this is filled with rip-rap material that includes carbonate rock. It is possible that small fragments of carbonate rock in the sediment are contributing to the elevated concentrations of calcium and magnesium detected in this sample. The correlation for SD-2 and SD-5 (blind duplicate) was within an acceptable range (within 20%).

The highest concentration of chloride (160 ppm) was detected in SD-3.

TABLE 3

SEDIMENT DATA SUMMARY

Second Year - Third Quarter (May 2002)

Harrison Subresidency

NYSDOT

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	11000	6500	9600	5800	6200		
Antimony	ND	ND	ND	ND	ND	2	25
Arsenic	1.5	1.6	1.6	2	ND	6	33
Barium	55	42	59	26	38		
Beryllium	ND	ND	ND	ND	ND		
Cadmium	ND	ND	ND	ND	ND	0.6	9
Calcium	2000	56000	42000	41000	48000		
Chromium	21	12	21	10	11	26	110
Cobalt	5.3	5.1	4.9	4.7	4.7		
Copper	14	12	17	8.5	12	16	110
Iron	15000	15000	15000	14000	13000	20000	40000
Lead	12	18	64	14	19	31	110
Magnesium	3700	30000	25000	22000	27000		
Manganese	180	700	330	370	610	460	1100
Mercury	ND	ND	ND	ND	ND	0.15	1.3
Nickel	14	13	15	12	13	16	50
Potassium	1400	1600	970	1300	1400		
Selenium	ND	ND	ND	ND	ND		
Silver	1.5	ND	1.4	ND	0.98	1	2.2
Sodium	ND	ND	ND	ND	ND		
Thallium	ND	ND	ND	ND	ND		
Vanadium	28	18	29	15	18		
Zinc	46	47	72	41	40	120	270
Chloride (mg/kg)	87	92	160	ND	ND		

(a) - NYSDEC Technical Guidance for Screening Contaminated Sediments.
November 1993, revised January 1999.
1 - Lowest Effect Level
2 - Severe Effect Level
ND - Not detected at analytical detection limit.

4.0 COMPARISON TO APPLICABLE CRITERIA

4.1 Groundwater

The results of the groundwater TAL metal 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 groundwater analysis indicates that four non-RCRA and three RCRA metals, detected in the unfiltered and filtered samples, occurred at concentrations exceeding their respective groundwater criteria (Table 1).

Iron and manganese exceeded their combined Class GA standard of 500 parts per billion (ppb) in all but three samples (unfiltered and filtered PC-1 and filtered PC-4). The highest combined concentration of iron and manganese was detected in MW-4. All the combined concentrations of iron and manganese detected in the filtered samples were lower than those detected in the unfiltered samples.

Magnesium exceeded the Class GA guidance value of 35,000 ppb in the unfiltered and filtered upgradient samples collected from LMW-2 at 42,000 ppb and 41,000 ppb respectively.

Sodium exceeded the standard of 20,000 ppb in all filtered and unfiltered groundwater samples. The highest concentration (170,000 ppb) was detected in the filtered sample collected from PC-1.

All four non-RCRA TAL metals were also detected above the standards and/or guidance values in the upgradient well, LMW-2 which suggests a contributing off-site source.

Three RCRA metals, chromium, lead and selenium were detected at concentrations exceeding their respective Class GA standards of 50 ppb, 25 ppb and 10 ppb in three unfiltered groundwater samples.

Chromium and lead exceeded their respective standards in the unfiltered sample collected from the offsite well PC-4 at 90 ppb and 26 ppb respectively. Selenium was detected above the Class GA standard in the unfiltered samples collected from MW-4 and PC-2 at 18 ppb and 15 ppb respectively.

Chloride was detected above the standard of 250 ppm in the unfiltered sample collected from PC-1.

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 three non-RCRA metals (iron, manganese and sodium) were detected in the surface water samples at concentrations exceeding their respective criteria (Table 2). Iron and manganese exceeded the combined Class GA standard of 500 ppb in the unfiltered sample collected from the upstream location, SW-1 and the unfiltered sample collected from SW-4. The combined iron and manganese concentration detected in the filtered samples was lower than that detected in the unfiltered samples. The elevated levels of iron and manganese detected in the upstream sampling location SW-1, suggest a contributing off-site source.

Sodium was detected above the Class GA standard of 20,000 ppb in the unfiltered and filtered samples collected from all surface water locations. The highest concentration, 120,000 ppb, was detected in both the unfiltered and filtered samples collected from SW-3. The concentration of sodium detected in the unfiltered and filtered samples collected from the upstream location SW-1 suggests a contributing off-site source.

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

4.3 Sediment

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

The results of the TAL metals analyses indicate that concentrations of copper, lead, manganese and silver exceeded the lowest effect level (LEL) in the upstream and downstream sample locations. Copper exceeded the LEL of 16 ppm in the sample collected from SD-3 (17 ppm). Lead was detected above the LEL of 31 ppm in the sample collected from SD-3 at 64 ppm. Manganese was detected above the LEL of 460 ppm in SD-2 (700 ppm) and its duplicate sample SD-5 (610 ppm). Silver was detected above the LEL of 1 ppm in the upgradient sample, SD-1 (1.5 ppm) and SD-3 (1.4 ppm). The elevated concentration of silver detected in the sample

collected from the upstream location SD-1, suggests a contributing external source. According to the NYSDEC Technical Guidance for Screening Contaminated Sediments if only the LEL criterion is exceeded, the impact to the sediment is considered moderate.

There is no criterion for chloride.

5.0 COMPARISON WITH THE PREVIOUS QUARTER

5.1 Groundwater

Results of the second year third quarter groundwater sampling event (May 2002) indicate that there has been a slight increase in the concentrations of the non-RCRA and RCRA metals that exceed the NYSDEC standards or guidance values for chromium, lead, manganese, selenium, and sodium since the last sampling event (February 2002). However, there has been a decrease in the concentrations of antimony, iron and magnesium.

5.2 Surface Water

Between February 2002 and May 2002 there has been an overall decrease in the concentration of RCRA and non-RCRA metals in the surface water samples (excluding SW-3).

5.3 Surface Sediments

Between February 2002 and May 2002 there has been a general decrease in the concentration of RCRA and non-RCRA metals in the sediment samples.

6.0 CONCLUSIONS

Concentrations of iron, magnesium, manganese, and sodium (which are non-RCRA constituents) were detected in excess of the NYS standards in the unfiltered and filtered groundwater samples. Elevated levels of iron, magnesium, manganese and sodium, in the sample collected from the upgradient well LMW-2 suggest there may be a contributing external source to the concentrations detected in the downgradient wells. The Harrison Subresidency landfill is located approximately 508 ft. downgradient of a local landfill and approximately 574 ft. downgradient of the Westchester County Airport (Figure 6). The analytical results also indicate that concentrations of the RCRA metals, chromium, lead and selenium were detected in excess of the NYS standards in the downgradient wells. However, chromium, lead and selenium were not detected in the filtered samples.

The filtered and unfiltered analytical results suggest that a large portion of the TAL metals are associated with the suspended solids faction (which typically does not migrate with the groundwater) and were not detected in the dissolved phase or were detected at lower concentrations.

Chloride was detected in excess of the NYS standard in one on-site monitoring well (PC-1).

Surface water analytical results indicate that concentrations of the non-RCRA metals, iron, manganese and sodium were detected at levels exceeding the NYS standards. There were no RCRA metals detected in the surface water samples that exceeded the NYS standards.

Chloride was not detected in excess of the NYS standard in the surface water samples.

The RCRA metals, lead and silver were detected in two sediment samples (lead and silver in SD-3 and silver in SD-1) above their respective LELs but were not detected above the NYS standards in the corresponding surface water samples. The concentration of silver detected in the upstream sample collected from SD-1 suggests a contributing off-site source. The Harrison Subresidency landfill is located approximately 508 ft. downgradient of a local landfill and approximately 574 ft. downgradient of the Westchester County Airport (Figure 6). The non-RCRA metals copper and manganese were detected above their respective LELs (copper in SD-3 and manganese in SD-2) but were not detected above the NYS standards in the corresponding surface water samples.

There is no sediment criterion for chloride.

Figure 6

Site and Vicinity Location

Harrison Subresidency
POST-CLOSURE QUARTERLY MONITORING
NYSDOT PIN 8806.51.301
Map Source: New York State Department of Transportation
Albany, New York

ATTACHMENT A

LMS Well Sampling Log

Date:	5/22/02		METERS USED
Crew:	JT/ML	Temp.:	TCL # 8
Job No:	446-304	pH:	98-15
Project:	Harrison Landfill	Cond.:	TCL # 8
Project Site:	Harrison NY	Turb.:	DRT-15CE

Well ID No.:	LMW-2	DTW Before Sampling:	11.05
Well Condition:	Good	Sample Date/Time:	5/22/02@1630
Well Depth/Diameter:	24.0/2"	Sampling Method:	Dedicated Bailer
Well Casing Type:	PVC	Sampling Depth(s):	13-16'
Screened Interval:	14-24	DTW After Sampling:	14.75
Casing Ht./Lock No.:	2246	Chain-of-Custody No.(s):	
Reference Pt.:	TOC	Analytical Lab(s):	Veritech
Depth to Water (DTW):	9.7'	Sampling Observations:	
Water Column Ht./Vol.:	14.3/2.86		
Purge Est.:	9 gal.		
Purge Method(s):	Hand bailed		
Purge Date/Time(s):			
Depth(s):	All		
Rates (gpm):			
Purged Volume:	4.5 gal.		
DTW After Purging:	Purged dry		
Yield Rate:	Low		
Purge Observations:	Slightly turbid.		

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	12	7.3	0.941	20

SAMPLE ANALYSES

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

*Preserved in Laboratory

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.
0	12.9	6.6	0.907

Comments: Well dry after purging 4.5 gal.

Air Temp: 70°

Weather Conditions: Sunny

Crew Chief Signature _____ Date: _____

LMS Well Sampling Log

Date:	5/22/02		METERS USED
Crew:	JT/ML	Temp.:	TCL # 8
Job No:	446-304	pH:	98-15
Project:	Harrison Landfill	Cond.:	TCL # 8
Project Site:	Harrison NY	Turb.:	DRT-15CE

Well ID No.:	MW-4	DTW Before Sampling:	4.05
Well Condition:	Good	Sample Date/Time:	5/22/02@1530
Well Depth/Diameter:	15/2"	Sampling Method:	Dedicated Bailer
Well Casing Type:	PVC	Sampling Depth(s):	8-12'
Screened Interval:	NA	DTW After Sampling:	6.65
Casing Ht./Lock No.:	2402	Chain-of-Custody No.(s):	
Reference Pt.:	TOC	Analytical Lab(s):	Veritech
Depth to Water (DTW):	3.25	Sampling Observations:	Water slightly turbid.
Water Column Ht./Vol.:	11.75/2.35		
Purge Est.:	7 gal.		
Purge Method(s):	Hand bailed		
Purge Date/Time(s):			
Depth(s):	All		
Rates (gpm):			
Purged Volume:	6.5 gal.		
DTW After Purging:			
Yield Rate:	Low		
Purge Observations:	Water turbid.		

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	14.4	7.2	0.904	30

SAMPLE ANALYSES

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

*Preserved in Laboratory

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	12	7.2	0.92	50

Comments: Well dry at 6.5 gal.

Air Temp: 70°

Weather Conditions: Sunny

Crew Chief Signature _____ Date: _____

LMS Well Sampling Log

Date:	5/22/02		METERS USED
Crew:	JT/ML	Temp.:	TCL # 8
Job No:	446-304	pH:	98-15
Project:	Harrison Landfill	Cond.:	TCL # 8
Project Site:	Harrison NY	Turb.:	DRT-15CE

Well ID No.:	PC-1	DTW Before Sampling:	4.6
Well Condition:	Good	Sample Date/Time:	5/22/02@1030
Well Depth/Diameter:	17.2/2"	Sampling Method:	Dedicated Bailer
Well Casing Type:	PVC	Sampling Depth(s):	8-12'
Screened Interval:	NA	DTW After Sampling:	
Casing Ht./Lock No.:	2402	Chain-of-Custody No.(s):	
Reference Pt.:	TOC	Analytical Lab(s):	Veritech
Depth to Water (DTW):	4.46	Sampling Observations:	Water clear.
Water Column Ht./Vol.:	12.74/2.55		
Purge Est.:	8		
Purge Method(s):	Peristaltic Pump		
Purge Date/Time(s):			
Depth(s):	All		
Rates (gpm):	0.33 gal/min.		
Purged Volume:	10 gal.		
DTW After Purging:			
Yield Rate:	Low		
Purge Observations:	Water clear.		

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	16.1	7.6	1.198	3

SAMPLE ANALYSES

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

*Preserved in Laboratory

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	14.8	6.6	1.395	3
5	14.4	7	1.505	2
10	14.5	7.1	1.488	1

Comments:

Air Temp: 70^0

Weather Conditions: Sunny

Crew Chief Signature _____ Date: _____

LMS Well Sampling Log

Date:	5/22/02
Crew:	JT/ML
Job No:	446-304
Project:	Harrison Landfill
Project Site:	Harrison NY

METERS USED	
Temp.:	TCL # 8
pH:	98-15
Cond.:	TCL # 8
Turb.:	DRT-15CE

Well ID No.:	PC-2
Well Condition:	Damaged (casing bent)
Well Depth/Diameter:	15.05/2"
Well Casing Type:	PVC
Screened Interval:	5.05-15.05
Casing Ht./Lock No.:	2402
Reference Pt.:	TOC
Depth to Water (DTW):	2.85
Water Column Ht./Vol.:	12.2/2.44
Purge Est.:	7.5
Purge Method(s):	Peristaltic pump
Purge Date/Time(s):	
Depth(s):	All
Rates (gpm):	0.33 gal/min.
Purged Volume:	10 gal.
DTW After Purging:	
Yield Rate:	Low
Purge Observations:	Water slightly turbid then clear.

DTW Before Sampling:	3.5
Sample Date/Time:	5/22/02@1230
Sampling Method:	Dedicated Bailer
Sampling Depth(s):	6-10'
DTW After Sampling:	4.2
Chain-of-Custody No.(s):	
Analytical Lab(s):	Veritech
Sampling Observations:	

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	11.7	6.3	0.988	8

SAMPLE ANALYSES

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

*Preserved in Laboratory

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	12.7	7.2	0.968	32
5	11.5	7.1	0.964	28
10	11.7	6.6	0.98	11

Comments: Iron precipitate leaching from base of landfill.

Air Temp: 70^0

Weather Conditions: Sunny

Crew Chief Signature _____ Date: _____

LMS Well Sampling Log

Date:	5/23/02
Crew:	JT/ML
Job No:	446-304
Project:	Harrison Landfill
Project Site:	Harrison NY

METERS USED	
Temp.:	TCL # 8
pH:	98-15
Cond.:	TCL # 8
Turb.:	DRT-15CE

Well ID No.:	PC-3	
Well Condition:	Good	
Well Depth/Diameter:	17.2/2"	
Well Casing Type:	PVC	
Screened Interval:	7.2-17.2	
Casing Ht./Lock No.:	2246	(new lock)
Reference Pt.:	TOC	
Depth to Water (DTW):	9.2	
Water Column Ht./Vol.:	8.0/1.6	
Purge Est.:	5 gal.	
Purge Method(s):	Hand bailed	
Purge Date/Time(s):		
Depth(s):	All	
Rates (gpm):		
Purged Volume:	5 gal.	
DTW After Purging:		
Yield Rate:	Low	
Purge Observations:	Water is turbid.	

DTW Before Sampling:	9.35
Sample Date/Time:	5/23/02@1125
Sampling Method:	Dedicated Bailer
Sampling Depth(s):	12-16'
DTW After Sampling:	9.35
Chain-of-Custody No.(s):	
Analytical Lab(s):	Veritech
Sampling Observations:	Water turbid.

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	10.7	7.2	1.015	86

SAMPLE ANALYSES

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

*Preserved in Laboratory

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	10.7	7.3	2.21	130
5	10.6	7.2	1.488	160

Comments:

Air Temp:	70^0
Weather Conditions:	Sunny

Crew Chief Signature _____ Date: _____

LMS Well Sampling Log

Date:	5/23/02
Crew:	JT/ML
Job No:	446-304
Project:	Harrison Landfill
Project Site:	Harrison NY

METERS USED	
Temp.:	TCL # 8
pH:	98-15
Cond.:	TCL # 8
Turb.:	DRT-15CE

Well ID No.:	PC-4
Well Condition:	Good
Well Depth/Diameter:	16.68'/2"
Well Casing Type:	PVC
Screened Interval:	NA
Casing Ht./Lock No.:	
Reference Pt.:	TOC
Depth to Water (DTW):	8.3
Water Column Ht./Vol.:	8.38/1.68
Purge Est.:	6 gal.
Purge Method(s):	Hand bailed
Purge Date/Time(s):	
Depth(s):	All
Rates (gpm):	
Purged Volume:	6.5 gal.
DTW After Purging:	
Yield Rate:	Low
Purge Observations:	Water turbid.

DTW Before Sampling:	8.5
Sample Date/Time:	5/23/02@1030
Sampling Method:	Dedicated Bailer
Sampling Depth(s):	11-15'
DTW After Sampling:	8.5
Chain-of-Custody No.(s):	
Analytical Lab(s):	Veritech
Sampling Observations:	Water turbid.

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	10.9	7.3	0.688	285

SAMPLE ANALYSES

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

*Perserved in Laboratory

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	12	7.5	0.652	170
6.5	10.9	7.3	0.682	225

Comments:

Air Temp: 70^0

Weather Conditions: Sunny

Crew Chief Signature _____ Date: _____

ATTACHMENT B

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

Date: 5/22/02
Crew: JT/ML
Site: Harrison Landfill

FIELD DATA SHEET FOR SURFACE WATER

pH No: 98-15
TLC No: 9
Turb. Meter: DRT-15CE

Sta. No.	Time	Sample Depth	Total Depth	Temp. °C	pH	Cond. umhos/cm	Turb. NTUs	Flow CFS	Sample Parameters	Comments
SW-2	1540	0-6"	8"	19	7.3	0.435	5	< 1	TAL Metals (T, F), Cl	
SW-3	1610	0-4"	6"	23.4	8	1.146	4	< 1	TAL Metals (T, F), Cl	
SW-1	1625	0-4"	6"	19.7	8.2	1.025	6	< 1	TAL Metals (T, F), Cl	
SW-4	1735	0-6"	8"	16.9	8.4	0.44	5	< 1	TAL Metals (T, F), Cl	

Date: 5/22/02
Crew: JT/ML
Site: Harrison Landfill

FIELD DATA SHEET FOR SOIL/SEDIMENTS

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

Sta. No.	Time	Sample Depth	Method	Texture	Color	Odor/ Staining	Sample Parameters	Comments
SD-2	1545	3-4"	Dedicated SS Spoon	Loose/gran.	Br./Drk.Gr.	None	TAL Metals, Cl	
SD-5	1545	N/A	N/A	N/A	N/A	N/A	TAL Metals, Cl	Duplicate of SD-2
SD-3	1615	3-4"	Dedicated SS Spoon	Loose/gran.	Drk.Br.	None	TAL Metals, Cl	
SD-1	1630	3-4"	Dedicated SS Spoon	Loose/gran.	Brown	None	TAL Metals, Cl	
SD-4	1740	3-4"	Dedicated SS Spoon	Loose/gran.	Br./Gr.	None	TAL Metals, Cl	

ATTACHMENT C

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

Date: 5/23/02
Crew: JT/ML
Site: Harrison Landfill

AIR MONITORING FIELD DATA SHEET

CGI: Gas Tech Genisis
PID: HNU
FID: Foxboro OVA 128

Sample Point	Time	Inspector	% LEL CGI	PID Equiv.	FID PPM	CH4	Background PID	Background FID	Observations/Notes
GV-1		JT/ML	<10%	0	1	0	0	1	All PID and FID readings at site background
GV-2		"	<10%	0	1	0	0	1	values. No readings were above CGI pre-set alarms.
GV-3		"	<10%	0	1	0	0	1	" " "
GV-4		"	<10%	0	1	0	0	1	" " "
NPL		"	<10%	0	1	0	0	1	" " "
EPL		"	<10%	0	1	0	0	1	" " "
SPL		"	<10%	0	1	0	0	1	" " "
WPL		"	<10%	0	1	0	0	1	" " "

Notes:

ppm = part per million
mg/m^3 = milligrams per cubic meter
LEL = lower explosive limit
N.. = compass direction

CGI = combustable gas indicator
PID = photoionization detector
FID = flame ionization detector
PL = property line

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

PO Number:

Samples submitted on: 5/24/02

AB58092
AB58093
AB58094
AB58095
AB58096
AB58097
AB58098
AB58099

Date: 6/5/02

HCI Project: 05241540

Robin Cousineau - Quality Assurance Director

Or

Stanley Gilewicz - Laboratory Director

CT #: PH-0671 MA #: NJ386 NJ #: 14622 NY #: 11408 PA #: 68-463

SDG Narrative

Project: Harrison
Job:

Hampton-Clarke, Inc. (HCI) received the following Lawler, Metusky & Skelly Engineers samples on May 24th, 2002:

LMS #	HCI #	Type	Analysis
PC-1 unfiltered	AB58092	Aqueous	Tal Metals, Chloride
PC-2 unfiltered	AB58093	Aqueous	Tal Metals, Chloride
PC-4 unfiltered	AB58094	Aqueous	Tal Metals, Chloride
PC-3 unfiltered	AB58095	Aqueous	Tal Metals, Chloride
PC-1 filtered	AB58096	Aqueous	Tal Metals
PC-2 filtered	AB58097	Aqueous	Tal Metals
PC-4 filtered	AB58098	Aqueous	Tal Metals
PC-3 filtered	AB58099	Aqueous	Tal Metals

Note: The lab filtered and preserved all samples.

Problems associated with these analyses are as follows:

Metals

No problems were encountered in the analysis of these samples.

Wet Chemistry

No problems were encountered in the analysis of these samples.

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

Stan Gilewicz, Laboratory Director

6/6/02
Date

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

CHAIN OF CUSTODY RECORD

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

CUSTOMER INFORMATION

CUSTOMER: LMS Engineers
ADDRESS: 1 Blue Hill Plaza P.O. Box 1509
TELEPHONE: 845 735-8350
FAX: 845 735-7466
PROJECT: Harrison
PROJECT MANAGER: Marcia Heinze
PROJECT LOCATION: Harrison
STATE: NY
PO NUMBER:

REPORT INFORMATION

SEND REPORT TO: SAME

SEND INVOICE TO: SAME

PROJECT INFORMATION

TURNAROUND (CONFIRM RUSH TAT'S WITH LAB)

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

DELIVERABLES (PLEASE CHECK BOX)

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

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE COMPOSITE (C)	SAMPLE TYPE GRAB (G)	SAMPLE MATRIX	No. of Bottles H2SO4	HNO3	HCl	NaOH	Zn Ac + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB58092	PC-1		5-22-02	1030		X	W		1								TAL Metals
58093	PC-2		5-22-02	1230		X	W		1								TAL Metals
58094	PC-4		5-23-02	1030		X	W		1								TAL Metals
58095	PC-3		5-23-02	1125		X	W		1								TAL Metals
58096	PC-1		5-22-02	1030		X	W							1			*TAL Metals (Lab to filter + preserve)
58097	PC-2		5-22-02	1230		X	W							1			*TAL Metals (Lab to filter + preserve)
58098	PC-4		5-23-02	1030		X	W							1			*TAL Metals (Lab to filter + preserve)
58099	PC-3		5-23-02	1125		X	W							1			*TAL Metals (Lab to filter + preserve)
58092	PC-1		5-22-02	1030		X	W							1			Cl
58093	PC-2		5-22-02	1230		X	W							1			Cl

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

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

SPECIAL INSTRUCTIONS: *LAB to filter + preserve for TAL metals

TEMPERATURE UPON RECEIPT: 4°C

RELINQUISHED BY: / AGENT OF:	DATE / TIME	RECEIVED BY: / AGENT OF:	DATE / TIME
[signature]	5-23-02 1700	FED EX	5/24/02 1030

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

CHAIN OF CUSTODY RECORD

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

CUSTOMER INFORMATION

CUSTOMER: LMS Engineers
ADDRESS: 1 Blue Hill Plaza, P.O. Box 1509
TELEPHONE: 845 735-8300
FAX: 845 735 7466
PROJECT: Harrison
PROJECT MANAGER: Maria Heincz
PROJECT LOCATION: Harrison
STATE: NJ
PO NUMBER:

REPORT INFORMATION

SEND REPORT TO: SAME
SEND INVOICE TO: SAME

PROJECT INFORMATION

TURNAROUND
(CONFIRM RUSH TAT'S WITH LAB)

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

DELIVERABLES
(PLEASE CHECK BOX)

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

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE (C)	SAMPLE TYPE: GRAB (G)	SAMPLE MATRIX	No. of Bottles: H2SO4	HNO3	HCL	NaOH	ZnAc + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB58094	PC-4		5-23-02	1030		X	W							1			Cl⁻
58095	PC-3		5-23-02	1125		X	W							1			Cl⁻

LAB USE ONLY

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

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

SPECIAL INSTRUCTIONS:

TEMPERATURE UPON RECEIPT: 4.0°

RELINQUISHED BY: / AGENT OF:	DATE / TIME: 5-23-02 1700	RECEIVED BY: / AGENT OF: HLC	DATE / TIME: 5/24/02 1030
RELINQUISHED BY: / AGENT OF:	DATE / TIME:	RECEIVED BY: / AGENT OF:	DATE / TIME:

CONDITION UPON RECEIPT FORM

Veritech

Date Received: 5/24/02 Filed By: T. D

Client: LMS Project/Account: Harrison

Veritech Project #: _____

INITIAL CONDITIONS

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

SAMPLE INFORMATION

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

OTHER

[13] Specify: _____

CORRECTIVE ACTIONS

NO.	ACTION

PRESERVATION DOCUMENTATION

Date Received: 5/24/02
Client: LMS
Veritech Project #:
Filed By: J. Tr.
Project: Harrison

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

INTERNAL CHAIN OF CUSTODY RECORD - REFRIGERATOR #12

veritech

Client ID: LMSEng

Location: C-6

COMMENTS

		REMOVED:				RETURNED:			
TEST	SAMPLE No.	DATE	TIME	SIGNATURE	ALTERNATE	DATE	TIME	SIGNATURE	ALTERNATE
Lab Filtration TD-WI	58092-099	05/28/02	10:04	SS	* 58096-099 Lab Filtration	5/28/02	15:00		
Cl⁻	58092-95	5/28/02	13⁰³	KM		5/28/02	13³⁹	KM	

FOR LOGIN BATCH

AB 58092-99

METHOD REFERENCES

***Test Methods for Evaluating Solid Waste*, SW-846, Third Edition**

Chloride: Method 9253.
Cyanide: Method 9010B/9014.
Dioxins/Furans: Method 8290.
Flashpoint: Method 1010.
Fingerprint (GC): Methods (3510C or 3550B)/8015 modified.
Hexavalent Chromium: Second and Third Editions, Methods 3060 and 7196A.
Ignitability: Method 1030.
Metals: Methods (3005A or 3050B)/6010B. (7470A or 7471A) (Hg).
PCB's: Methods (3510C or 3550B)/8082.
PCB's (Oils): Methods 3580A/8082.
Pesticides: Methods (3510C or 3550B)/8081A.
pH (Soils): Method 9045C.
Phenolics (Soils): Method 9065.
Reactive Cyanide/Sulfide: Chapter Seven, Section 7.3, Reactivity.
Semivolatile Organics: Methods (3510C or 3550B)/8270C.
Sulfide: Method 9030B/9034.
TCLP: Extraction: Method 1311.
TCLP Volatile Organics: Method 8260B.
TCLP Semivolatile Organics: Methods 3510C/8270C.
TCLP Pesticides: Methods 3510C/8081A.
TCLP Herbicides: Method 8151A.
TCLP Metals: Methods 3005A/6010B and 7470A.
TPH: Method 9071A (extraction only)/418.1.
TPH Extractables: Methods (3510C or 3550B)/8015 modified.
Volatile Organics: Method 8260B.
Total Organic Carbon: 9060
Total Organic Halides(EOX): 9023

***Federal Register*, 40 CFR Part 136**

Volatile Organics: Method 624.
Semivolatile Organics: Method 625.
Pesticides/PCB's: Method 608.

***Methods for the Determination of Organic Compounds in Drinking Water*, EPA/600/4-88/039**

Volatile Organics: Method 524.2, Revision 4.1, 1995.

***Standard Methods for the Examination of Water and Wastewater*, 18th Edition, 1992**

Cyanide (Free):, Method 4500-CN-I.
Hexavalent Chromium: Method 3500-Cr D.
Salinity: Method 2520-B.
Solids, Total, Fixed, & Volatile: Method 2540-G.

***Methods for the Determination of Metals in Environmental Samples*, EPA/600/4-91/010, June 1991**

ICP Metals: Method 200.7, Revision 3.3.

***Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983**

Cyanide & Amenable Cyanide: Method 335.2/335.1.
Phenols: Method 420.1.
Mercury: Method 245.1.
pH Hydrogen Ion: Method 150.1/150.2.
Temperature, Deg. C: 170.1.
TPH (Soils & Waters): Method 418.1 (analysis 418.1 for Soils).
Specific Conductance: Method 120.1.
Residue, Filterable (TDS): Method 160.1.
Residue, Non-Filterable (TSS): Method 160.2.
Residue, Total: Method 160.3.
Residue, Volatile: Method 160.4.
Residue, Settleable: Method 160.5
Chloride: Method 325.3.
Sulfide (Waters): Method 376.1.
Oil & Grease (Total Recoverable): Method 413.1.
Oil & Grease: Method 1664.
Acidity (as CaCO3): Method 305.1.
Alkalinity (as CaCO3): Method 310.1.
Ammonia: Method 350.2
Total Organic Carbon: 415.1

Hach Chemical Company Handbook

Chemical Oxygen Demand (Waters): Method 8000.

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58092 % Solid: 0
Client Id: PC-1 unfiltered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-39-3	Barium	9.1	130	1	PEICP1	05/29/02	4035	4035AMD	13
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-70-2	Calcium	1000	130000	1	PEICP1	05/29/02	4035	4035AMD	13
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-50-8	Copper	4.6	5.9	1	PEICP1	05/29/02	4035	4035AMD	13
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7439-95-4	Magnesium	380	18000	1	PEICP1	05/29/02	4035	4035AMD	13
7439-96-5	Manganese	8.8	110	1	PEICP1	05/29/02	4035	4035AMD	13
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	30
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-09-7	Potassium	170	7300	1	ARLICP	05/29/02	4035	4035ZMD	10
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-23-5	Sodium	1100	160000	1	ARLICP	05/29/02	4035	4035ZMD	10
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	13
7440-62-2	Vanadium	4.5	5.3	1	PEICP1	05/29/02	4035	4035AMD	13
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	13

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit
* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58093 % Solid: 0
Client Id: PC-2 unfiltered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	260	1	PEICP1	05/29/02	4035	4035AMD	35
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-39-3	Barium	9.1	200	1	PEICP1	05/29/02	4035	4035AMD	35
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-70-2	Calcium	1000	72000	1	PEICP1	05/29/02	4035	4035AMD	35
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7439-89-6	Iron	92	84000	1	PEICP1	05/29/02	4035	4035AMD	35
7439-92-1	Lead	4.2	6.5	1	PEICP1	05/29/02	4035	4035AMD	35
7439-95-4	Magnesium	380	23000	1	PEICP1	05/29/02	4035	4035AMD	35
7439-96-5	Manganese	8.8	17000	1	PEICP1	05/29/02	4035	4035AMD	35
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	31
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-09-7	Potassium	170	3600	1	ARLICP	05/29/02	4035	4035ZMD	31
7782-49-2	Selenium	8.2	15	1	PEICP1	05/29/02	4035	4035AMD	35
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-23-5	Sodium	1100	62000	1	ARLICP	05/29/02	4035	4035ZMD	31
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	35
7440-62-2	Vanadium	4.5	5.7	1	PEICP1	05/29/02	4035	4035AMD	35
7440-66-6	Zinc	31	53	1	PEICP1	05/29/02	4035	4035AMD	35

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58094 % Solid: 0
Client Id: PC-4 unfiltered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	22000	1	PEICP1	05/29/02	4035	4035AMD	36
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-39-3	Barium	9.1	310	1	PEICP1	05/29/02	4035	4035AMD	36
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-70-2	Calcium	1000	62000	1	PEICP1	05/29/02	4035	4035AMD	36
7440-47-3	Chromium	9.7	90	1	PEICP1	05/29/02	4035	4035AMD	36
7440-48-4	Cobalt	4.7	22	1	PEICP1	05/29/02	4035	4035AMD	36
7440-50-8	Copper	4.6	56	1	PEICP1	05/29/02	4035	4035AMD	36
7439-89-6	Iron	92	39000	1	PEICP1	05/29/02	4035	4035AMD	36
7439-92-1	Lead	4.2	26	1	PEICP1	05/29/02	4035	4035AMD	36
7439-95-4	Magnesium	380	25000	1	PEICP1	05/29/02	4035	4035AMD	36
7439-96-5	Manganese	8.8	730	1	PEICP1	05/29/02	4035	4035AMD	36
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	34
7440-02-0	Nickel	15	80	1	PEICP1	05/29/02	4035	4035AMD	36
7440-09-7	Potassium	170	9600	1	ARLICP	05/29/02	4035	4035ZMD	32
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-23-5	Sodium	1100	50000	1	ARLICP	05/29/02	4035	4035ZMD	32
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	36
7440-62-2	Vanadium	4.5	75	1	PEICP1	05/29/02	4035	4035AMD	36
7440-66-6	Zinc	31	110	1	PEICP1	05/29/02	4035	4035AMD	36

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit
* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58095 % Solid: 0
Client Id: PC-3 unfiltered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	3500	1	PEICP1	05/29/02	4035	4035AMD	37
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-39-3	Barium	9.1	210	1	PEICP1	05/29/02	4035	4035AMD	37
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-70-2	Calcium	1000	100000	1	PEICP1	05/29/02	4035	4035AMD	37
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-48-4	Cobalt	4.7	12	1	PEICP1	05/29/02	4035	4035AMD	37
7440-50-8	Copper	4.6	10	1	PEICP1	05/29/02	4035	4035AMD	37
7439-89-6	Iron	92	9800	1	PEICP1	05/29/02	4035	4035AMD	37
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7439-95-4	Magnesium	380	31000	1	PEICP1	05/29/02	4035	4035AMD	37
7439-96-5	Manganese	8.8	1100	1	PEICP1	05/29/02	4035	4035AMD	37
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	35
7440-02-0	Nickel	15	20	1	PEICP1	05/29/02	4035	4035AMD	37
7440-09-7	Potassium	170	7900	1	ARLICP	05/29/02	4035	4035ZMD	33
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-23-5	Sodium	1100	100000	1	ARLICP	05/29/02	4035	4035ZMD	33
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	37
7440-62-2	Vanadium	4.5	18	1	PEICP1	05/29/02	4035	4035AMD	37
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	37

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58096
Client Id: PC-1 filtered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-39-3	Barium	9.1	140	1	PEICP1	05/29/02	4035	4035AMD	40
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-70-2	Calcium	1000	140000	1	PEICP1	05/29/02	4035	4035AMD	40
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7439-95-4	Magnesium	380	20000	1	PEICP1	05/29/02	4035	4035AMD	40
7439-96-5	Manganese	8.8	110	1	PEICP1	05/29/02	4035	4035AMD	40
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	36
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-09-7	Potassium	170	7900	1	ARLICP	05/29/02	4035	4035ZMD	34
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-23-5	Sodium	1100	170000	1	ARLICP	05/29/02	4035	4035ZMD	34
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	40
7440-62-2	Vanadium	4.5	6.0	1	PEICP1	05/29/02	4035	4035AMD	40
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	40

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58097 % Solid: 0
Client Id: PC-2 filtered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-39-3	Barium	9.1	80	1	PEICP1	05/29/02	4035	4035AMD	41
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-70-2	Calcium	1000	71000	1	PEICP1	05/29/02	4035	4035AMD	41
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7439-89-6	Iron	92	23000	1	PEICP1	05/29/02	4035	4035AMD	41
7439-92-1	Lead	4.2	4.2	1	PEICP1	05/29/02	4035	4035AMD	41
7439-95-4	Magnesium	380	24000	1	PEICP1	05/29/02	4035	4035AMD	41
7439-96-5	Manganese	8.8	16000	1	PEICP1	05/29/02	4035	4035AMD	41
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	37
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-09-7	Potassium	170	3800	1	ARLICP	05/29/02	4035	4035ZMD	35
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-23-5	Sodium	1100	64000	1	ARLICP	05/29/02	4035	4035ZMD	35
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	41
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	41

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit
* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58098 % Solid: 0
Client Id: PC-4 filtered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-39-3	Barium	9.1	110	1	PEICP1	05/29/02	4035	4035AMD	42
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-70-2	Calcium	1000	63000	1	PEICP1	05/29/02	4035	4035AMD	42
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7439-95-4	Magnesium	380	17000	1	PEICP1	05/29/02	4035	4035AMD	42
7439-96-5	Manganese	8.8	410	1	PEICP1	05/29/02	4035	4035AMD	42
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	38
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-09-7	Potassium	170	5900	1	ARLICP	05/29/02	4035	4035ZMD	36
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-23-5	Sodium	1100	54000	1	ARLICP	05/29/02	4035	4035ZMD	36
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	42
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	42

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit
* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58099 % Solid: 0
Client Id: PC-3 filtered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-39-3	Barium	9.1	150	1	PEICP1	05/29/02	4035	4035AMD	43
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-70-2	Calcium	1000	92000	1	PEICP1	05/29/02	4035	4035AMD	43
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-48-4	Cobalt	4.7	8.1	1	PEICP1	05/29/02	4035	4035AMD	43
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7439-89-6	Iron	92	1300	1	PEICP1	05/29/02	4035	4035AMD	43
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7439-95-4	Magnesium	380	26000	1	PEICP1	05/29/02	4035	4035AMD	43
7439-96-5	Manganese	8.8	1000	1	PEICP1	05/29/02	4035	4035AMD	43
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	39
7440-02-0	Nickel	15	16	1	PEICP1	05/29/02	4035	4035AMD	43
7440-09-7	Potassium	170	6800	1	ARLICP	05/29/02	4035	4035ZMD	37
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-23-5	Sodium	1100	99000	1	ARLICP	05/29/02	4035	4035ZMD	37
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	43
7440-62-2	Vanadium	4.5	5.0	1	PEICP1	05/29/02	4035	4035AMD	43
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	43

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: W4035a
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	CCB-47	MB 4035 (1)-10		
Aluminum	.18 U	.18 U	.18 U	.18 U	.18 U	.18 U		
Antimony	.015 U	.015 U	.015 U	.015 U	.015 U	.015 U		
Arsenic	.0075 U	.0075 U	.0075 U	.0075 U	.0075 U	.0075 U		
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Beryllium	.004 U	.004 U	.004 U	.004 U	.004 U	.004 U		
Cadmium	.0035 U	.0035 U	.0035 U	.0035 U	.0035 U	.0035 U		
Calcium	2 U	2 U	2 U	2 U	2 U	2 U		
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Cobalt	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U		
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Iron	.275 U	.275 U	.275 U	.275 U	.275 U	.28 U		
Lead	.005 U	.005 U	.005 U	.005 U	.005 U	.005 U		
Magnesium	2 U	2 U	2 U	2 U	2 U	2 U		
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Selenium	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U		
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U		
Thallium	.01 U	.01 U	.01 U	.01 U	.01 U	.01 U		
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: W4035Z
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	ICB M-02-BLK-356-3	CCB-15	CCB-27	CCB-39	CCB-43	MB 4035 (1)-6		
Potassium	2 U	2 U	2 U	2 U	2 U	2 U		
Sodium	2 U	2 U	2 U	2 U	2 U	2 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/30/02
Data File: S4036C
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	CCB-46			
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: h4035sw
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	ICB-9	CCB-21	CCB-33	CCB-41	MB 4035 (1)-10			
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/31/02
Data File: H4035SWB
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	ICB-9	CCB-12						
Mercury	.7 U	.7 U						

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: W4035a
Prep Batch: 4035
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58092-13		AB58092-15-IX	%REC OR Conc	AB58092-16-1X	%REC OR Conc	LCSW-11-1X	%REC OR Conc	LCSW MR-12-1X	%REC OR Conc	%REC OR Conc
Aluminum	5.000			0.18	U	5.1490200	103	5.1401899	103	5.0453315	101	5.0057435	100	
Antimony	.5000			0.015	U	0.5194052	104	0.5176310	104	0.5298206	106	0.5222337	104	
Arsenic	.5000			0.0075	U	0.5116164	102	0.5050326	101	0.5189919	104	0.5051724	101	
Barium	.5000			0.13427735		0.6170920	97	0.6237015	98	0.5049228	101	0.4994309	100	
Beryllium	.5000			0.004	U	0.4906402	98	0.4883413	98	0.5006464	100	0.4964912	99	
Cadmium	.5000			0.0035	U	0.5006997	100	0.4936768	99	0.5195137	104	0.5109098	102	
Calcium	50.00			125.124195		172.57802	95	179.94902	110	50.451326	101	50.002474	100	
Chromium	.5000			0.05	U	0.4896028	98	0.5011351	100	0.507505	102	0.5113394	102	
Cobalt	.5000			0.02	U	0.4947430	99	0.4890682	98	0.5136814	103	0.5075459	102	
Copper	.5000			0.05	U	0.5107724	102	0.5121157	102	0.5015802	100	0.4992195	100	
Iron	5.000			0.275	U	4.9639988	99	4.9542133	99	5.1263351	103	5.0923556	102	
Lead	.5000			0.005	U	0.4932933	99	0.4942342	99	0.5116050	102	0.5066203	101	
Magnesium	50.00			18.0139372		67.673396	99	68.420134	101	50.272562	101	49.797511	100	
Manganese	.5000			0.10631533		0.6086726	100	0.6125196	101	0.5219018	104	0.5166160	103	
Nickel	.5000			0.05	U	0.4696809	94	0.4771157	95	0.4896284	98	0.4904492	98	
Selenium	.5000			0.04	U	0.5027820	101	0.4941038	99	0.5052789	101	0.5037719	101	
Silver	.5000			0.02	U	0.4848705	97	0.4902214	98	0.4870805	97	0.4879296	98	
Thallium	.5000			0.01	U	0.4865343	97	0.4933500	99	0.5100759	102	0.5158523	103	
Vanadium	.5000			0.05	U	0.4901849	98	0.4936794	99	0.4971392	99	0.4973728	99	
Zinc	.5000			0.05	U	0.5136803	103	0.5111501	102	0.5359767	107	0.5274172	105	

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: W4035Z
Prep Batch: 4035
Analytical Method: SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58092-10	AB58092-12-1X	%REC OR Conc	AB58092-13-1X	%REC OR Conc	LCSW-7-1X	%REC OR Conc	LCSW MR-8-1X	%REC OR Conc	%REC OR Conc
Potassium	50			7.261	56.259	98	56.906	99	48.926	98	48.74	97	
Sodium	50			156.167	201.952	92	212.837	113	49.859	100	49.749	99	

Qc Limits:

EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: h4035sw
Prep Batch: 4035
Analytical Method: SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241540

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58088-13		AB58088-15-1X	%REC OR Conc	AB58088-16-1X	%REC OR Conc	LCSW-11-1X	%REC OR Conc	LCSW MR-12-1X	%REC OR Conc	%REC OR Conc
Mercury	10			0.7	U	9.8055027	98	9.9926875	100	10.236298	102	10.316969	103	

Qc Limits:

EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

Veritech Wet Chem Form 1 Summary

Lab #: AB58092

Lab #: AB58092 | Sample Matrix: Aqueous

Sample ID: PC-1 unfiltered | Date Received: 5/24/02

Test Group Name: Chloride EPA 325 | Date Prepared: 5/28/02

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	280	mg/l	1	1	5/28/02

Lab #: AB58093 | Sample Matrix: Aqueous

Sample ID: PC-2 unfiltered | Date Received: 5/24/02

Test Group Name: Chloride EPA 325 | Date Prepared: 5/28/02

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	67	mg/l	1	1	5/28/02

Lab #: AB58094 | Sample Matrix: Aqueous

Sample ID: PC-4 unfiltered | Date Received: 5/24/02

Test Group Name: Chloride EPA 325 | Date Prepared: 5/28/02

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	110	mg/l	1	1	5/28/02

Lab #: AB58095 | Sample Matrix: Aqueous

Sample ID: PC-3 unfiltered | Date Received: 5/24/02

Test Group Name: Chloride EPA 325 | Date Prepared: 5/28/02

Analyte	Concentration	Units	MDL/PQL	DF	Date Analyzed
Chloride	180	mg/l	1	1	5/28/02

Analysis Type: CL-W
Batch Number: CL-W-20
Cal Curve Date:
Units: mg/l

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-05/28/02	50	90-110	NA	49.55095	99	NA	
DUP	AB57980	NA	NA	20	107.7861	NA	0.94	
MBS	MBS	50	75-125	NA	49.55095	99	NA	
MS	AB57980	50	75-125	NA	157.337	97	NA	
MSD	AB57980	50	75-125	20	157.337	97	0	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Titr Vol	Smp Vol	DF	NofT	Tit Blk	Prep Date	Prep By	Anal Date	Anal By
L-01-05/28/02	CAL-01		50		100	49.551	4.95	50	1	0.01441	.1			05/28/02	km
-1-05/28/02	MB	MB-1-05/28/02	ND	1	100	0	0.10	50	1	0.01441	.1	05/28/02	km	05/28/02	km
S	MBS	MB-1-05/28/02	50	1	100	49.551	4.95	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57980	Sample	MB-1-05/28/02	110	1	100	108.81	10.75	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57980	DUP	MB-1-05/28/02	110	1	100	107.79	10.65	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57980	MS	MB-1-05/28/02	160	1	100	157.34	15.50	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57980	MSD	MB-1-05/28/02	160	1	100	157.34	15.50	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57981	Sample	MB-1-05/28/02	77	1	100	76.625	7.60	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57982	Sample	MB-1-05/28/02	23	1	100	23.498	2.40	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57983	Sample	MB-1-05/28/02	66	1	100	66.408	6.60	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57984	Sample	MB-1-05/28/02	90	1	100	89.907	8.90	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57985	Sample	MB-1-05/28/02	91	1	100	91.439	9.05	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57986	Sample	MB-1-05/28/02	ND	1	100	0	0.10	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB58075	Sample	MB-1-05/28/02	46	1	100	45.647	4.65	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58077	Sample	MB-1-05/28/02	36	1	100	36.116	3.70	50	1	.01415	.1	05/28/02	km	05/28/02	km
58080	Sample	MB-1-05/28/02	210	1	100	212.18	21.25	50	1	.01415	.1	05/28/02	km	05/28/02	km
58083	Sample	MB-1-05/28/02	210	1	100	205.66	20.60	50	1	.01415	.1	05/28/02	km	05/28/02	km
58086	Sample	MB-1-05/28/02	31	1	100	31.1	3.20	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58088	Sample	MB-1-05/28/02	41	1	100	41.133	4.20	50	1	.01415	.1	05/28/02	km	05/28/02	km
58092	Sample	MB-1-05/28/02	280	1	100	279.4	27.95	50	1	.01415	.1	05/28/02	km	05/28/02	km
58093	Sample	MB-1-05/28/02	67	1	100	66.715	6.75	50	1	.01415	.1	05/28/02	km	05/28/02	km
58094	Sample	MB-1-05/28/02	110	1	100	114.37	11.50	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58095	Sample	MB-1-05/28/02	180	1	100	183.09	18.35	50	1	.01415	.1	05/28/02	km	05/28/02	km

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

Hampton-Clarke, Inc.
veritech laboratories

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

Lawler, Metusky & Skelly Engineers

Format: NYDOH-CatA
Project: Harrison
PO Number:

Samples submitted on: 5/24/2002

AB58075
AB58076
AB58077
AB58078
AB58079
AB58080
AB58081
AB58082
AB58083
AB58084
AB58085
AB58086
AB58087
AB58088
AB58089
AB58090
AB58091

Date: 6/7/2002
HCI Project: 05241450

Robin Cousineau - Quality Assurance Director

Or

Stanley Gilewicz - Laboratory Director

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

6/10/02
Date

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

CHAIN OF CUSTODY RECORD

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

CUSTOMER INFORMATION

CUSTOMER: LMS Engineers
ADDRESS: 1 Blue Hill Plaza, P.O. Box 1509
TELEPHONE: 845 735-8300
FAX: 845 735-7400
PROJECT: Harrison
PROJECT MANAGER: Maria Heincz
PROJECT LOCATION: Harrison
STATE: NY
PO NUMBER:

REPORT INFORMATION

SEND REPORT TO: SAME

SEND INVOICE TO: SAME

PROJECT INFORMATION

TURNAROUND (CONFIRM RUSH TAT'S WITH LAB)

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

DELIVERABLES (PLEASE CHECK BOX)

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

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE COMPOSITE (C)	SAMPLE TYPE GRAB (G)	SAMPLE MATRIX	No. of Bottles H2SO4	HNO3	HCL	NaOH	ZnAc + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB58075	MW-4		5-22-02	1530		X	W		1								TAL Metals
58076	MW-4		5-22-02	1530		X	W							1			* TAL Metals (LAB to filter + Preserve)
58075	MW-4		5-22-02	1530		X	W							1			Cl^-
58077	SW-2		5-22-02	1540		X	W		1								TAL Metals
58078	SW-2		5-22-02	1540		X	W							1			* TAL Metals (LAB to filter + preserve)
58077	SW-2		5-22-02	1540		X	W							1			Cl^-
58079	SD-2		5-22-02	1545		X	S							1			TAL Metals + Cl^-
	~~SD-2~~		~~5-22-02~~														
58080	SW-3		5-22-02	1610		X	W		1								TAL Metals
58081	SW-3		5-22-02	1610		X	W							1			* TAL Metals (LAB to filter + preserve)

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

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

SPECIAL INSTRUCTIONS: * LAB to filter and preserve

TEMPERATURE UPON RECEIPT: 7.9

RELINQUISHED BY: / AGENT OF:	DATE / TIME	RECEIVED BY: / AGENT OF:	DATE / TIME
LMS	4-23-02 / 700	FedEx	
RELINQUISHED BY: FedEx / AGENT OF:	DATE / TIME	RECEIVED BY: / AGENT OF:	DATE / TIME
			5/4/02 1030

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

CHAIN OF CUSTODY RECORD

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

CUSTOMER INFORMATION

CUSTOMER: LMS Engineers
ADDRESS: Blue Hill Plaza, PO, 1509
TELEPHONE: 845 735-8300
FAX: (845) 735-7466
PROJECT: Harrison
PROJECT MANAGER: Maria Heinz
PROJECT LOCATION: Harrison
STATE: NY
PO NUMBER:

REPORT INFORMATION

SEND REPORT TO: SAME
SEND INVOICE TO: SAME

PROJECT INFORMATION

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

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

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE COMPOSITE (C)	SAMPLE TYPE GRAB (G)	SAMPLE MATRIX	No. of Bottles H2SO4	HNO3	HCL	NaOH	ZnAc + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB58080	SW-3		5-22-02	1610		X	W							1			Cl⁻
58082	SD-3		5-22-02	1615		X	S							1			TAL Metals + Cl⁻
58083	SW-1		5-22-02	1625		X	W		1								TAL Metals
58084	SW-1		5-22-02	1625		X	W							1			*TAL Metals (LAB to filter + preserve)
58083	SW-1		5-22-02	1625		X	W							1			Cl⁻
58085	SD-1		5-22-02	1630		X	S							1			TAL Metals + Cl⁻
58086	LMW-2		5-22-02	1630		X	W		1								TAL Metals
58087	LMW-2		5-22-02	1630		X	W							1			TAL Metals (LAB to filter and preserve)
58086	LMW-2		5-22-02	1630		X	W							1			Cl⁻
58088	SW-4		5-22-02	1735		X			1								TAL Metals

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

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

SPECIAL INSTRUCTIONS: * LAB to filter and Preserve

TEMPERATURE UPON RECEIPT: 3.9

RELINQUISHED BY: / AGENT OF: LMS	DATE / TIME 5-22-02 1700	RECEIVED BY: / AGENT OF: Fed Ex	DATE / TIME
RELINQUISHED BY: / AGENT OF: Fed Ex	DATE / TIME	RECEIVED BY: / AGENT OF: F & D ITCL	DATE / TIME 5/24/02 1030

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

CHAIN OF CUSTODY RECORD

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

CUSTOMER INFORMATION

CUSTOMER: LMS Engineers
ADDRESS: 1 Olive Hill Plaza, P.O. Box 150
TELEPHONE: 845 735-3200
FAX: 845 735-7466
PROJECT: Harrison
PROJECT MANAGER: Maria Heinz
PROJECT LOCATION: Harrison
STATE: NY
PO NUMBER:

REPORT INFORMATION

SEND REPORT TO: SAME
SEND INVOICE TO: SAME

PROJECT INFORMATION

TURNAROUND (CONFIRM RUSH TAT'S WITH LAB)

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

DELIVERABLES (PLEASE CHECK BOX)

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

ANALYTICAL REQUESTS

LAB SAMPLE NUMBER (LAB USE ONLY)	SAMPLE IDENTIFICATION	METHANOL BOTTLE #	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE (C)	SAMPLE TYPE: GRAB (G)	SAMPLE MATRIX	No. of Bottles: H_2SO_4	HNO_3	HCL	NaOH	ZnAc + NaOH	Ascorbic	NONE	Methanol	Other	ANALYSIS
AB58089	SW-4		5-22-02	1735		X	W							1			~~X~~ TAL Metals (LAB to filter + preserve)
58088	SW-4		5-22-02	1735		X	W							1			Cl^-
58090	SD-4		5-22-02	1740		X	S							1			TAL Metals + Cl^-
58091	SD-5		5-22-02	1545		X	S							1			TAL Metals + Cl^-

LAB USE ONLY

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

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

SPECIAL INSTRUCTIONS: ~~X~~ LAB to filter + preserve

TEMPERATURE UPON RECEIPT: 3.9

RELINQUISHED BY: / AGENT OF:	DATE / TIME	RECEIVED BY: / AGENT OF:	DATE / TIME
[signature] LMS	5-22-02 1700	FedEx	
RELINQUISHED BY: FedEx / AGENT OF:	DATE / TIME	RECEIVED BY: [signature] / AGENT OF:	DATE / TIME 5/24/02 1030

CONDITION UPON RECEIPT FORM

Veritech

Date Received: 5/24/02 Filed By: F-h .D

Client: LMS Project/Account: Harrison

Veritech Project #

YES	NO		INITIAL CONDITIONS
✓		[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 F.D 5/24
3.9 °C		[4]	Please specify the temperature inside the container.

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

OTHER

[13] Specify:

NO.	ACTION	CORRECTIVE ACTIONS

PRESERVATION DOCUMENTATION

Date Received: 5/24/02 — Filed By: T.D

Client: LMS — Project: Harrison

Veritech Project #:

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

INTERNAL CHAIN OF CUSTODY RECORD - REFRIGERATOR #12

veritech

Client ID: LMS Eng

Location: ~~cart~~ LAB A-3

COMMENTS

* 2 Boxes *

		REMOVED:				RETURNED:			
TEST	SAMPLE No.	DATE	TIME	SIGNATURE	ALTERNATE	DATE	TIME	SIGNATURE	ALTERNATE
Lab Filtration * TD-WI/Itg	58075-78;80;81;83; 58084;86-89	05/28/02	10:18	SS	* 58076,78,81,84,87,89 Lab Filtration	5/28/02	14:50		
TD-SI/Itg	58091 58079;82;85;90	05/28/02	10:18	SS		05/28/02	14:28	SS	
Cl⁻	58075,77,80,83,86,88	5/28/02	12 15	KM		5/28/02	12 55	KM	
TS	58079,82,85,90,91	5/29/02	8:30	BCT		5/29/02	9:10	BCT	
Cl⁻	58079,82,85,90,91	5/29/02	9 15	KM		5/29/02	9 51	KM	
TD-SI	58079,82,85,90,91	5/29/02	1047	KM		05/29/02	14:00	SS	

FOR LOGIN BATCH

AB 58075-91

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58075
Client Id: MW-4 unfiltered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	1500	1	PEICP1	05/29/02	4035	4035AMD	20
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-39-3	Barium	9.1	180	1	PEICP1	05/29/02	4035	4035AMD	20
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-70-2	Calcium	1000	56000	1	PEICP1	05/29/02	4035	4035AMD	20
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-48-4	Cobalt	4.7	21	1	PEICP1	05/29/02	4035	4035AMD	20
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7439-89-6	Iron	92	120000	1	PEICP1	05/29/02	4035	4035AMD	20
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7439-95-4	Magnesium	380	20000	1	PEICP1	05/29/02	4035	4035AMD	20
7439-96-5	Manganese	44	35000	5	PEICP1	05/30/02	4035	4036CMD	40
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	17
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-09-7	Potassium	170	2400	1	ARLICP	05/29/02	4035	4035ZMD	17
7782-49-2	Selenium	8.2	18	1	PEICP1	05/29/02	4035	4035AMD	20
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-23-5	Sodium	1100	32000	1	ARLICP	05/29/02	4035	4035ZMD	17
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	20
7440-62-2	Vanadium	4.5	8.7	1	PEICP1	05/29/02	4035	4035AMD	20
7440-66-6	Zinc	31	34	1	PEICP1	05/29/02	4035	4035AMD	20

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58076
Client Id: MW-4 filtered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-39-3	Barium	9.1	64	1	PEICP1	05/29/02	4035	4035AMD	22
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-70-2	Calcium	1000	54000	1	PEICP1	05/29/02	4035	4035AMD	22
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-48-4	Cobalt	4.7	19	1	PEICP1	05/29/02	4035	4035AMD	22
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7439-89-6	Iron	92	25000	1	PEICP1	05/29/02	4035	4035AMD	22
7439-92-1	Lead	4.2	4.7	1	PEICP1	05/29/02	4035	4035AMD	22
7439-95-4	Magnesium	380	20000	1	PEICP1	05/29/02	4035	4035AMD	22
7439-96-5	Manganese	44	33000	5	PEICP1	05/30/02	4035	4036CMD	42
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	18
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-09-7	Potassium	170	2200	1	ARLICP	05/29/02	4035	4035ZMD	18
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-23-5	Sodium	1100	32000	1	ARLICP	05/29/02	4035	4035ZMD	18
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	22
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	22

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58077
Client Id: SW-2 unfiltered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-39-3	Barium	9.1	35	1	PEICP1	05/29/02	4035	4035AMD	23
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-70-2	Calcium	1000	45000	1	PEICP1	05/29/02	4035	4035AMD	23
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7439-89-6	Iron	92	230	1	PEICP1	05/29/02	4035	4035AMD	23
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7439-95-4	Magnesium	380	13000	1	PEICP1	05/29/02	4035	4035AMD	23
7439-96-5	Manganese	8.8	110	1	PEICP1	05/29/02	4035	4035AMD	23
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	19
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-09-7	Potassium	170	3200	1	ARLICP	05/29/02	4035	4035ZMD	19
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-23-5	Sodium	1100	33000	1	ARLICP	05/29/02	4035	4035ZMD	19
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	23
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	23

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58078
Client Id: SW-2 filtered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-39-3	Barium	9.1	32	1	PEICP1	05/29/02	4035	4035AMD	24
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-70-2	Calcium	1000	42000	1	PEICP1	05/29/02	4035	4035AMD	24
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7439-95-4	Magnesium	380	12000	1	PEICP1	05/29/02	4035	4035AMD	24
7439-96-5	Manganese	8.8	12	1	PEICP1	05/29/02	4035	4035AMD	24
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	22
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-09-7	Potassium	170	3100	1	ARLICP	05/29/02	4035	4035ZMD	20
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-23-5	Sodium	1100	32000	1	ARLICP	05/29/02	4035	4035ZMD	20
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	24
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	24

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58079
Client Id: SD-2
Matrix: SOIL

% Solid: 77
Units: mg/Kg

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	320	6500	100	ARLICP	05/28/02	4036	4036ZMD	12
7440-36-0	Antimony	1.3	ND	100	PEICP1	05/30/02	4036	4036CMD	20
7440-38-2	Arsenic	1.3	1.6	100	PEICP1	05/29/02	4036	4036AMD	20
7440-39-3	Barium	1.9	42	100	PEICP1	05/29/02	4036	4036AMD	20
7440-41-7	Beryllium	0.31	ND	100	PEICP1	05/29/02	4036	4036AMD	20
7440-43-9	Cadmium	0.42	ND	100	PEICP1	05/29/02	4036	4036AMD	20
7440-70-2	Calcium	510	56000	100	ARLICP	05/28/02	4036	4036ZMD	12
7440-47-3	Chromium	1.6	12	100	PEICP1	05/29/02	4036	4036AMD	20
7440-48-4	Cobalt	1.1	5.1	100	PEICP1	05/29/02	4036	4036AMD	20
7440-50-8	Copper	1.5	12	100	PEICP1	05/29/02	4036	4036AMD	20
7439-89-6	Iron	140	15000	100	ARLICP	05/28/02	4036	4036ZMD	12
7439-92-1	Lead	1.7	18	100	PEICP1	05/29/02	4036	4036AMD	20
7439-95-4	Magnesium	350	30000	100	ARLICP	05/28/02	4036	4036ZMD	12
7439-96-5	Manganese	2.4	700	100	PEICP1	05/29/02	4036	4036AMD	20
7439-97-6	Mercury	0.048	ND	167	HGCV2	05/28/02	4036	4036SMD	17
7440-02-0	Nickel	1.1	13	100	PEICP1	05/29/02	4036	4036AMD	20
7440-09-7	Potassium	49	1600	100	ARLICP	05/28/02	4036	4036ZMD	12
7782-49-2	Selenium	2.4	ND	100	PEICP1	05/29/02	4036	4036AMD	20
7440-22-4	Silver	0.68	ND	100	PEICP1	05/29/02	4036	4036AMD	20
7440-23-5	Sodium	550	ND	100	ARLICP	05/28/02	4036	4036ZMD	12
7440-28-0	Thallium	0.58	ND	100	PEICP1	05/29/02	4036	4036BMD	20
7440-62-2	Vanadium	0.56	18	100	PEICP1	05/29/02	4036	4036AMD	20
7440-66-6	Zinc	6.3	47	100	PEICP1	05/29/02	4036	4036AMD	20

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58080
Client Id: SW-3 unfiltered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	140	1	PEICP1	05/29/02	4035	4035AMD	25
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-39-3	Barium	9.1	74	1	PEICP1	05/29/02	4035	4035AMD	25
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-70-2	Calcium	1000	110000	1	PEICP1	05/29/02	4035	4035AMD	25
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7439-89-6	Iron	92	140	1	PEICP1	05/29/02	4035	4035AMD	25
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7439-95-4	Magnesium	380	18000	1	PEICP1	05/29/02	4035	4035AMD	25
7439-96-5	Manganese	8.8	29	1	PEICP1	05/29/02	4035	4035AMD	25
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	23
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-09-7	Potassium	170	5500	1	ARLICP	05/29/02	4035	4035ZMD	21
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-23-5	Sodium	1100	120000	1	ARLICP	05/29/02	4035	4035ZMD	21
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	25
7440-62-2	Vanadium	4.5	4.6	1	PEICP1	05/29/02	4035	4035AMD	25
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	25

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

10/3

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58081 % Solid: 0
Client Id: SW-3 filtered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-39-3	Barium	9.1	65	1	PEICP1	05/29/02	4035	4035AMD	26
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-70-2	Calcium	1000	110000	1	PEICP1	05/29/02	4035	4035AMD	26
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7439-95-4	Magnesium	380	17000	1	PEICP1	05/29/02	4035	4035AMD	26
7439-96-5	Manganese	8.8	11	1	PEICP1	05/29/02	4035	4035AMD	26
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	24
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-09-7	Potassium	170	5000	1	ARLICP	05/29/02	4035	4035ZMD	22
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-23-5	Sodium	1100	120000	1	ARLICP	05/29/02	4035	4035ZMD	22
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	26
7440-66-6	Zinc	31	53	1	PEICP1	05/29/02	4035	4035AMD	26

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58082
Client Id: SD-3
Matrix: SOIL

% Solid: 69
Units: mg/Kg

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	360	9600	100	ARLICP	05/28/02	4036	4036ZMD	13
7440-36-0	Antimony	1.4	ND	100	PEICP1	05/30/02	4036	4036CMD	22
7440-38-2	Arsenic	1.5	1.6	100	PEICP1	05/29/02	4036	4036AMD	22
7440-39-3	Barium	2.1	59	100	PEICP1	05/29/02	4036	4036AMD	22
7440-41-7	Beryllium	0.34	ND	100	PEICP1	05/29/02	4036	4036AMD	22
7440-43-9	Cadmium	0.47	ND	100	PEICP1	05/29/02	4036	4036AMD	22
7440-70-2	Calcium	570	42000	100	ARLICP	05/28/02	4036	4036ZMD	13
7440-47-3	Chromium	1.8	21	100	PEICP1	05/29/02	4036	4036AMD	22
7440-48-4	Cobalt	1.2	4.9	100	PEICP1	05/29/02	4036	4036AMD	22
7440-50-8	Copper	1.7	17	100	PEICP1	05/29/02	4036	4036AMD	22
7439-89-6	Iron	160	15000	100	ARLICP	05/28/02	4036	4036ZMD	13
7439-92-1	Lead	1.9	64	100	PEICP1	05/29/02	4036	4036AMD	22
7439-95-4	Magnesium	390	25000	100	ARLICP	05/28/02	4036	4036ZMD	13
7439-96-5	Manganese	2.7	330	100	PEICP1	05/29/02	4036	4036AMD	22
7439-97-6	Mercury	0.053	ND	167	HGCV2	05/28/02	4036	4036SMD	18
7440-02-0	Nickel	1.2	15	100	PEICP1	05/29/02	4036	4036AMD	22
7440-09-7	Potassium	55	970	100	ARLICP	05/28/02	4036	4036ZMD	13
7782-49-2	Selenium	2.6	ND	100	PEICP1	05/29/02	4036	4036AMD	22
7440-22-4	Silver	0.76	1.4	100	PEICP1	05/29/02	4036	4036AMD	22
7440-23-5	Sodium	620	ND	100	ARLICP	05/28/02	4036	4036ZMD	13
7440-28-0	Thallium	0.64	ND	100	PEICP1	05/29/02	4036	4036BMD	22
7440-62-2	Vanadium	0.63	29	100	PEICP1	05/29/02	4036	4036AMD	22
7440-66-6	Zinc	7.1	72	100	PEICP1	05/29/02	4036	4036AMD	22

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58083 % Solid: 0
Client Id: SW-1 unfiltered Units: ug/L
Matrix: AQUEOUS

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	150	1	PEICP1	05/29/02	4035	4035AMD	27
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-39-3	Barium	9.1	53	1	PEICP1	05/29/02	4035	4035AMD	27
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-70-2	Calcium	1000	66000	1	PEICP1	05/29/02	4035	4035AMD	27
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7439-89-6	Iron	92	320	1	PEICP1	05/29/02	4035	4035AMD	27
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7439-95-4	Magnesium	380	21000	1	PEICP1	05/29/02	4035	4035AMD	27
7439-96-5	Manganese	8.8	360	1	PEICP1	05/29/02	4035	4035AMD	27
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/31/02	4035	35SWBM	10
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-09-7	Potassium	170	3700	1	ARLICP	05/29/02	4035	4035ZMD	23
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-23-5	Sodium	1100	81000	1	ARLICP	05/29/02	4035	4035ZMD	23
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	27
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	27

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58084
Client Id: SW-1 filtered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-39-3	Barium	9.1	63	1	PEICP1	05/29/02	4035	4035AMD	30
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-70-2	Calcium	1000	69000	1	PEICP1	05/29/02	4035	4035AMD	30
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7439-95-4	Magnesium	380	22000	1	PEICP1	05/29/02	4035	4035AMD	30
7439-96-5	Manganese	8.8	340	1	PEICP1	05/29/02	4035	4035AMD	30
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	26
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-09-7	Potassium	170	3600	1	ARLICP	05/29/02	4035	4035ZMD	24
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-23-5	Sodium	1100	110000	1	ARLICP	05/29/02	4035	4035ZMD	24
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	30
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	30

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58085
Client Id: SD-1
Matrix: SOIL

% Solid: 69
Units: mg/Kg

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	360	11000	100	ARLICP	05/28/02	4036	4036ZMD	19
7440-36-0	Antimony	1.4	ND	100	PEICP1	05/30/02	4036	4036CMD	23
7440-38-2	Arsenic	1.5	1.5	100	PEICP1	05/29/02	4036	4036AMD	23
7440-39-3	Barium	2.1	55	100	PEICP1	05/29/02	4036	4036AMD	23
7440-41-7	Beryllium	0.34	ND	100	PEICP1	05/29/02	4036	4036AMD	23
7440-43-9	Cadmium	0.47	ND	100	PEICP1	05/29/02	4036	4036AMD	23
7440-70-2	Calcium	570	2000	100	ARLICP	05/28/02	4036	4036ZMD	19
7440-47-3	Chromium	1.8	21	100	PEICP1	05/29/02	4036	4036AMD	23
7440-48-4	Cobalt	1.2	5.3	100	PEICP1	05/29/02	4036	4036AMD	23
7440-50-8	Copper	1.7	14	100	PEICP1	05/29/02	4036	4036AMD	23
7439-89-6	Iron	160	15000	100	ARLICP	05/28/02	4036	4036ZMD	19
7439-92-1	Lead	1.9	12	100	PEICP1	05/29/02	4036	4036AMD	23
7439-95-4	Magnesium	390	3700	100	ARLICP	05/28/02	4036	4036ZMD	19
7439-96-5	Manganese	2.7	180	100	PEICP1	05/29/02	4036	4036AMD	23
7439-97-6	Mercury	0.053	ND	167	HGCV2	05/28/02	4036	4036SMD	19
7440-02-0	Nickel	1.2	14	100	PEICP1	05/29/02	4036	4036AMD	23
7440-09-7	Potassium	55	1400	100	ARLICP	05/28/02	4036	4036ZMD	19
7782-49-2	Selenium	2.6	ND	100	PEICP1	05/29/02	4036	4036AMD	23
7440-22-4	Silver	0.76	1.5	100	PEICP1	05/29/02	4036	4036AMD	23
7440-23-5	Sodium	620	ND	100	ARLICP	05/28/02	4036	4036ZMD	19
7440-28-0	Thallium	0.64	ND	100	PEICP1	05/29/02	4036	4036BMD	23
7440-62-2	Vanadium	0.63	28	100	PEICP1	05/29/02	4036	4036AMD	23
7440-66-6	Zinc	7.1	46	100	PEICP1	05/29/02	4036	4036AMD	23

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58086
Client Id: LMW-2 unfiltered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	2000	1	PEICP1	05/29/02	4035	4035AMD	31
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-39-3	Barium	9.1	220	1	PEICP1	05/29/02	4035	4035AMD	31
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-70-2	Calcium	1000	110000	1	PEICP1	05/29/02	4035	4035AMD	31
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-50-8	Copper	4.6	10	1	PEICP1	05/29/02	4035	4035AMD	31
7439-89-6	Iron	92	3400	1	PEICP1	05/29/02	4035	4035AMD	31
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7439-95-4	Magnesium	380	42000	1	PEICP1	05/29/02	4035	4035AMD	31
7439-96-5	Manganese	8.8	660	1	PEICP1	05/29/02	4035	4035AMD	31
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	27
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-09-7	Potassium	170	6100	1	ARLICP	05/29/02	4035	4035ZMD	25
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-23-5	Sodium	1100	57000	1	ARLICP	05/29/02	4035	4035ZMD	25
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	31
7440-62-2	Vanadium	4.5	14	1	PEICP1	05/29/02	4035	4035AMD	31
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	31

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58087
Client Id: LMW-2 filtered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-39-3	Barium	9.1	180	1	PEICP1	05/29/02	4035	4035AMD	32
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-70-2	Calcium	1000	110000	1	PEICP1	05/29/02	4035	4035AMD	32
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7439-95-4	Magnesium	380	41000	1	PEICP1	05/29/02	4035	4035AMD	32
7439-96-5	Manganese	8.8	610	1	PEICP1	05/29/02	4035	4035AMD	32
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	28
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-09-7	Potassium	170	5100	1	ARLICP	05/29/02	4035	4035ZMD	28
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-23-5	Sodium	1100	58000	1	ARLICP	05/29/02	4035	4035ZMD	28
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	32
7440-62-2	Vanadium	4.5	8.4	1	PEICP1	05/29/02	4035	4035AMD	32
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	32

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58088
Client Id: SW-4 unfiltered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	210	1	PEICP1	05/29/02	4035	4035AMD	33
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-39-3	Barium	9.1	36	1	PEICP1	05/29/02	4035	4035AMD	33
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-70-2	Calcium	1000	41000	1	PEICP1	05/29/02	4035	4035AMD	33
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7439-89-6	Iron	92	480	1	PEICP1	05/29/02	4035	4035AMD	33
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7439-95-4	Magnesium	380	12000	1	PEICP1	05/29/02	4035	4035AMD	33
7439-96-5	Manganese	8.8	140	1	PEICP1	05/29/02	4035	4035AMD	33
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	13
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-09-7	Potassium	170	3100	1	ARLICP	05/29/02	4035	4035ZMD	29
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-23-5	Sodium	1100	35000	1	ARLICP	05/29/02	4035	4035ZMD	29
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	33
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	33

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58089
Client Id: SW-4 filtered
Matrix: AQUEOUS

% Solid: 0
Units: ug/L

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	100	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-36-0	Antimony	7.5	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-38-2	Arsenic	7.0	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-39-3	Barium	9.1	29	1	PEICP1	05/29/02	4035	4035AMD	34
7440-41-7	Beryllium	2.2	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-43-9	Cadmium	2.1	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-70-2	Calcium	1000	37000	1	PEICP1	05/29/02	4035	4035AMD	34
7440-47-3	Chromium	9.7	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-48-4	Cobalt	4.7	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-50-8	Copper	4.6	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7439-89-6	Iron	92	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7439-92-1	Lead	4.2	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7439-95-4	Magnesium	380	11000	1	PEICP1	05/29/02	4035	4035AMD	34
7439-96-5	Manganese	8.8	16	1	PEICP1	05/29/02	4035	4035AMD	34
7439-97-6	Mercury	0.12	ND	1	HGCV2	05/29/02	4035	035swMD	29
7440-02-0	Nickel	15	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-09-7	Potassium	170	2800	1	ARLICP	05/29/02	4035	4035ZMD	30
7782-49-2	Selenium	8.2	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-22-4	Silver	5.5	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-23-5	Sodium	1100	32000	1	ARLICP	05/29/02	4035	4035ZMD	30
7440-28-0	Thallium	5.9	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-62-2	Vanadium	4.5	ND	1	PEICP1	05/29/02	4035	4035AMD	34
7440-66-6	Zinc	31	ND	1	PEICP1	05/29/02	4035	4035AMD	34

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58090
Client Id: SD-4
Matrix: SOIL

% Solid: 77
Units: mg/Kg

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	320	5800	100	ARLICP	05/28/02	4036	4036ZMD	20
7440-36-0	Antimony	1.3	ND	100	PEICP1	05/30/02	4036	4036CMD	24
7440-38-2	Arsenic	1.3	2.0	100	PEICP1	05/29/02	4036	4036AMD	24
7440-39-3	Barium	1.9	26	100	PEICP1	05/29/02	4036	4036AMD	24
7440-41-7	Beryllium	0.31	ND	100	PEICP1	05/29/02	4036	4036AMD	24
7440-43-9	Cadmium	0.42	ND	100	PEICP1	05/29/02	4036	4036AMD	24
7440-70-2	Calcium	510	41000	100	ARLICP	05/28/02	4036	4036ZMD	20
7440-47-3	Chromium	1.6	10	100	PEICP1	05/29/02	4036	4036AMD	24
7440-48-4	Cobalt	1.1	4.7	100	PEICP1	05/29/02	4036	4036AMD	24
7440-50-8	Copper	1.5	8.5	100	PEICP1	05/29/02	4036	4036AMD	24
7439-89-6	Iron	140	14000	100	ARLICP	05/28/02	4036	4036ZMD	20
7439-92-1	Lead	1.7	14	100	PEICP1	05/29/02	4036	4036AMD	24
7439-95-4	Magnesium	350	22000	100	ARLICP	05/28/02	4036	4036ZMD	20
7439-96-5	Manganese	2.4	370	100	PEICP1	05/29/02	4036	4036AMD	24
7439-97-6	Mercury	0.048	ND	167	HGCV2	05/28/02	4036	4036SMD	22
7440-02-0	Nickel	1.1	12	100	PEICP1	05/29/02	4036	4036AMD	24
7440-09-7	Potassium	49	1300	100	ARLICP	05/28/02	4036	4036ZMD	20
7782-49-2	Selenium	2.4	ND	100	PEICP1	05/29/02	4036	4036AMD	24
7440-22-4	Silver	0.68	ND	100	PEICP1	05/29/02	4036	4036AMD	24
7440-23-5	Sodium	550	ND	100	ARLICP	05/28/02	4036	4036ZMD	20
7440-28-0	Thallium	0.58	ND	100	PEICP1	05/29/02	4036	4036BMD	24
7440-62-2	Vanadium	0.56	15	100	PEICP1	05/29/02	4036	4036AMD	24
7440-66-6	Zinc	6.3	41	100	PEICP1	05/29/02	4036	4036AMD	24

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

Form1
Inorganic Analysis Data Sheet

Sample ID: AB58091
Client Id: SD-5
Matrix: SOIL

% Solid: 73
Units: mg/Kg

Cas No.	Analyte	RL	Conc	Dil Fact	Instr	Analysis Date:	Prep Batch	File:	Seq Num
7429-90-5	Aluminum	340	6200	100	ARLICP	05/28/02	4036	4036ZMD	21
7440-36-0	Antimony	1.3	ND	100	PEICP1	05/30/02	4036	4036CMD	25
7440-38-2	Arsenic	1.4	ND	100	PEICP1	05/29/02	4036	4036AMD	25
7440-39-3	Barium	2.0	38	100	PEICP1	05/29/02	4036	4036AMD	25
7440-41-7	Beryllium	0.33	ND	100	PEICP1	05/29/02	4036	4036AMD	25
7440-43-9	Cadmium	0.44	ND	100	PEICP1	05/29/02	4036	4036AMD	25
7440-70-2	Calcium	540	48000	100	ARLICP	05/28/02	4036	4036ZMD	21
7440-47-3	Chromium	1.7	11	100	PEICP1	05/29/02	4036	4036AMD	25
7440-48-4	Cobalt	1.1	4.7	100	PEICP1	05/29/02	4036	4036AMD	25
7440-50-8	Copper	1.6	12	100	PEICP1	05/29/02	4036	4036AMD	25
7439-89-6	Iron	150	13000	100	ARLICP	05/28/02	4036	4036ZMD	21
7439-92-1	Lead	1.8	19	100	PEICP1	05/29/02	4036	4036AMD	25
7439-95-4	Magnesium	370	27000	100	ARLICP	05/28/02	4036	4036ZMD	21
7439-96-5	Manganese	2.5	610	100	PEICP1	05/29/02	4036	4036AMD	25
7439-97-6	Mercury	0.050	ND	167	HGCV2	05/28/02	4036	4036SMD	23
7440-02-0	Nickel	1.1	13	100	PEICP1	05/29/02	4036	4036AMD	25
7440-09-7	Potassium	52	1400	100	ARLICP	05/28/02	4036	4036ZMD	21
7782-49-2	Selenium	2.5	ND	100	PEICP1	05/29/02	4036	4036AMD	25
7440-22-4	Silver	0.72	0.98	100	PEICP1	05/29/02	4036	4036AMD	25
7440-23-5	Sodium	580	ND	100	ARLICP	05/28/02	4036	4036ZMD	21
7440-28-0	Thallium	0.61	ND	100	PEICP1	05/29/02	4036	4036BMD	25
7440-62-2	Vanadium	0.59	18	100	PEICP1	05/29/02	4036	4036AMD	25
7440-66-6	Zinc	6.7	40	100	PEICP1	05/29/02	4036	4036AMD	25

Flag Codes:

ND - Indcates Compound was not found above the detection/Reporting Limit

* - Indcates Compound above calibration range

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/28/02
Data File: S4036Z
Prep Batch: 4036
Reporting Limits Used: SOIL,SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-356-3	CCB-15	CCB-25	MB 4036 (100)-16				
Aluminum	3 U	3 U	3 U	300 U				
Calcium	5 U	5 U	5 U	500 U				
Iron	3 U	3 U	3 U	300 U				
Magnesium	5 U	5 U	5 U	500 U				
Potassium	2.5 U	2.5 U	2.5 U	250 U				
Sodium	5 U	5 U	5 U	500 U				

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: S4036A
Prep Batch: 4036
Reporting Limits Used: SOIL,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	MB 4036 (100)-10	MB FB (1)-34		
Arsenic	.02 U	.02 U	.02 U	.02 U	2 U	.02 U		
Barium	.1 U	.1 U	.1 U	.1 U	10 U	.1 U		
Beryllium	.006 U	.006 U	.006 U	.006 U	.6 U	.006 U		
Cadmium	.006 U	.006 U	.006 U	.006 U	.6 U	.006 U		
Chromium	.05 U	.05 U	.05 U	.05 U	5 U	.05 U		
Copper	.05 U	.05 U	.05 U	.05 U	5 U	.05 U		
Lead	.05 U	.05 U	.05 U	.05 U	5 U	.05 U		
Nickel	.05 U	.05 U	.05 U	.05 U	5 U	.05 U		
Selenium	.02 U	.02 U	.02 U	.02 U	2 U	.02 U		
Silver	.025 U	.025 U	.025 U	.025 U	2.5 U	.025 U		
Zinc	.1 U	.1 U	.1 U	.1 U	10 U	.1 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: S4036B
Prep Batch: 4036
Reporting Limits Used: SOIL,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	MB 4036 (100)-10	MB FB (1)-34		
Thallium	.012 U	.012 U	.012 U	.012 U	1.2 U	.012 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/30/02
Data File: S4036C
Prep Batch: 4036
Reporting Limits Used: SOIL,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	MB 4036 (100)-10	MB FB (1)-34		
Antimony	.02 U	.02 U	.02 U	.02 U	2 U	.02 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: W4035a
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	CCB-47	MB 4035 (1)-10		
Aluminum	.18 U	.18 U	.18 U	.18 U	.18 U	.18 U		
Antimony	.015 U	.015 U	.015 U	.015 U	.015 U	.015 U		
Arsenic	.0075 U	.0075 U	.0075 U	.0075 U	.0075 U	.0075 U		
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Beryllium	.004 U	.004 U	.004 U	.004 U	.004 U	.004 U		
Cadmium	.0035 U	.0035 U	.0035 U	.0035 U	.0035 U	.0035 U		
Calcium	2 U	2 U	2 U	2 U	2 U	2 U		
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Cobalt	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U		
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Iron	.275 U	.275 U	.275 U	.275 U	.275 U	.28 U		
Lead	.005 U	.005 U	.005 U	.005 U	.005 U	.005 U		
Magnesium	2 U	2 U	2 U	2 U	2 U	2 U		
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Selenium	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U		
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U		
Thallium	.01 U	.01 U	.01 U	.01 U	.01 U	.01 U		
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: W4035Z
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-356-3	CCB-15	CCB-27	CCB-39	CCB-43	MB 4035 (1)-6		
Potassium	2 U	2 U	2 U	2 U	2 U	2 U		
Sodium	2 U	2 U	2 U	2 U	2 U	2 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/30/02
Data File: S4036C
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB M-02-BLK-262-7	CCB-19	CCB-29	CCB-39	CCB-46			
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/02
Data File: h4035sw
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB-9	CCB-21	CCB-33	CCB-41	MB 4035 (1)-10			
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/31/02
Data File: H4035SWB
Prep Batch: 4035
Reporting Limits Used: AQUEOUS,SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB-9	CCB-12						
Mercury	.7 U	.7 U						

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/28/02
Data File: H4036S
Prep Batch: 4036
Reporting Limits Used: SOIL,SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	ICB-9	CCB-21	CCB-33	MB 4036 (167)-10	MB FB (1)-30			
Mercury	.85 U	.85 U	.85 U	142 U	.85 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
b-indicates result found above reporting limits in Method Blank but result is <2.2 * Reporting limit (Method 200.7 only)
u-indicates result below reporting limit

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/28/02
Data File: S4036Z
Prep Batch: 4036
Analytical Method: SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-7	AB58188-9-1X	%REC OR Conc	AB58188-10-1X	%REC OR Conc	LCS-17-1X	%REC OR Conc	LCS MR-18-1X	%REC OR Conc	%REC OR Conc
Aluminum	5	5	3.75 - 6.25	73.812	61.276	-250 b	73.51	-6 b	4.561	4.56	4.602	4.6	
Calcium	50	50.00	37.50 - 62.50	5 U	45.154	90	47.255	95	41.193	41.2	41.796	41.8	
Iron	5	5.00	3.75 - 6.25	158.605	130.147	-570 b	151.058	-150 b	4.095	4.09	4.09	4.09	
Magnesium	50	50.00	37.50 - 62.50	29.02	61.264	64 a	67.638	77	40.553	40.6	41.325	41.3	
Potassium	50	50.00	37.50 - 62.50	6.903	45.829	78	48.52	83	39.564	39.6	40.401	40.4	
Sodium	50	50.00	37.50 - 62.50	5 U	43.078	86	45.456	91	43.11	43.1	43.931	43.9	

Qc Limits:

EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: S4036A
Prep Batch: 4036
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-13		AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS 100-11-1X	%REC OR Conc	LCS 100 MR-12-1X	%REC OR Conc	LCSW-35-1X	%REC OR Conc
Arsenic	.5000	.500	.3726 - .6274	0.0458882		0.4461348	80	0.4929807	89	0.4115254	.412	0.4125951	.413	0.3808861	76
Barium	.5000	.500	.3726 - .6274	0.36395602		0.760233	79	0.7781499	83	0.4666972	.467	0.4752340	.475	0.3986598	80
Beryllium	.5000	.500	.3726 - .6274	0.00616313		0.4323487	85	0.4595918	91	0.4189549	.419	0.4286964	.429	0.388107	78
Cadmium	.5000	.500	.3726 - .6274	0.006	U	0.4128816	83	0.4530171	91	0.4084369	.408	0.4167779	.417	0.3923989	78
Chromium	.5000	.500	.3726 - .6274	0.11817402		0.5572622	88	0.6129210	99	0.4617545	.462	0.4770035	.477	0.4293798	86
Copper	.5000	.500	.3726 - .6274	0.54839905		0.7310224	37 a	0.8658596	63 a	0.4061989	.406	0.4189439	.419	0.3964780	79
Lead	.5000	.500	.3726 - .6274	0.08009827		0.4887359	82	0.5432302	93	0.4186192	.419	0.4278653	.428	0.3969970	79
Nickel	.5000	.500	.3726 - .6274	0.16752087		0.5798974	82	0.6466719	96	0.4429817	.443	0.4574198	.457	0.4158504	83
Selenium	.5000	.500	.3726 - .6274	0.02	U	0.4241693	85	0.4454492	89	0.4023084	.402	0.4140843	.414	0.3776143	76
Silver	.5000	.500	.3726 - .6274	0.025	U	0.4451451	89	0.4742286	95	0.4296184	.43	0.4361257	.436	0.3955494	79
Zinc	.5000	.500	.3726 - .6274	0.71463987		0.8842912	34 a	1.0407775	65 a	0.4247316	.425	0.4828476	.483	0.4048385	81

Qc Limits:

EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/30/02
Data File: S4036C
Prep Batch: 4036
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts: MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts: LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-13	AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS 100-11-1X	%REC OR Conc	LCS 100 MR-12-1X	%REC OR Conc	LCSW-35-1X	%REC OR Conc
Antimony	.5000	.500	.3726 - .6274	0.02 U	0.4421010	88	0.4367291	87	0.4159416	.416	0.4235346	.424	0.4572739	91

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/28/02
Data File: S4036Z
Prep Batch: 4036
Analytical Method: SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-7		AB58188-9-1X	%REC OR Conc	AB58188-10-1X	%REC OR Conc	LCS-17-1X	%REC OR Conc	LCS MR-18-1X	%REC OR Conc	%REC OR Conc
Aluminum	5	5	3.75 - 6.25	73.812		61.276	-250 b	73.51	-6 b	4.561	4.56	4.602	4.6	
Calcium	50	50.00	37.50 - 62.50	5	U	45.154	90	47.255	95	41.193	41.2	41.796	41.8	
Iron	5	5.00	3.75 - 6.25	158.605		130.147	-570 b	151.058	-150 b	4.095	4.09	4.09	4.09	
Magnesium	50	50.00	37.50 - 62.50	29.02		61.264	64 a	67.638	77	40.553	40.6	41.325	41.3	
Potassium	50	50.00	37.50 - 62.50	6.903		45.829	78	48.52	83	39.564	39.6	40.401	40.4	
Sodium	50	50.00	37.50 - 62.50	5	U	43.078	86	45.456	91	43.11	43.1	43.931	43.9	

Qc Limits:

EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: S4036A
Prep Batch: 4036
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-13	AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS 100-11-1X	%REC OR Conc	LCS 100 MR-12-1X	%REC OR Conc	LCSW-35-1X	%REC OR Conc
Arsenic	.5000	.500	.3726 - .6274	0.0458882	0.4461348	80	0.4929807	89	0.4115254	.412	0.4125951	.413	0.3808861	76
Barium	.5000	.500	.3726 - .6274	0.36395602	0.760233	79	0.7781499	83	0.4666972	.467	0.4752340	.475	0.3986598	80
Beryllium	.5000	.500	.3726 - .6274	0.00616313	0.4323487	85	0.4595918	91	0.4189549	.419	0.4286964	.429	0.388107	78
Cadmium	.5000	.500	.3726 - .6274	0.006 U	0.4128816	83	0.4530171	91	0.4084369	.408	0.4167779	.417	0.3923989	78
Chromium	.5000	.500	.3726 - .6274	0.11817402	0.5572622	88	0.6129210	99	0.4617545	.462	0.4770035	.477	0.4293798	86
Copper	.5000	.500	.3726 - .6274	0.54839905	0.7310224	37 a	0.8658596	63 a	0.4061989	.406	0.4189439	.419	0.3964780	79
Lead	.5000	.500	.3726 - .6274	0.08009827	0.4887359	82	0.5432302	93	0.4186192	.419	0.4278653	.428	0.3969970	79
Nickel	.5000	.500	.3726 - .6274	0.16752087	0.5798974	82	0.6466719	96	0.4429817	.443	0.4574198	.457	0.4158504	83
Selenium	.5000	.500	.3726 - .6274	0.02 U	0.4241693	85	0.4454492	89	0.4023084	.402	0.4140843	.414	0.3776143	76
Silver	.5000	.500	.3726 - .6274	0.025 U	0.4451451	89	0.4742286	95	0.4296184	.43	0.4361257	.436	0.3955494	79
Zinc	.5000	.500	.3726 - .6274	0.71463987	0.8842912	34 a	1.0407775	65 a	0.4247316	.425	0.4828476	.483	0.4048385	81

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: S4036B
Prep Batch: 4036
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-13		AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS 100-11-1X	%REC OR Conc	LCS 100 MR-12-1X	%REC OR Conc	LCSW-35-1X	%REC OR Conc
Thallium	.5000	.500	.3726 - .6274	0.012	U	0.4359264	87	0.4586475	92	0.4204555	.42	0.4332377	.433	0.3990579	80

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/30/02
Data File: S4036C
Prep Batch: 4036
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-13	AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS 100-11-1X	%REC OR Conc	LCS 100 MR-12-1X	%REC OR Conc	LCSW-35-1X	%REC OR Conc
Antimony	.5000	.500	.3726 - .6274	0.02 U	0.4421010	88	0.4367291	87	0.4159416	.416	0.4235346	.424	0.4572739	91

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: W4035a
Prep Batch: 4035
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58092-13		AB58092-15-1X	%REC OR Conc	AB58092-16-1X	%REC OR Conc	LCSW-11-1X	%REC OR Conc	LCSW MR-12-1X	%REC OR Conc	%REC OR Conc
Aluminum	5.000			0.18	U	5.1490200	103	5.1401899	103	5.0453315	101	5.0057435	100	
Antimony	.5000			0.015	U	0.5194052	104	0.5176310	104	0.5298206	106	0.5222337	104	
Arsenic	.5000			0.0075	U	0.5116164	102	0.5050326	101	0.5189919	104	0.5051724	101	
Barium	.5000			0.13427735		0.6170920	97	0.6237015	98	0.5049228	101	0.4994309	100	
Beryllium	.5000			0.004	U	0.4906402	98	0.4883413	98	0.5006464	100	0.4964912	99	
Cadmium	.5000			0.0035	U	0.5006997	100	0.4936768	99	0.5195137	104	0.5109098	102	
Calcium	50.00			125.124195		172.57802	95	179.94902	110	50.451326	101	50.002474	100	
Chromium	.5000			0.05	U	0.4896028	98	0.5011351	100	0.507505	102	0.5113394	102	
Cobalt	.5000			0.02	U	0.4947430	99	0.4890682	98	0.5136814	103	0.5075459	102	
Copper	.5000			0.05	U	0.5107724	102	0.5121157	102	0.5015802	100	0.4992195	100	
Iron	5.000			0.275	U	4.9639988	99	4.9542133	99	5.1263351	103	5.0923556	102	
Lead	.5000			0.005	U	0.4932933	99	0.4942342	99	0.5116050	102	0.5066203	101	
Magnesium	50.00			18.0139372		67.673396	99	68.420134	101	50.272562	101	49.797511	100	
Manganese	.5000			0.10631533		0.6086726	100	0.6125196	101	0.5219018	104	0.5166160	103	
Nickel	.5000			0.05	U	0.4696809	94	0.4771157	95	0.4896284	98	0.4904492	98	
Selenium	.5000			0.04	U	0.5027820	101	0.4941038	99	0.5052789	101	0.5037719	101	
Silver	.5000			0.02	U	0.4848705	97	0.4902214	98	0.4870805	97	0.4879296	98	
Thallium	.5000			0.01	U	0.4865343	97	0.4933500	99	0.5100759	102	0.5158523	103	
Vanadium	.5000			0.05	U	0.4901849	98	0.4936794	99	0.4971392	99	0.4973728	99	
Zinc	.5000			0.05	U	0.5136803	103	0.5111501	102	0.5359767	107	0.5274172	105	

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: W4035Z
Prep Batch: 4035
Analytical Method: SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58092-10	AB58092-12-1X	%REC OR Conc	AB58092-13-1X	%REC OR Conc	LCSW-7-1X	%REC OR Conc	LCSW MR-8-1X	%REC OR Conc	%REC OR Conc
Potassium	50			7.261	56.259	98	56.906	99	48.926	98	48.74	97	
Sodium	50			156.167	201.952	92	212.837	113	49.859	100	49.749	99	

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/29/02
Data File: h4035sw
Prep Batch: 4035
Analytical Method: SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58088-13	AB58088-15-1X	%REC OR Conc	AB58088-16-1X	%REC OR Conc	LCSW-11-1X	%REC OR Conc	LCSW MR-12-1X	%REC OR Conc	%REC OR Conc
Mercury	10			0.7 U	9.8055027	98	9.9926875	100	10.236298	102	10.316969	103	

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/28/02
Data File: H4036S
Prep Batch: 4036
Analytical Method: SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts		LCS Soil Rec Limits	Non Spike Conc AB58188-13		AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS-11-1X	%REC OR Conc	LCS MR-12-1X	%REC OR Conc	LCSW-31-1X	%REC OR Conc
	MS-Tclp MS-Aq LCS-Aq MS-soil	LCS Soil													
Mercury	10	10.00	7.50 - 12.5	0.85	U	10.643499	106	10.439136	104	10.364356	10.4	10.513618	10.5	11.220663	112

Qc Limits:	
EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM 5/FORM 7
SPIKE/LCS RECOVERY

Date Analyzed: 05/28/02
Data File: H4036S
Prep Batch: 4036
Analytical Method: SW846
Instrument: HGCV2
Units: All units in ppm except Hg in ppb
Project Number: 05241450

Analyte	Spike Amts: MS-Tclp MS-Aq LCS-Aq MS-soil	Spike Amts: LCS Soil	LCS Soil Rec Limits	Non Spike Conc AB58188-13		AB58188-15-1X	%REC OR Conc	AB58188-16-1X	%REC OR Conc	LCS-11-1X	%REC OR Conc	LCS MR-12-1X	%REC OR Conc	LCSW-31-1X	%REC OR Conc
Mercury	10	10.00	7.50 - 12.5	0.85	U	10.643499	106	10.439136	104	10.364356	10.4	10.513618	10.5	11.220663	112

Qc Limits:

EPA600:	SW846
LCS: 85-115 MS: 70-130	LCS SOIL: See Above Range LCS Aqueous/TCLP or MS soil/aqueous:75-125 MS TCLP: >50%

Flags:

U: Conc < Reporting Limit
a: Recovery Failed Specified Limit
b: Recovery Failed Specified Limit but Non Spike concentration > 4* spike amount

FORM6/FORM9
RPDS

Date Analyzed: 05/28/02
Data File: S4036Z
Prep Batch: 4036
Analytical Method: SW846
Instrument: ARLICP
Units: All units in ppm except Hg in ppb
Project Number: 05241450

		Sample	Method Rep		LCS	LCS MR		Sample	Serial Dil	
Analyte	Qc Limits	AB58188-7	AB58188-8	RPD	LCS-17	LCS MR-18	RPD	AB58188-7	AB58188-6	%Diff
Aluminum	<=20	73.812	63.434	15				73.812	60.68	20 Sa
Calcium	<=20	5 U	5 U	---				3.919	5.44	33 Sd
Iron	<=20	158.605	148.413	6.6				158.605	127.835	21 Sa
Magnesium	<=20	29.020	22.362	26 Na				29.020	25.355	13 Sa
Potassium	<=20	6.903	5.845	17				6.903	5.345	25 Sd
Sodium	<=20	5 U	5 U	---				0.463	1.79 U	---

Flags:

Na:Method Rep out but concentrations < 5* Reporting Limits
Nb:Method Rep outside of Qc Limits
U: Conc < Reporting Limit (Method Rep) or < IDL (serial Dilution)
Lm:Lcs Rpd Out

Sa:Serial Dilution outside of qc limits
Sb: Serial dilution out but concentration < 10 * IDL
Sc: Serial Dilution out but concentration < RL but > IDL
Sd: Sb + Sc

FORM6/FORM9
RPDS

Date Analyzed: 05/29/02
Data File: S4036A
Prep Batch: 4036
Analytical Method: SW846
Instrument: PEICP1
Units: All units in ppm except Hg in ppb
Project Number: 05241450

		Sample	Method Rep		LCS	LCS MR		Sample	Serial Dil	
Analyte	Qc Limits	AB58188-13	AB58188-14	RPD	LCS 100-11	LCS 100 MR-12	RPD	AB58079-20	AB58079-21	%Diff
Arsenic	<=20	0.04588820	0.04293818	6.6				0.01235894	0.0263 U	---
Barium	<=20	0.36395602	0.26118366	33 Na				0.32567867	0.31244425	4.1
Beryllium	<=20	0.00616313	0.006 U	---				0.00186162	0.0003035 U	---
Cadmium	<=20	0.006 U	0.006 U	---				0.00071850	0.00072 U	---
Chromium	<=20	0.11817402	0.11920143	0.87				0.09217491	0.072007	25 Sc
Copper	<=20	0.54839905	0.39144326	33 Nb	0.40619893	0.41894392	3.1	0.08910973	0.1164373	27 Sd
Lead	<=20	0.08009827	0.09176861	14				0.13731029	0.12316035	11 Sc
Nickel	<=20	0.16752087	0.13736058	20				0.10294236	0.09819855	4.7
Selenium	<=20	0.02 U	0.02 U	---				0.00744 U	0.0372 U	---
Silver	<=20	0.025 U	0.025 U	---				0.00451299	0.01027865	78 Sd
Zinc	<=20	0.71463987	0.51386602	33 Nb	0.42473160	0.48284767	13	0.35959587	0.355963	1

Flags:

Na:Method Rep out but concentrations < 5* Reporting Limits
Nb:Method Rep outside of Qc Limits
U: Conc < Reporting Limit (Method Rep) or < IDL (serial Dilution)
Lm:Lcs Rpd Out

Sa:Serial Dilution outside of qc limits
Sb: Serial dilution out but concentration < 10 * IDL
Sc: Serial Dilution out but concentration < RL but > IDL
Sd: Sb + Sc

Analysis Type: CL-S
Batch Number: CL-S-9
Cal Curve Date:
Units: mg/kg

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-06/03/02	50	90-110	NA	53.605	107	NA	
CAL-01	CAL-01-05/30/02	50	90-110	NA	53.605	107	NA	
DUP	AB58294	NA	NA	20	29.23529	NA	NA	Nc
MBS	MBS	500	75-125	NA	543.15	109	NA	
MBS	MBS-2	500	75-125	NA	486.35	97	NA	
MS	AB58294	588.2353	75-125	NA	572.1765	97	NA	
MSD	AB58294	588.2353	75-125	20	601.4117	102	5	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Titr Vol1	Titr Vol2	DF	Smp Vol	Smp Wt	Fin Vol	NofT	Prep Date	Prep By	Anal Date	Anal By
L-01-05/30/02	CAL-01		54		100	53.605	2.96	1.45	1	50	100	100	0.025			05/30/02	km
3-1-05/29/02	MB	MB-1-05/29/02	ND	50	100	24.85	0.22	0.15	1	50	10	100	0.025	05/29/02	km	05/30/02	km
AB58079	Sample	MB-1-05/29/02	92	65	77	92.208	0.80	0.60	1	50	10	100	0.025	05/29/02	km	05/30/02	km
AB58082	Sample	MB-1-05/29/02	160	72	69	164.64	0.68	0.36	1	50	10	100	0.025	05/29/02	km	05/30/02	km
AB58085	Sample	MB-1-05/29/02	87	72	69	87.464	0.40	0.23	1	50	10	100	0.025	05/29/02	km	05/30/02	km
[redacted]58090	Sample	MB-1-05/29/02	ND	65	77	18.442	0.16	0.12	1	50	10	100	0.025	05/29/02	km	05/30/02	km
[redacted]58091	Sample	MB-1-05/29/02	ND	68	73	19.452	0.14	0.10	1	50	10	100	0.025	05/29/02	km	05/30/02	km
AB58271	Sample	MB-1-05/29/02	540	57	88	540.57	2.72	1.38	1	50	10	100	0.025	05/29/02	km	05/30/02	km
AB58272	Sample	MB-1-05/29/02	33000	71	70	33471	2.80	1.48	1	1.0	10	100	0.025	05/29/02	km	05/30/02	km
[redacted]58273	Sample	MB-1-05/29/02	4800	57	88	4840.9	3.92	2.0	1	8.0	10	100	0.025	05/29/02	km	05/30/02	km
[redacted]58274	Sample	MB-1-05/29/02	850	52	97	849.07	4.76	2.44	1	50	10	100	0.025	05/29/02	km	05/30/02	km
[redacted]58275	Sample	MB-1-05/29/02	8400	64	78	8363	3.12	1.65	1	4.0	10	100	0.025	05/29/02	km	05/30/02	km
MBS-2	MBS	MB-1-05/29/02	490	50	100	486.35	2.97	1.60	1	50	10	100	0.025	05/29/02	km	05/30/02	km
CAL-01-06/03/02	CAL-01		54		100	53.605	3.01	1.50	1	50	100	100	0.025			06/03/02	km/ges
B-1-06/03/02	MB	MB-1-06/03/02	ND	50	100	21.3	0.22	0.16	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58294	Sample	MB-1-06/03/02	ND	59	85	33.412	0.23	0.15	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58294	DUP	MB-1-06/03/02	ND	59	85	29.235	0.22	0.15	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
AB58294	MS	MB-1-06/03/02	570	59	85	572.18	2.98	1.61	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
AB58294	MSD	MB-1-06/03/02	600	59	85	601.41	3.00	1.56	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
BS	MBS	MB-1-06/03/02	540	50	100	543.15	3.02	1.49	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58286	Sample	MB-1-06/03/02	1400	63	80	1420	2.70	1.42	1	20	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58287	Sample	MB-1-06/03/02	2500	69	72	2539.2	4.21	2.15	1	20	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
AB58288	Sample	MB-1-06/03/02	140	58	86	140.35	0.77	0.43	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
AB58289	Sample	MB-1-06/03/02	1700	65	77	1659.7	2.97	1.53	1	20	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58290	Sample	MB-1-06/03/02	18000	60	83	17536	3.32	1.68	1	2.0	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58291	Sample	MB-1-06/03/02	ND	60	84	16.905	0.13	0.09	1	50	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
[redacted]58292	Sample	MB-1-06/03/02	1800	63	80	1819.4	3.44	1.80	1	20	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
AB58293	Sample	MB-1-06/03/02	11000	66	76	10627	3.79	1.97	1	4.0	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges
AB58295	Sample	MB-1-06/03/02	1100	60	84	1109.4	2.30	1.25	1	20	10	100	0.025	06/03/02	km/ges	06/03/02	km/ges

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

Analysis Type: CL-W
Batch Number: CL-W-20
Cal Curve Date:
Units: mg/l

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-05/31/02	50	90-110	NA	49.15852	98	NA	
CAL-01	CAL-01-05/28/02	50	90-110	NA	49.55095	99	NA	
DUP	AB57980	NA	NA	20	107.7861	NA	0.94	
MBS	MBS-2	50	75-125	NA	48.15528	96	NA	
MBS	MBS	50	75-125	NA	49.55095	99	NA	
MS	AB57980	50	75-125	NA	157.337	97	NA	
MSD	AB57980	50	75-125	20	157.337	97	0	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Titr Vol	Smp Vol	DF	NofT	Tit Blk	Prep Date	Prep By	Anal Date	Anal By
L-01-05/28/02	CAL-01		50		100	49.551	4.95	50	1	0.01441	.1			05/28/02	km
-1-05/28/02	MB	MB-1-05/28/02	ND	1	100	0	0.10	50	1	0.01441	.1	05/28/02	km	05/28/02	km
BS	MBS	MB-1-05/28/02	50	1	100	49.551	4.95	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57980	Sample	MB-1-05/28/02	110	1	100	108.81	10.75	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57980	DUP	MB-1-05/28/02	110	1	100	107.79	10.65	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57980	MS	MB-1-05/28/02	160	1	100	157.34	15.50	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57980	MSD	MB-1-05/28/02	160	1	100	157.34	15.50	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57981	Sample	MB-1-05/28/02	77	1	100	76.625	7.60	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57982	Sample	MB-1-05/28/02	23	1	100	23.498	2.40	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB57983	Sample	MB-1-05/28/02	66	1	100	66.408	6.60	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57984	Sample	MB-1-05/28/02	90	1	100	89.907	8.90	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57985	Sample	MB-1-05/28/02	91	1	100	91.439	9.05	50	1	0.01441	.1	05/28/02	km	05/28/02	km
57986	Sample	MB-1-05/28/02	ND	1	100	0	0.10	50	1	0.01441	.1	05/28/02	km	05/28/02	km
AB58075	Sample	MB-1-05/28/02	46	1	100	45.647	4.65	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58077	Sample	MB-1-05/28/02	36	1	100	36.116	3.70	50	1	.01415	.1	05/28/02	km	05/28/02	km
58080	Sample	MB-1-05/28/02	210	1	100	212.18	21.25	50	1	.01415	.1	05/28/02	km	05/28/02	km
58083	Sample	MB-1-05/28/02	210	1	100	205.66	20.60	50	1	.01415	.1	05/28/02	km	05/28/02	km
58086	Sample	MB-1-05/28/02	31	1	100	31.1	3.20	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58088	Sample	MB-1-05/28/02	41	1	100	41.133	4.20	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58092	Sample	MB-1-05/28/02	280	1	100	279.4	27.95	50	1	.01415	.1	05/28/02	km	05/28/02	km
58093	Sample	MB-1-05/28/02	67	1	100	66.715	6.75	50	1	.01415	.1	05/28/02	km	05/28/02	km
58094	Sample	MB-1-05/28/02	110	1	100	114.37	11.50	50	1	.01415	.1	05/28/02	km	05/28/02	km
AB58095	Sample	MB-1-05/28/02	180	1	100	183.09	18.35	50	1	.01415	.1	05/28/02	km	05/28/02	km
CAL-01-05/31/02	CAL-01		49		100	49.159	5.00	50	1	.01415	.1			05/31/02	bct
B-1-05/31/02	MB	MB-1-05/31/02	ND	1	100	0	0.10	50	1	.01415	.1	05/31/02	bct	05/31/02	bct
S-2	MBS	MB-1-05/31/02	48	1	100	48.155	4.90	50	1	.01415	.1	05/31/02	bct	05/31/02	bct
58460	Sample	MB-1-05/31/02	23	1	100	23.074	2.40	50	1	.01415	.1	05/31/02	bct	05/31/02	bct
AB58463	Sample	MB-1-05/31/02	100	1	100	104.34	10.50	50	1	.01415	.1	05/31/02	bct	05/31/02	bct

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