Appendix J

Laboratory Analytical Reports

Arsenic Speciation (Total Metals in ug/L)
Pore Water Samples
Ajax/Magnolia Mines SI, July 2003

Site	Sample No.	Date	ARSENIC (III)	ARSENIC (V)
AJAX	ST-PWP-04	07/17/03	26.9	258
GRAN	ST-PWP-53	07/19/03	<2U	77.9
GRAN	ST-PWP-54	07/18/03	3.1	81.7
MAGN	ST-PWP-01	07/18/03	<2U	<2U
MAGN	ST-PWP-02	07/18/03	<2U	125
MAGN	ST-PWP-03	07/18/03	<2U	54.4

Total Metals (ug/L)
Surface Water Samples
Ajax/Magnolia Mines SI, July 2003

Site	Sample No.	Date	ALUMINUM	ANTIMONY	ARSENIC	ARSENIC (III)	ARSENIC (V)	BARIUM	CALCIUM	CHROMIUM, TOTAL	COBALT	COPPER	IRON	LEAD	MAGNESIUM	MANGANESE	MERCURY	NICKEL	POTASSIUM	SODIUM	THALLIUM	VANADIUM	ZINC
AJAX	AD-SFW-07	07/17/03	27.7B	<3.8U	2.6B	<2U	29.2	12.1B	105000	3B	<1.8U	<1.4U	<16.8U	1.6B	58000	215	0.11B	9.9B	3460B	5170	<2.8U	<2.2U	<5.7U
MAGN	AD-SFW-13	07/18/03	367	<4.7U	239	2.2	164	26.5B	134000	<1.4U	13B	5.3B	9530	<1.3U	69400	1740	0.33	68	4930B	6420	<2.8U	<2U	35.3
MAGN	AD-SFW-55	07/19/03	1180	<4.7U	<4.8U	<2U	<2U	52.3B	21500	<1.4U	<2U	2.4B	636	<1.3U	10500	48.9	0.13B	<2.1U	1360B	6340	3.7B	2.6B	5.4B
AJAX	PD-SFW-06	07/17/03	56.5B	<3.8U	5.4B	<2U	3.2	10.9B	107000	<0.6U	<1.8U	3B	765	<1.5U	58800	154	0.12B	6.9B	3530B	5230	<2.8U	<2.2U	11.9B
MAGN	PD-SFW-11	07/18/03	33.4B	<4.7U	9.7B	<2U	6.8	16.2B	133000	<1.4U	5.5B	<2.4U	64.3B	<1.3U	69100	905	0.14B	39.4B	4680B	5580	3.1B	<2U	11.5B
AJAX	ST-SFW-04	07/17/03	48.1B	4.2B	23.6	<2U	22.7	69.8B	40600	<0.6U	<1.8U	<1.4U	151	<1.5U	18600	12.8B	0.15B	<2U	2570B	6480	<2.8U	<2.2U	<5.7U
AJAX	ST-SFW-52	07/17/03	33.8B	<3.8U	47.3	73.2	186	33.1B	107000	<0.6U	<1.8U	<1.4U	31.1B	1.7B	56500	362	<0.1U	<2U	4520B	5450	<2.8U	<2.2U	<5.7U
GRAN	ST-SFW-53	07/19/03	93.9B	<4.7U	13.1	24.8	8.6	54.8B	15100	<1.4U	<2U	<2.4U	113	<1.3U	3470B	18.8	0.11B	<2.1U	1850B	3130B	3.1B	<2U	3.6B
GRAN	ST-SFW-54	07/17/03	54.1B	<3.8U	12.6	<2U	12.8	53.3B	16200	<0.6U	<1.8U	<1.4U	78.1B	<1.5U	4120B	15	0.14B	<2U	2530B	3490B	<2.8U	<2.2U	<5.7U
MAGN	ST-SFW-01	07/18/03	51.8B	4.4B	<2.4U	<2U	<2U	56.5B	28400	<0.6U	<1.8U	<1.4U	57.1B	<1.5U	12900	4.8B	0.11B	<2U	2320B	6570	<2.8U	2.4B	<5.7U
MAGN	ST-SFW-02	07/18/03	60B	4.9B	36.2	<2U	35	65.1B	40900	<0.6U	<1.8U	<1.4U	464	1.7B	18700	28	0.18B	<2U	2790B	6300	<2.8U	<2.2U	<5.7U
MAGN	ST-SFW-03	07/18/03	40.5B	<4.7U	29.6	<2U	22.5	73.3B	42200	<1.4U	<2U	<2.4U	266	<1.3U	19400	7.4B	0.18B	<2.1U	2410B	6200	<2.8U	<2U	4B

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: GCD002

SEVERN TRENT STL

September 12, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCD002

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 22 and 24, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/22/03 ETR No: 94941		
535363	AJAXSTPSD04	07/17/03	Sediment
535364	AJAXPDSSD06	07/17/03	Sediment
535365	AJAXSTRSD04	07/17/03	Sediment
535366	AJAXSTSSD52	07/17/03	Sediment
535367	GRANSTRSD54	07/17/03	Sediment
535368	GRANSTPSD54	07/17/03	Sediment
535369	MAGNSTPSD03	07/18/03	Sediment
535370	MAGNPDSSD11	07/18/03	Sediment
535371	MAGNSTPSD02	07/18/03	Sediment
535372	MAGNSTPSD01	07/18/03	Sediment
535373	GRANSTPSD53	07/19/03	Sediment
535373MS	GRANSTPSD53MS	07/19/03	Sediment
535373DP	GRANSTPSD53REP	07/19/03	Sediment
535374	GRANSTRSD53	07/19/03	Sediment
	Received: 07/24/03 ETR No: 95000		
535813	BLUESTPSD05	07/21/03	Sediment
535814	BLUESTPSD05100	07/21/03	Sediment
535815	BLUESTPSD06	07/21/03	Sediment
535816	BLUESTRSD08	07/20/03	Sediment
535817	BLUESTPSD08	07/20/03	Sediment
535818	BLUESTPSD07	07/20/03	Sediment

0001-A

Severn Trent Laboratories, Inc.
STL Burlington • 208 South Park Drive, Suite 1, Colchester, VT 05446
Tel 802 655 1203 Fax 802 655 1248 • *www.stl-inc.com*

One of the sample containers for the sample designated BLUESTPSD08 was received broken.

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample login is included in the Sample Handling section of this submittal.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Metals by 6010B:
The sample designated AJAXPDSSD06 yielded a negative interference for thallium. This sample was analyzed full strength (-302.9) and at a 1:10 dilution (61.4). Both sets of results yielded a negative interference for thallium. The laboratory suspects that this anomaly is likely due to the elevated presence of manganese present in the sample. The results have been reported from a 1:10 dilution.

The serial dilution of the sample designated GRANSTRSD53 yielded a percent recovery marginally below the established control limits. Additionally, the duplicate analysis of this sample yielded %RSDs for several elements outside of the established control limits.

Total Organic Carbon by Lloyd Kahn:
The duplicate analysis of the sample designated GRANSTRSD53 yielded a %RPD of 22%.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0696.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The Laboratory Director or his designee, as verified by the following signature, has authorized the release of the data contained in this hardcopy data package.

Sincerely,

Chris Anderson, for:

Michael F. Wheeler, Ph.D.
Laboratory Director

0001-B Last Alpha

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Sediment

p 1 of 2

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: EA Engineering	Company: Same
Address: 12011 Bel-Red Road Bellevue, WA 98	Address:
Contact: Jen Kindred	Contact:
Phone: 425-451-7400	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Sampler's Name: James Gaither

Sampler's Signature:

Proj. No.: 13890.13

Project Name: Granite Creek Watershed Mines

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TOC	TAL Metals	SN	Grain Size	Lab/Sample ID (Lab Use Only)
SD	7/17/03	1525		X	AJAX-ST-PSD-04			2		X	X	X	X	
SD	7/17/03	1430		X	AJAX-PD-SSD-06			2		X	X	X	X	
SD	7/17/03	1521		X	AJAX-ST-RSD-04			2		X	X	X	X	
SD	7/17/03	1520		X	AJAX-ST-SSD-52			2		X	X	X	X	
SD	7/17/03	1835		X	~~GRAN-ST-PSD-53~~			2		X	X	X	X	
SD	7/17/03	1845		X	GRAN-ST-RSD-53			2		X	X	X	X	
SD	7/17/03	1745		X	GRAN-ST-RSD-54			2		X	X	X	X	
SD	7/17/03	1750		X	GRAN-ST-PSD-54			2		X	X	X	X	
SD	7/18/03	1710		X	MAGN-ST-~~RSD~~ PSD-03			2		X	X	X	X	
SD	7/18/03	1510		X	MAGN-PD-~~5~~PSD-11			2		X	X	X	X	

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time	Remarks
	7-21-03	0800		7/22/03	1030	
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time	Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

Sediment p2 of 2

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7400
Fax: 425-451-7806
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Jen Kindred, Don Norman
Sampler's Signature: Jen Kindred, Don Norman

Proj. No.: 13890, 13
Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TOC	TAL Metals	CN	Grain Size	Lab/Sample ID (Lab Use Only)
SD	7/18/03	1600		X	MAGN-ST-PSD-02			2		X	X	X	X	
SD	7/18/03	1540		X	MAGN-ST-PSD-01			2		X	X	X	X	
SD	7/19/03	1500		X	GRAN-ST-PSD-53 MS			3		X	X	X	X	MS on TOC, TAL, CN
SD	7/19/03	1445		X	GRAN-ST-RSD-53			2		X	X	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
[signature]	7-21-03	0900	[signature]	7/22/03	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

SD = Sediment

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**
SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Sediment

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 BEL-Red Rd Suite 200 Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7400
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Sampler's Name: Don Norman
Sampler's Signature: Don Norman

Proj. No.: 13890.16
Project Name: Granite Cr Watershed

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED TOC	CN	TAL metals	Grain size	Lab/Sample ID (Lab Use Only)
SD	7/21/03	1145		X	BLUE-ST-PSD-05			2		X	X	X	X	
SD	7/21/03	1145		X	BLUE-ST-PSD-05 (100)			2		X	X	X	X	
SD	7/21/03	1200		X	BLUE-ST-PSD-06			2		X	X	X	X	
SD	7/20/03	1615		X	BLUE-ST-RSD-08			2		X	X	X	X	
SD	7/20/03	1630		X	BLUE-ST-PSD-08			2		X	X	X	X	
SD	7/20/03	1830		X	BLUE-ST-PSD-07			2		X	X	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
[signature]	7/22/03	0900	[signature]	7/24/03	0930
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes.
Please Fax written changes to (802) 655-1248

STLB234-200 (12/02)

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXSTPSD04

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535363

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 78.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		78.8	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	127	3840	

Printed on: 09/11/03 02:57 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXPDSSD06

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535364

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/22/03

% Solids: 30.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		30.8	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	325	17200	

Printed on: 09/11/03 02:57 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXSTRSD04

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535365

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 78.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		78.3	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	128	15500	

Printed on: 09/11/03 02:58 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXSTSSD52

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535366

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 11.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		11.5	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	870	119900	

Printed on: 09/11/03 02:58 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANSTRSD54

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD002

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 535367

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/22/03

% Solids: 83.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		83.3	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	121	121	U

Printed on: 09/11/03 02:59 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANSTPSD54

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535368

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 70.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		70.1	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	143	27700	

Printed on: 09/11/03 02:59 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNSTPSD03

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535369

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 80.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		80.6	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	125	6040	

Printed on: 09/11/03 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNPDSSD11

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD002

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 535370

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/22/03

% Solids: 13.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		13.6	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	736	11200	

Printed on: 09/11/03 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNSTPSD02

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535371

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 67.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		67.0	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	150	12400	

Printed on: 09/11/03 03:01 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNSTPSD01

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535372

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 75.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		75.8	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	132	5130	

Printed on: 09/11/03 03:02 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANSTPSD53

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD002

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 535373

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/22/03

% Solids: 78.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		78.6	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	128	2670	

Printed on: 09/11/03 03:04 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANSTRSD53

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535374

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids: 80.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		80.4	
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	1	125	6750	

Printed on: 09/11/03 03:06 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUESTPSD05

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535813

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/24/03

% Solids: 82.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		82.2	
IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	1	122	3530	

Printed on: 09/11/03 03:07 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUESTPSD05100

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535814

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/24/03

% Solids: 74.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		74.7	
IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	1	134	4760	

Printed on: 09/11/03 03:08 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUESTPSD06

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535815

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/24/03

% Solids: 80.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		80.9	
IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	1	124	124	U

Printed on: 09/11/03 03:08 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUESTRSD08

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535816

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/24/03

% Solids: 84.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		84.0	
IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	1	120	26400	

Printed on: 09/11/03 03:09 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUESTPSD08

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535817

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/24/03

% Solids: 80.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		80.4	
IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	1	125	7820	

Printed on: 09/11/03 03:09 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUESTPSD07

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD002

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 535818

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/24/03

% Solids: 70.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		70.2	
IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	1	143	22400	

Printed on: 09/11/03 03:10 PM

WET CHEMISTRY

Method Blank Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCD002

Lab Code: STLVT **Case No.:** 23046

Matrix: SOIL **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Conc.	Units	Qual.	DF	RL	Analytical Run Date	Analytical Batch
BLKLK0728A	IN847	TOC by Lloyd Kahn	100	mg/Kg	U	1	100	07/28/03	BLKLK0728A
BLKLK0730A	IN847	TOC by Lloyd Kahn	100	mg/Kg	U	1	100	07/30/03	BLKLK0730A

Printed on: 09/11/03 03:11 PM

WET CHEMISTRY

Matrix Spike Sample Report Summary

Client Sample No.
GRANSTPSD53MS

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535373MS

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Matrix Spike Result Conc.	Qual.	Sample Result Conc.	Qual.	Spike Added	% Recovery*
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	125800		2670		110501.00	111.4

* *Control Limit for Percent Recovery is 75-125%, unless otherwise specified.*

Printed on: 09/11/03 03:05 PM

WET CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.
GRANSTPSD53REP

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535373DP

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/22/03

% Solids: 81.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Qual.	Duplicate Sample Result Conc.	Qual.	RPD*
IN623	Solids, Percent	07/29/03	N/A	%	78.6		81.7		4
IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	2670		2140		22

** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/11/03 03:03 PM

WET CHEMISTRY

Laboratory Control Sample Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCD002

Lab Code: STLVT **Case No.:** 23046

Matrix: SOIL **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCS Conc.	True Value	% Recovery*
LCSLK0728A	IN847	TOC by Lloyd Kahn	07/28/03	BLKLK0728A	mg/Kg	8360	8500.0000	98.4
LCSLK0730A	IN847	TOC by Lloyd Kahn	07/30/03	BLKLK0730A	mg/Kg	8510	8500.0000	100.1

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*

Printed on: 09/11/03 03:11 PM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
AJAXPDSSD06	535364
AJAXSTPSD04	535363
AJAXSTRSD04	535365
AJAXSTSSD52	535366
BLUESTPSD05	535813
BLUESTPSD05100	535814
BLUESTPSD06	535815
BLUESTPSD07	535818
BLUESTPSD08	535817
BLUESTRSD08	535816
GRANSTPSD53	535373
GRANSTPSD53D	535373DP
GRANSTPSD53S	535373MS
GRANSTPSD54	535368
GRANSTRSD53	535374
GRANSTRSD54	535367
MAGNPDSSD11	535370
MAGNSTPSD01	535372
MAGNSTPSD02	535371
MAGNSTPSD03	535369

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXPDSSD06

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535364

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 30.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5190		*	P
7440-36-0	Antimony	5.2	B	N	P
7440-38-2	Arsenic	1020			P
7440-39-3	Barium	309		*	P
7440-41-7	Beryllium	1.5			P
7440-43-9	Cadmium	9.3			P
7440-70-2	Calcium	33300		*	P
7440-47-3	Chromium	4.4		*	P
7440-48-4	Cobalt	254			P
7440-50-8	Copper	316		*	P
7439-89-6	Iron	319000		*	P
7439-92-1	Lead	27.9		*	P
7439-95-4	Magnesium	3530		*	P
7439-96-5	Manganese	40600			P
7439-97-6	Mercury	0.76		*	CV
7440-02-0	Nickel	860			P
7440-09-7	Potassium	892	B	E*	P
7782-49-2	Selenium	11.6			P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	129	U		P
7440-28-0	Thallium	15.6	U		P
7440-62-2	Vanadium	17.8		*	P
7440-66-6	Zinc	1660		*	P
57-12-5	Cyanide	2.9			AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTPSD04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535363

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 78.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10300		*	P
7440-36-0	Antimony	3.4	B	N	P
7440-38-2	Arsenic	326			P
7440-39-3	Barium	233		*	P
7440-41-7	Beryllium	0.71			P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	7350		*	P
7440-47-3	Chromium	19.5		*	P
7440-48-4	Cobalt	18.1			P
7440-50-8	Copper	80.4		*	P
7439-89-6	Iron	36500		*	P
7439-92-1	Lead	69.4		*	P
7439-95-4	Magnesium	5360		*	P
7439-96-5	Manganese	2570			P
7439-97-6	Mercury	0.51		*	CV
7440-02-0	Nickel	43.8			P
7440-09-7	Potassium	2560		E*	P
7782-49-2	Selenium	1.3			P
7440-22-4	Silver	2.2			P
7440-23-5	Sodium	287	B		P
7440-28-0	Thallium	0.65	U		P
7440-62-2	Vanadium	39.4		*	P
7440-66-6	Zinc	180		*	P
57-12-5	Cyanide	0.48	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTRSD04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535365

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 78.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9950		*	P
7440-36-0	Antimony	1.5	B	N	P
7440-38-2	Arsenic	631			P
7440-39-3	Barium	263		*	P
7440-41-7	Beryllium	0.76			P
7440-43-9	Cadmium	0.58			P
7440-70-2	Calcium	13800		*	P
7440-47-3	Chromium	18.5		*	P
7440-48-4	Cobalt	18.0			P
7440-50-8	Copper	36.9		*	P
7439-89-6	Iron	44500		*	P
7439-92-1	Lead	26.3		*	P
7439-95-4	Magnesium	8630		*	P
7439-96-5	Manganese	2600			P
7439-97-6	Mercury	0.42		*	CV
7440-02-0	Nickel	29.6			P
7440-09-7	Potassium	2830		E*	P
7782-49-2	Selenium	0.85			P
7440-22-4	Silver	1.3			P
7440-23-5	Sodium	132	B		P
7440-28-0	Thallium	0.62	U		P
7440-62-2	Vanadium	50.0		*	P
7440-66-6	Zinc	120		*	P
57-12-5	Cyanide	0.59	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTSSD52

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535366

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 11.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16800		*	P
7440-36-0	Antimony	12.2	B	N	P
7440-38-2	Arsenic	2800			P
7440-39-3	Barium	268		*	P
7440-41-7	Beryllium	0.96	B		P
7440-43-9	Cadmium	5.3			P
7440-70-2	Calcium	16500		*	P
7440-47-3	Chromium	21.0		*	P
7440-48-4	Cobalt	28.3	B		P
7440-50-8	Copper	105		*	P
7439-89-6	Iron	134000		*	P
7439-92-1	Lead	42.5		*	P
7439-95-4	Magnesium	5490		*	P
7439-96-5	Manganese	3480			P
7439-97-6	Mercury	1.0		*	CV
7440-02-0	Nickel	161			P
7440-09-7	Potassium	3250	B	E*	P
7782-49-2	Selenium	6.9			P
7440-22-4	Silver	2.6	B		P
7440-23-5	Sodium	599	B		P
7440-28-0	Thallium	4.0	U		P
7440-62-2	Vanadium	57.3		*	P
7440-66-6	Zinc	705		*	P
57-12-5	Cyanide	4.0	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUESTPSD05

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535813

Level (low/med): LOW Date Received: 7/24/2003

% Solids: 82.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14900			P
7440-36-0	Antimony	1.2	B	N	P
7440-38-2	Arsenic	19.4			P
7440-39-3	Barium	73.1		*	P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	0.059	U		P
7440-70-2	Calcium	4180		*	P
7440-47-3	Chromium	86.1		*	P
7440-48-4	Cobalt	20.7			P
7440-50-8	Copper	28.8		*	P
7439-89-6	Iron	28100		*	P
7439-92-1	Lead	3.6		*	P
7439-95-4	Magnesium	11500		*	P
7439-96-5	Manganese	665			P
7439-97-6	Mercury	0.38		*	CV
7440-02-0	Nickel	111			P
7440-09-7	Potassium	808		E*	P
7782-49-2	Selenium	0.52			P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	226	B		P
7440-28-0	Thallium	0.93	B		P
7440-62-2	Vanadium	52.2		*	P
7440-66-6	Zinc	56.2			P
57-12-5	Cyanide	0.52	U		AS

Color Before: brown Clarity Before: Texture: coarse

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLUESTPSD05100

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535814

Level (low/med): LOW Date Received: 7/24/2003

% Solids: 74.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14200			P
7440-36-0	Antimony	1.2	B	N	P
7440-38-2	Arsenic	22.7			P
7440-39-3	Barium	73.4		*	P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	0.059	U		P
7440-70-2	Calcium	2710		*	P
7440-47-3	Chromium	101		*	P
7440-48-4	Cobalt	15.9			P
7440-50-8	Copper	36.5		*	P
7439-89-6	Iron	28500		*	P
7439-92-1	Lead	4.9		*	P
7439-95-4	Magnesium	11200		*	P
7439-96-5	Manganese	531			P
7439-97-6	Mercury	0.13		*	CV
7440-02-0	Nickel	107			P
7440-09-7	Potassium	949		E*	P
7782-49-2	Selenium	0.49			P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	254	B		P
7440-28-0	Thallium	0.84	B		P
7440-62-2	Vanadium	49.3		*	P
7440-66-6	Zinc	62.4			P
57-12-5	Cyanide	0.50	U		AS

Color Before: brown Clarity Before: Texture: coarse

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUESTPSD06

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535815

Level (low/med): LOW Date Received: 7/24/2003

% Solids: 80.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7730			P
7440-36-0	Antimony	0.52	U	N	P
7440-38-2	Arsenic	7.4			P
7440-39-3	Barium	71.5		*	P
7440-41-7	Beryllium	0.19	B		P
7440-43-9	Cadmium	0.077	B		P
7440-70-2	Calcium	2980		*	P
7440-47-3	Chromium	20.4		*	P
7440-48-4	Cobalt	14.9			P
7440-50-8	Copper	40.6		*	P
7439-89-6	Iron	10000		*	P
7439-92-1	Lead	2.0		*	P
7439-95-4	Magnesium	2690		*	P
7439-96-5	Manganese	786			P
7439-97-6	Mercury	0.075		*	CV
7440-02-0	Nickel	92.0			P
7440-09-7	Potassium	350	B	E*	P
7782-49-2	Selenium	0.44	B		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	337	B		P
7440-28-0	Thallium	0.63	U		P
7440-62-2	Vanadium	16.4		*	P
7440-66-6	Zinc	28.8			P
57-12-5	Cyanide	0.61	U		AS

Color Before: brown Clarity Before: Texture: coarse

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUESTPSD07

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535818

Level (low/med): LOW Date Received: 7/24/2003

% Solids: 70.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11800			P
7440-36-0	Antimony	1.0	B	N	P
7440-38-2	Arsenic	31.0			P
7440-39-3	Barium	82.3		*	P
7440-41-7	Beryllium	0.32	B		P
7440-43-9	Cadmium	0.12	B		P
7440-70-2	Calcium	3350		*	P
7440-47-3	Chromium	55.6		*	P
7440-48-4	Cobalt	14.6			P
7440-50-8	Copper	26.8		*	P
7439-89-6	Iron	20000		*	P
7439-92-1	Lead	3.1		*	P
7439-95-4	Magnesium	6500		*	P
7439-96-5	Manganese	571			P
7439-97-6	Mercury	0.10		*	CV
7440-02-0	Nickel	82.7			P
7440-09-7	Potassium	1310		E*	P
7782-49-2	Selenium	0.69			P
7440-22-4	Silver	0.33	B		P
7440-23-5	Sodium	364	B		P
7440-28-0	Thallium	0.62	U		P
7440-62-2	Vanadium	35.1		*	P
7440-66-6	Zinc	56.6			P
57-12-5	Cyanide	0.69	U		AS

Color Before: brown Clarity Before: Texture: coarse

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUESTPSD08

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535817

Level (low/med): LOW Date Received: 7/24/2003

% Solids: 80.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4750			P
7440-36-0	Antimony	0.96	B	N	P
7440-38-2	Arsenic	15.3			P
7440-39-3	Barium	60.6		*	P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.060	U		P
7440-70-2	Calcium	1070		*	P
7440-47-3	Chromium	78.0		*	P
7440-48-4	Cobalt	24.9			P
7440-50-8	Copper	51.3		*	P
7439-89-6	Iron	57900		*	P
7439-92-1	Lead	5.4		*	P
7439-95-4	Magnesium	11100		*	P
7439-96-5	Manganese	733			P
7439-97-6	Mercury	0.085		*	CV
7440-02-0	Nickel	160			P
7440-09-7	Potassium	530		E*	P
7782-49-2	Selenium	1.0			P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	62.3	B		P
7440-28-0	Thallium	2.2			P
7440-62-2	Vanadium	57.1		*	P
7440-66-6	Zinc	56.6			P
57-12-5	Cyanide	0.56	U		AS

Color Before: brown Clarity Before: Texture: coarse

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUESTRSD08

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535816

Level (low/med): LOW Date Received: 7/24/2003

% Solids: 84.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12600			P
7440-36-0	Antimony	0.47	U	N	P
7440-38-2	Arsenic	3.9			P
7440-39-3	Barium	64.2		*	P
7440-41-7	Beryllium	0.11	B		P
7440-43-9	Cadmium	0.060	U		P
7440-70-2	Calcium	5890		*	P
7440-47-3	Chromium	10.7		*	P
7440-48-4	Cobalt	9.5			P
7440-50-8	Copper	54.1		*	P
7439-89-6	Iron	14000		*	P
7439-92-1	Lead	1.3		*	P
7439-95-4	Magnesium	4610		*	P
7439-96-5	Manganese	527			P
7439-97-6	Mercury	0.056		*	CV
7440-02-0	Nickel	51.9			P
7440-09-7	Potassium	1110		E*	P
7782-49-2	Selenium	0.17	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	1040			P
7440-28-0	Thallium	0.58	U		P
7440-62-2	Vanadium	10.6		*	P
7440-66-6	Zinc	59.1			P
57-12-5	Cyanide	0.56	U		AS

Color Before: brown Clarity Before: Texture: coarse

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTPSD53

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535373

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10200		*	P
7440-36-0	Antimony	2.0	B	N	P
7440-38-2	Arsenic	130			P
7440-39-3	Barium	139		*	P
7440-41-7	Beryllium	0.24	B		P
7440-43-9	Cadmium	0.96			P
7440-70-2	Calcium	2180		*	P
7440-47-3	Chromium	10.4		*	P
7440-48-4	Cobalt	6.9			P
7440-50-8	Copper	18.1		*	P
7439-89-6	Iron	21600		*	P
7439-92-1	Lead	38.2		*	P
7439-95-4	Magnesium	4790		*	P
7439-96-5	Manganese	364			P
7439-97-6	Mercury	0.11		*	CV
7440-02-0	Nickel	6.2			P
7440-09-7	Potassium	2840		E*	P
7782-49-2	Selenium	0.44	B		P
7440-22-4	Silver	1.8			P
7440-23-5	Sodium	45.2	U		P
7440-28-0	Thallium	0.69	B		P
7440-62-2	Vanadium	52.1		*	P
7440-66-6	Zinc	150		*	P
57-12-5	Cyanide	0.57	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTPSD54

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535368

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 70.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8910		*	P
7440-36-0	Antimony	5.1	B	N	P
7440-38-2	Arsenic	303			P
7440-39-3	Barium	144		*	P
7440-41-7	Beryllium	0.26	B		P
7440-43-9	Cadmium	2.8			P
7440-70-2	Calcium	2740		*	P
7440-47-3	Chromium	10.9		*	P
7440-48-4	Cobalt	6.5			P
7440-50-8	Copper	28.0		*	P
7439-89-6	Iron	18900		*	P
7439-92-1	Lead	148		*	P
7439-95-4	Magnesium	3460		*	P
7439-96-5	Manganese	611			P
7439-97-6	Mercury	0.32		*	CV
7440-02-0	Nickel	7.6			P
7440-09-7	Potassium	2400		E*	P
7782-49-2	Selenium	0.80			P
7440-22-4	Silver	7.9			P
7440-23-5	Sodium	70.2	B		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	43.0		*	P
7440-66-6	Zinc	186		*	P
57-12-5	Cyanide	0.59	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTRSD53

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535374

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 80.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9670		*	P
7440-36-0	Antimony	2.3	B	N	P
7440-38-2	Arsenic	126			P
7440-39-3	Barium	127		*	P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	2230		*	P
7440-47-3	Chromium	9.9		*	P
7440-48-4	Cobalt	6.2			P
7440-50-8	Copper	18.6		*	P
7439-89-6	Iron	19000		*	P
7439-92-1	Lead	44.3		*	P
7439-95-4	Magnesium	4030		*	P
7439-96-5	Manganese	360			P
7439-97-6	Mercury	0.12		*	CV
7440-02-0	Nickel	6.5			P
7440-09-7	Potassium	2550		E*	P
7782-49-2	Selenium	0.42	B		P
7440-22-4	Silver	4.9			P
7440-23-5	Sodium	45.9	U		P
7440-28-0	Thallium	0.73	B		P
7440-62-2	Vanadium	45.9		*	P
7440-66-6	Zinc	148		*	P
57-12-5	Cyanide	0.60	U		AS

Color Before: brown Clarity Before: _____ Texture: medium

Color After: yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTRSD54

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535367

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 83.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7770		*	P
7440-36-0	Antimony	5.1	B	N	P
7440-38-2	Arsenic	246			P
7440-39-3	Barium	126		*	P
7440-41-7	Beryllium	0.21	B		P
7440-43-9	Cadmium	1.8			P
7440-70-2	Calcium	1750		*	P
7440-47-3	Chromium	8.3		*	P
7440-48-4	Cobalt	6.4			P
7440-50-8	Copper	30.0		*	P
7439-89-6	Iron	18300		*	P
7439-92-1	Lead	121		*	P
7439-95-4	Magnesium	3380		*	P
7439-96-5	Manganese	560			P
7439-97-6	Mercury	0.12		*	CV
7440-02-0	Nickel	7.3			P
7440-09-7	Potassium	2340		E*	P
7782-49-2	Selenium	0.63			P
7440-22-4	Silver	6.3			P
7440-23-5	Sodium	79.5	B		P
7440-28-0	Thallium	0.76	B		P
7440-62-2	Vanadium	38.3		*	P
7440-66-6	Zinc	151		*	P
57-12-5	Cyanide	0.57	U		AS

Color Before: brown Clarity Before: _____ Texture: medium

Color After: yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNPDSSD11

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535370

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 13.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	46500		*	P
7440-36-0	Antimony	6.5	B	N	P
7440-38-2	Arsenic	2190			P
7440-39-3	Barium	200		*	P
7440-41-7	Beryllium	3.8			P
7440-43-9	Cadmium	3.6			P
7440-70-2	Calcium	11000		*	P
7440-47-3	Chromium	54.9		*	P
7440-48-4	Cobalt	54.9			P
7440-50-8	Copper	461		*	P
7439-89-6	Iron	136000		*	P
7439-92-1	Lead	23.2		*	P
7439-95-4	Magnesium	7110		*	P
7439-96-5	Manganese	2750			P
7439-97-6	Mercury	1.2		*	CV
7440-02-0	Nickel	159			P
7440-09-7	Potassium	5430		E*	P
7782-49-2	Selenium	2.6	B		P
7440-22-4	Silver	2.3	B		P
7440-23-5	Sodium	263	U		P
7440-28-0	Thallium	5.5	B		P
7440-62-2	Vanadium	90.2		*	P
7440-66-6	Zinc	515		*	P
57-12-5	Cyanide	3.3	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNSTPSD01

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535372

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 75.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14900		*	P
7440-36-0	Antimony	0.46	U	N	P
7440-38-2	Arsenic	1.3			P
7440-39-3	Barium	502		*	P
7440-41-7	Beryllium	0.44	B		P
7440-43-9	Cadmium	0.059	U		P
7440-70-2	Calcium	5500		*	P
7440-47-3	Chromium	14.9		*	P
7440-48-4	Cobalt	9.6			P
7440-50-8	Copper	14.3		*	P
7439-89-6	Iron	20700		*	P
7439-92-1	Lead	3.8		*	P
7439-95-4	Magnesium	3910		*	P
7439-96-5	Manganese	424			P
7439-97-6	Mercury	0.020	B	*	CV
7440-02-0	Nickel	24.3			P
7440-09-7	Potassium	394	B	E*	P
7782-49-2	Selenium	0.48	B		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	764			P
7440-28-0	Thallium	0.56	U		P
7440-62-2	Vanadium	34.2		*	P
7440-66-6	Zinc	21.8		*	P
57-12-5	Cyanide	0.64	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPSD02

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535371

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 67.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1550		*	P
7440-36-0	Antimony	2.6	B	N	P
7440-38-2	Arsenic	121			P
7440-39-3	Barium	40.2		*	P
7440-41-7	Beryllium	0.65			P
7440-43-9	Cadmium	0.16	B		P
7440-70-2	Calcium	923		*	P
7440-47-3	Chromium	51.7		*	P
7440-48-4	Cobalt	3.1	B		P
7440-50-8	Copper	36.1		*	P
7439-89-6	Iron	23200		*	P
7439-92-1	Lead	4.6		*	P
7439-95-4	Magnesium	1010		*	P
7439-96-5	Manganese	319			P
7439-97-6	Mercury	1.4		*	CV
7440-02-0	Nickel	6.6			P
7440-09-7	Potassium	848		E*	P
7782-49-2	Selenium	0.45	B		P
7440-22-4	Silver	3.6			P
7440-23-5	Sodium	74.8	B		P
7440-28-0	Thallium	0.99	B		P
7440-62-2	Vanadium	62.2		*	P
7440-66-6	Zinc	50.3		*	P
57-12-5	Cyanide	0.70	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPSD03

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Lab Sample ID: 535369

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 80.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4750		*	P
7440-36-0	Antimony	5.1	B	N	P
7440-38-2	Arsenic	742			P
7440-39-3	Barium	188		*	P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	0.74			P
7440-70-2	Calcium	2000		*	P
7440-47-3	Chromium	11.6		*	P
7440-48-4	Cobalt	59.5			P
7440-50-8	Copper	32.8		*	P
7439-89-6	Iron	42100		*	P
7439-92-1	Lead	54.1		*	P
7439-95-4	Magnesium	1060		*	P
7439-96-5	Manganese	1920			P
7439-97-6	Mercury	1.1		*	CV
7440-02-0	Nickel	131			P
7440-09-7	Potassium	1300		E*	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	1.2			P
7440-23-5	Sodium	65.3	B		P
7440-28-0	Thallium	0.84	B		P
7440-62-2	Vanadium	29.4		*	P
7440-66-6	Zinc	140		*	P
57-12-5	Cyanide	0.55	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cyanide	120.0	113.99	95.0	150.0	144.40	96.3	149.38	99.6	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cyanide				150.0	153.09	102.1	151.26	100.8	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	3.0	2.82	94.0	5.0	4.90	98.0	4.71	94.2	CV

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	4.61	92.2	5.15	103.0	CV

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	3.0	2.72	90.7	5.0	4.85	97.0	4.46	89.2	CV

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	998.00	99.8	400.0	405.60	101.4	408.40	102.1	P
Selenium	250.0	243.60	97.4	100.0	102.30	102.3	101.70	101.7	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead				400.0	410.80	102.7	406.20	101.6	P
Selenium				100.0	102.50	102.5	101.80	101.8	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26240.00	100.9	30200.0	29780.00	98.6	30030.00	99.4	P
Antimony	250.0	245.80	98.3	300.0	296.90	99.0	293.40	97.8	P
Arsenic	250.0	246.80	98.7	100.0	97.74	97.7	99.90	99.9	P
Barium	500.0	492.40	98.5	200.0	195.90	98.0	197.50	98.8	P
Beryllium	500.0	495.00	99.0	100.0	97.16	97.2	97.22	97.2	P
Cadmium	500.0	486.00	97.2	100.0	96.41	96.4	96.04	96.0	P
Calcium	25000.0	25340.00	101.4	30200.0	29970.00	99.2	29790.00	98.6	P
Chromium	500.0	492.60	98.5	200.0	191.50	95.8	192.20	96.1	P
Cobalt	500.0	487.10	97.4	200.0	194.40	97.2	194.20	97.1	P
Copper	500.0	497.50	99.5	200.0	197.90	99.0	198.00	99.0	P
Iron	25500.0	26090.00	102.3	30200.0	29840.00	98.8	29960.00	99.2	P
Lead	1000.0	983.60	98.4	400.0	387.70	96.9	387.00	96.8	P
Magnesium	25000.0	25190.00	100.8	30200.0	29640.00	98.1	29510.00	97.7	P
Manganese	500.0	488.40	97.7	200.0	194.20	97.1	193.40	96.7	P
Nickel	500.0	490.40	98.1	200.0	193.80	96.9	193.60	96.8	P
Potassium	25000.0	26530.00	106.1	30200.0	30820.00	102.1	31040.00	102.8	P
Silver	500.0	496.40	99.3	100.0	98.14	98.1	99.89	99.9	P
Sodium	25000.0	25230.00	100.9	30200.0	28980.00	96.0	29570.00	97.9	P
Thallium	250.0	237.90	95.2	100.0	97.51	97.5	98.66	98.7	P
Vanadium	500.0	490.80	98.2	200.0	196.30	98.2	195.70	97.8	P
Zinc	500.0	494.00	98.8	200.0	196.40	98.2	195.90	98.0	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	29900.00	99.0	29890.00	99.0	P
Antimony				300.0	294.20	98.1	295.00	98.3	P
Arsenic				100.0	99.42	99.4	98.17	98.2	P
Barium				200.0	196.10	98.0	196.20	98.1	P
Beryllium				100.0	97.65	97.6	96.94	96.9	P
Cadmium				100.0	96.42	96.4	96.02	96.0	P
Calcium				30200.0	29820.00	98.7	29690.00	98.3	P
Chromium				200.0	191.50	95.8	191.10	95.6	P
Cobalt				200.0	194.10	97.0	193.50	96.8	P
Copper				200.0	197.80	98.9	197.10	98.6	P
Iron				30200.0	29950.00	99.2	29890.00	99.0	P
Lead				400.0	384.70	96.2	388.00	97.0	P
Magnesium				30200.0	29630.00	98.1	29460.00	97.5	P
Manganese				200.0	192.70	96.4	192.20	96.1	P
Nickel				200.0	194.20	97.1	193.20	96.6	P
Potassium				30200.0	30980.00	102.6	31020.00	102.7	P
Silver				100.0	100.20	100.2	98.84	98.8	P
Sodium				30200.0	29470.00	97.6	29370.00	97.3	P
Thallium				100.0	98.29	98.3	94.41	94.4	P
Vanadium				200.0	195.90	98.0	195.00	97.5	P
Zinc				200.0	197.40	98.7	196.00	98.0	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	30000.00	99.3			P
Antimony				300.0	294.50	98.2			P
Arsenic				100.0	96.36	96.4			P
Barium				200.0	197.10	98.6			P
Beryllium				100.0	96.41	96.4			P
Cadmium				100.0	95.62	95.6			P
Calcium				30200.0	29750.00	98.5			P
Chromium				200.0	190.80	95.4			P
Cobalt				200.0	193.00	96.5			P
Copper				200.0	198.40	99.2			P
Iron				30200.0	29790.00	98.6			P
Lead				400.0	382.80	95.7			P
Magnesium				30200.0	29340.00	97.2			P
Manganese				200.0	191.80	95.9			P
Nickel				200.0	191.30	95.6			P
Potassium				30200.0	31180.00	103.2			P
Silver				100.0	98.79	98.8			P
Sodium				30200.0	29310.00	97.1			P
Thallium				100.0	101.00	101.0			P
Vanadium				200.0	194.10	97.0			P
Zinc				200.0	195.90	98.0			P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Cyanide	120.0	118.54	98.8	150.0	146.46	97.6	149.40	99.6	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cyanide				150.0	149.12	99.4	148.07	98.7	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Manganese	500.0	494.80	99.0	200.0	199.00	99.5	201.00	100.5	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Manganese				200.0	203.40	101.7	199.00	99.5	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cyanide	120.0	116.78	97.3	150.0	139.64	93.1	142.74	95.2	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Cyanide				150.0	144.46	96.3	143.71	95.8	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cyanide	120.0	117.46	97.9	150.0	140.94	94.0	143.67	95.8	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Cyanide				150.0	142.40	94.9			AS

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

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Mercury	0.2	0.22	110.0					

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.2	0.14	70.0					

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead				6.0	8.44	140.7	8.17	136.2
Selenium				10.0	9.26	92.6	11.19	111.9

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	469.90	117.5	474.00	118.5
Antimony				120.0	118.70	98.9	118.90	99.1
Arsenic				20.0	20.54	102.7	19.30	96.5
Barium				400.0	389.80	97.4	391.20	97.8
Beryllium				10.0	10.01	100.1	10.09	100.9
Cadmium				10.0	9.75	97.5	9.91	99.1
Calcium				10000.0	10240.00	102.4	10290.00	102.9
Chromium				20.0	19.20	96.0	20.27	101.4
Cobalt				100.0	95.72	95.7	95.66	95.7
Copper				50.0	50.07	100.1	51.23	102.5
Iron				200.0	244.90	122.4	251.60	125.8
Lead				6.0	4.17	69.5	4.32	72.0
Magnesium				10000.0	9945.00	99.4	9977.00	99.8
Manganese				30.0	29.09	97.0	28.93	96.4
Nickel				80.0	79.51	99.4	80.56	100.7
Potassium				10000.0	10760.00	107.6	10900.00	109.0
Silver				20.0	19.93	99.6	20.50	102.5
Sodium				10000.0	9714.00	97.1	9875.00	98.8
Thallium				20.0	20.53	102.6	22.91	114.6
Vanadium				100.0	96.82	96.8	96.83	96.8
Zinc				40.0	39.43	98.6	39.67	99.2

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Manganese				30.0	29.92	99.7	29.81	99.4

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.500	U	AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide			10.0	U							AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury			0.1	B							CV

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury	0.1	U	0.1	U	0.1	U			0.017	U	CV

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum									2.360	U	P
Antimony									0.470	U	P
Arsenic									0.480	U	P
Barium									0.590	U	P
Beryllium									0.020	U	P
Cadmium									0.060	U	P
Calcium									18.210	U	P
Chromium									-0.211	B	P
Cobalt									0.200	U	P
Copper									0.240	U	P
Iron									3.464	B	P
Lead	1.5	U	2.9	B	1.5	U	2.3	B	0.196	B	P
Magnesium									17.830	U	P
Manganese									0.070	U	P
Nickel									-0.315	B	P
Potassium									39.300	U	P
Selenium	1.7	U	1.7	U	1.7	U	1.7	U	0.211	B	P
Silver									0.220	U	P
Sodium									88.450	B	P
Thallium									0.570	U	P
Vanadium									0.200	U	P
Zinc									0.104	B	P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum									2.360	U	P
Antimony									0.470	U	P
Arsenic									0.480	U	P
Barium									0.590	U	P
Beryllium									0.020	U	P
Cadmium									0.060	U	P
Calcium									18.210	U	P
Chromium									-0.189	B	P
Cobalt									0.200	U	P
Copper									0.240	U	P
Iron									3.330	U	P
Lead			2.5	B					0.241	B	P
Magnesium									17.830	U	P
Manganese									0.070	U	P
Nickel									-0.304	B	P
Potassium									39.300	U	P
Selenium			1.7	U					0.170	U	P
Silver									0.220	U	P
Sodium									87.810	B	P
Thallium									0.570	U	P
Vanadium									0.200	U	P
Zinc									0.198	B	P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	-33.7	B	-38.2	B	-62.3	B	-47.6	B			P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U			P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U			P
Barium	5.9	U	5.9	U	5.9	U	5.9	U			P
Beryllium	0.3	B	0.3	B	0.4	B	0.4	B			P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U			P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U			P
Chromium	-2.7	B	-2.5	B	-2.6	B	-2.3	B			P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			P
Copper	2.4	U	2.4	U	2.4	U	2.4	U			P
Iron	33.3	U	33.3	U	33.3	U	33.3	U			P
Lead	1.3	U	1.3	U	1.3	U	1.3	U			P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U			P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P
Nickel	2.1	U	2.1	U	2.1	U	2.1	U			P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U			P
Silver	2.2	U	2.2	U	2.2	U	2.2	U			P
Sodium	472.7	U	472.7	U	472.7	U	472.7	U			P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U			P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U			P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U			P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			-44.1	B	-34.7	B					P
Antimony			4.7	U	4.7	U					P
Arsenic			4.8	U	4.8	U					P
Barium			5.9	U	5.9	U					P
Beryllium			0.4	B	0.4	B					P
Cadmium			0.6	U	0.6	U					P
Calcium			182.1	U	182.1	U					P
Chromium			-2.5	B	-2.6	B					P
Cobalt			2.0	U	2.0	U					P
Copper			2.4	U	2.4	U					P
Iron			33.3	U	33.3	U					P
Lead			1.3	U	1.3	U					P
Magnesium			178.3	U	178.3	U					P
Manganese			0.7	U	0.7	U					P
Nickel			2.1	U	2.1	U					P
Potassium			393.0	U	393.0	U					P
Silver			2.2	U	2.2	U					P
Sodium			472.7	U	472.7	U					P
Thallium			5.7	U	5.7	U					P
Vanadium			2.0	U	2.0	U					P
Zinc			1.0	U	1.0	U					P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.467	U	AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide			10.0	U							AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Manganese			0.7	U							P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.490	U	AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide			10.0	U							AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.495	U	AS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	44	1	45.6	103.6	1	47.2	107.3
Selenium	0	48	-2	43.6	90.8	-3	51.2	106.7

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	490000	494600.0	102.5	491700	489100.0	101.3
Antimony	0	596	-3	599.9	100.7	-3	593.3	99.5
Arsenic	0	102	6	104.5	102.5	3	100.4	98.4
Barium	0	503	2	495.0	98.4	2	487.6	96.9
Beryllium	0	482	0	475.8	98.7	0	468.5	97.2
Cadmium	0	938	0	927.3	98.9	-1	913.8	97.4
Calcium	500000	477840	481800	488500.0	102.2	480800	482000.0	100.9
Chromium	0	483	1	473.9	98.1	1	465.2	96.3
Cobalt	0	457	-1	455.4	99.6	-1	446.9	97.8
Copper	0	526	3	507.7	96.5	3	500.0	95.1
Iron	200000	191980	197000	197200.0	102.7	197200	195000.0	101.6
Lead	0	49	-2	41.9	85.5	-1	42.2	86.1
Magnesium	500000	521880	527200	535000.0	102.5	524900	526600.0	100.9
Manganese	0	474	1	466.7	98.5	1	455.4	96.1
Nickel	0	952	2	943.0	99.1	2	925.3	97.2
Potassium	0	0	-40	-6.4		36	43.4	
Silver	0	213	1	212.5	99.8	1	209.1	98.2
Sodium	0	0	-231	-127.1		-141	-125.0	
Thallium	0	89	2	91.6	102.9	0	88.7	99.7
Vanadium	0	478	4	467.1	97.7	4	458.9	96.0
Zinc	0	998	3	995.5	99.7	3	981.9	98.4

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Manganese	0	474	1	477.0	100.6	1	487.1	102.8

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANSTPSD53S

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		9962.3857		10187.6797		221.26	-101.8		P
Antimony	75 - 125	27.7796		2.0136	B	55.32	46.6	N	P
Arsenic		113.9507		129.6179		4.43	-353.7		P
Barium	75 - 125	338.2011		139.4708		221.26	89.8		P
Beryllium	75 - 125	5.4696		0.2433	B	5.53	94.5		P
Cadmium	75 - 125	6.1710		0.9585		5.53	94.3		P
Chromium	75 - 125	29.3285		10.3599		22.13	85.7		P
Cobalt	75 - 125	57.6723		6.9477		55.32	91.7		P
Copper	75 - 125	43.7327		18.1274		27.66	92.6		P
Iron		19637.1309		21618.9395		110.63	-1791.4		P
Lead		32.2270		38.2158		2.21	-271.0		P
Manganese		406.5716		364.1738		55.32	76.6		P
Mercury	75 - 125	0.3280		0.1128		0.20	107.6		CV
Nickel	75 - 125	57.5064		6.2417		55.32	92.7		P
Selenium	75 - 125	1.3630		0.4391	B	1.11	83.2		P
Silver	75 - 125	6.6622		1.7659		5.53	88.5		P
Thallium	75 - 125	5.4420		0.6896	B	5.53	85.9		P
Vanadium	75 - 125	94.5237		52.0863		55.32	76.7		P
Zinc	75 - 125	193.7161		149.5150		55.32	79.9		P
Cyanide	75 - 125	5.8886		0.5731	U	5.73	102.8		AS

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANSTPSD53A

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS _____ SDG No.: GCD002

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		107200.00		106500.00		2000.0	35.0		P
Antimony		518.30		21.05	B	500.0	99.4		P
Arsenic		1360.00		1355.00		40.0	12.5		P
Barium		3410.00		1458.00		2000.0	97.6		P
Beryllium		51.86		2.54	B	50.0	98.6		P
Cadmium		58.24		10.02		50.0	96.4		P
Chromium		307.60		108.30		200.0	99.6		P
Cobalt		554.40		72.63		500.0	96.4		P
Copper		447.60		189.50		250.0	103.2		P
Iron		222400.00		226000.00		1000.0	-360.0		P
Lead		412.50		399.50		20.0	65.0		P
Manganese		4214.00		3807.00		500.0	81.4		P
Nickel		549.60		65.25		500.0	96.9		P
Selenium		14.44		4.59	B	10.0	98.5		P
Silver		68.76		18.46		50.0	100.6		P
Thallium		53.70		7.21	B	50.0	93.0		P
Vanadium		1036.00		544.50		500.0	98.3		P
Zinc		2008.00		1563.00		500.0	89.0		P
Cyanide		21.48		10.00	U	20.0	107.4		AS

Comments: _____

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

GRANSTPSD53D

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 78.6 % Solids for Duplicate: 81.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		10187.6797		6896.9580		38.5	*	P
Antimony		2.0136	B	1.5673	B	24.9		P
Arsenic		129.6179		120.7048		7.1		P
Barium	19.1	139.4708		98.0713		34.9	*	P
Beryllium		0.2433	B	0.1891	B	25.1		P
Cadmium	0.5	0.9585		0.8358		13.7		P
Calcium	478.3	2184.8521		1470.0540		39.1	*	P
Chromium		10.3599		6.0352		52.8	*	P
Cobalt		6.9477		5.1340	B	30.0		P
Copper	2.4	18.1274		12.2950		38.3	*	P
Iron		21618.9395		14647.0801		38.4	*	P
Lead		38.2158		70.2204		59.0	*	P
Magnesium		4785.8188		2975.3889		46.7	*	P
Manganese		364.1738		302.8845		18.4		P
Mercury	0.0	0.1128		0.1996		55.6	*	CV
Nickel		6.2417		3.8895	B	46.4		P
Potassium	478.3	2840.1160		2122.2229		28.9	*	P
Selenium		0.4391	B	0.4494	B	2.3		P
Silver	1.0	1.7659		1.7256		2.3		P
Sodium		45.2180	U	53.8200	B	200.0		P
Thallium		0.6896	B	0.6094	U	200.0		P
Vanadium		52.0863		32.6298		45.9	*	P
Zinc		149.5150		94.4576		45.1	*	P
Cyanide		0.5731	U	0.5783	U			AS

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Cyanide				6.0	5.7		5.4	6.6	95.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 0.1	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 0.1	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				200.0	205.1		160.0 240.0	102.6
Antimony				50.0	50.1		40.0 60.0	100.2
Arsenic				24.0	22.7		19.2 28.8	94.6
Barium				200.0	197.9		160.0 240.0	99.0
Beryllium				5.0	5.0		4.0 6.0	100.0
Cadmium				25.0	24.7		20.0 30.0	98.8
Calcium				2000.0	2043.0		1600.0 2400.0	102.2
Chromium				20.0	20.1		16.0 24.0	100.5
Cobalt				50.0	49.0		40.0 60.0	98.0
Copper				25.0	25.9		20.0 30.0	103.6
Iron				100.0	99.3		80.0 120.0	99.3
Lead				22.0	21.4		17.6 26.4	97.3
Magnesium				2000.0	1984.0		1600.0 2400.0	99.2
Manganese				50.0	49.9		40.0 60.0	99.8
Nickel				50.0	49.0		40.0 60.0	98.0
Potassium				2000.0	1989.0		1600.0 2400.0	99.4
Selenium				21.0	19.2		16.8 25.2	91.4
Silver				25.0	25.2		20.0 30.0	100.8
Sodium				2000.0	2043.0		1600.0 2400.0	102.2
Thallium				25.0	23.8		20.0 30.0	95.2
Vanadium				50.0	50.3		40.0 60.0	100.6
Zinc				50.0	49.5		40.0 60.0	99.0

7
LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				200.0	206.0		160.0 240.0	103.0
Antimony				50.0	49.8		40.0 60.0	99.6
Arsenic				24.0	22.7		19.2 28.8	94.6
Barium				200.0	199.2		160.0 240.0	99.6
Beryllium				5.0	5.0		4.0 6.0	100.0
Cadmium				25.0	24.6		20.0 30.0	98.4
Calcium				2000.0	2031.0		1600.0 2400.0	101.6
Chromium				20.0	20.0		16.0 24.0	100.0
Cobalt				50.0	48.6		40.0 60.0	97.2
Copper				25.0	26.0		20.0 30.0	104.0
Iron				100.0	100.1		80.0 120.0	100.1
Lead				22.0	21.6		17.6 26.4	98.2
Magnesium				2000.0	1968.0		1600.0 2400.0	98.4
Manganese				50.0	49.5		40.0 60.0	99.0
Nickel				50.0	48.9		40.0 60.0	97.8
Potassium				2000.0	2006.0		1600.0 2400.0	100.3
Selenium				21.0	19.5		16.8 25.2	92.9
Silver				25.0	25.3		20.0 30.0	101.2
Sodium				2000.0	2070.0		1600.0 2400.0	103.5
Thallium				25.0	23.5		20.0 30.0	94.0
Vanadium				50.0	50.2		40.0 60.0	100.4
Zinc				50.0	49.4		40.0 60.0	98.8

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	6.1		5.4 6.6	101.7

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Cyanide				6.0	6.0		5.4	6.6	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	5.9		5.4 6.6	98.3

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	6.6		5.4 6.6	110.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 0.1	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum				200.0	208.3		160.0	240.0	104.2
Antimony				50.0	50.2		40.0	60.0	100.4
Arsenic				24.0	23.1		19.2	28.8	96.2
Barium				200.0	200.4		160.0	240.0	100.2
Beryllium				5.0	5.1		4.0	6.0	102.0
Cadmium				25.0	25.0		20.0	30.0	100.0
Calcium				2000.0	2066.0		1600.0	2400.0	103.3
Chromium				20.0	20.3		16.0	24.0	101.5
Cobalt				50.0	49.4		40.0	60.0	98.8
Copper				25.0	26.3		20.0	30.0	105.2
Iron				100.0	100.9		80.0	120.0	100.9
Lead				22.0	21.9		17.6	26.4	99.5
Magnesium				2000.0	2007.0		1600.0	2400.0	100.4
Manganese				50.0	50.1		40.0	60.0	100.2
Nickel				50.0	49.4		40.0	60.0	98.8
Potassium				2000.0	2026.0		1600.0	2400.0	101.3
Selenium				21.0	19.3		16.8	25.2	91.9
Silver				25.0	25.6		20.0	30.0	102.4
Sodium				2000.0	2087.0		1600.0	2400.0	104.4
Thallium				25.0	23.7		20.0	30.0	94.8
Vanadium				50.0	50.9		40.0	60.0	101.8
Zinc				50.0	50.0		40.0	60.0	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Cyanide				6.0	5.9		5.4	6.6	98.3

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	5.9		5.4 6.6	98.3

9
ICP SERIAL DILUTIONS

SAMPLE NO.

GRANSTPSD53L

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	106500.00		110500.00		3.8		P
Antimony	21.05	B	23.50	U	100.0		P
Arsenic	1355.00		1452.00		7.2		P
Barium	1458.00		1481.00		1.6		P
Beryllium	2.54	B	3.87	B	52.4		P
Cadmium	10.02		10.80	B	7.8		P
Calcium	22840.00		23820.00	B	4.3		P
Chromium	108.30		102.90		5.0		P
Cobalt	72.63		76.71	B	5.6		P
Copper	189.50		186.10		1.8		P
Iron	226000.00		235300.00		4.1		P
Lead	399.50		433.70		8.6		P
Magnesium	50030.00		51900.00		3.7		P
Manganese	3807.00		3960.00		4.0		P
Nickel	65.25		82.25	B	26.1		P
Potassium	29690.00		32680.00		10.1	E	P
Selenium	4.59	B	8.50	U	100.0		P
Silver	18.46		22.59	B	22.4		P
Sodium	472.70	U	2363.50	U			P
Thallium	7.21	B	28.50	U	100.0		P
Vanadium	544.50		561.60		3.1		P
Zinc	1563.00		1664.00		6.5		P

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: Date: 7/1/2003

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	10.0	AS

Comments:

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: _____ Date: 7/1/2003

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments: _____

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	23.6	P
Antimony	206.838		60	4.7	P
Arsenic	189.042		10	4.8	P
Barium	493.409		200	5.9	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.6	P
Calcium	317.933		5000	182.1	P
Chromium	267.716		10	1.4	P
Cobalt	228.616		50	2.0	P
Copper	324.754		25	2.4	P
Iron	271.441		100	33.3	P
Lead	220.353		3	1.3	P
Magnesium	279.078		5000	178.3	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.1	P
Potassium	766.491		5000	393.0	P
Silver	328.068		10	2.2	P
Sodium	330.232		5000	472.7	P
Thallium	190.864		10	5.7	P
Vanadium	292.402		50	2.0	P
Zinc	213.856		20	1.0	P

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Lead	220.353		3	1.5	P
Selenium	196.026		5	1.7	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ag
Aluminum	308.215	0.0000000	0.0000000	-0.0002180	0.0000000	0.0000000
Antimony	206.838	0.0000080	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000170	0.0000000	-0.0000590	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Cadmium	226.502	0.0000010	0.0000000	0.0000590	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000100	0.0000000	-0.0000200	0.0000060	0.0000000
Cobalt	228.616	0.0000000	0.0000000	-0.0000400	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0001740	0.0000000	0.0000000	-0.001587	0.0000000
Lead	220.353	-0.0000300	0.0000000	0.0000550	-0.000006	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000520	0.0000000	0.0000000
Phosphorus	178.287	0.0000070	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	-0.0007500	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000240	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000080	0.0000000	-0.0001100	0.0000000	0.0000000
Tin	189.989	0.0000090	0.0000000	-0.0000750	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000140	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000030	0.0000040	0.0000000
Zinc	206.200	0.0000300	0.0000000	-0.0000600	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: As	B	Be	Cd	Co
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	-0.0082960
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001900
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0002350
Tin	189.989	0.0000000	0.0000000	-0.0004370	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Na	Ni
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0078510	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	-0.0002840	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001750
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0008900	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000800
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	-0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0044570	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: Pb	Sb	Se	Si	Tl
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0003500	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0003900	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.215	0.0173200	0.0000000			
Antimony	206.838	-0.0012700	0.0000000			
Arsenic	189.042	-0.0002800	0.0000000			
Barium	493.409	0.0000000	0.0000000			
Beryllium	313.042	0.0004800	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000000	0.0000000			
Calcium	317.933	0.0000000	0.0000000			
Chromium	267.716	-0.0003600	0.0000000			
Cobalt	228.616	0.0000000	0.0000000			
Copper	324.754	0.0000000	0.0000000			
Iron	271.441	0.0081200	0.0000000			
Lead	220.353	-0.0000850	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Manganese	257.610	0.0000000	0.0000000			
Molybdenum	202.030	0.0000000	0.0000000			
Nickel	231.604	0.0000000	0.0000000			
Phosphorus	178.287	0.0000000	0.0164830			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.026	0.0000000	0.0000000			
Silver	328.068	-0.0003350	0.0000000			
Sodium	330.232	-0.1479730	0.6581000			
Strontium	421.552	0.0000000	0.0000000			
Thallium	190.864	0.0014900	0.0000000			
Tin	189.989	0.0000000	0.0000000			
Titanium	334.941	0.0000000	0.0000000			
Vanadium	292.402	0.0000000	0.0000000			
Zinc	206.200	-0.0004730	0.0000000			

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	10000.0	P
Iron	10.00	1000000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	10000.0	P
Potassium	10.00	100000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	5000.0	P

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Lead	10.00	50000.0	P
Selenium	10.00	5000.0	P

Comments: _____

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
AJAXPDSSD06	7/30/2003	1.07	50.0
AJAXSTPSD04	7/30/2003	1.32	50.0
AJAXSTRSD04	7/30/2003	1.09	50.0
AJAXSTSSD52	7/30/2003	1.08	50.0
GRANSTPSD54	7/30/2003	1.21	50.0
GRANSTRSD53	7/30/2003	1.03	50.0
GRANSTRSD54	7/30/2003	1.05	50.0
ICV	7/30/2003	50.0	50.0
LCS0730B	7/30/2003	1.00	50.0
LCSD0730B	7/30/2003	1.00	50.0
MAGNPDSSD11	7/30/2003	1.10	50.0
MAGNSTPSD01	7/30/2003	1.03	50.0
MAGNSTPSD03	7/30/2003	1.13	50.0
PBS0730B	7/30/2003	1.00	50.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
GRANSTPSD53	7/31/2003	1.11	50.0
GRANSTPSD53D	7/31/2003	1.10	50.0
GRANSTPSD53S	7/31/2003	1.11	50.0
ICV	7/31/2003	50.0	50.0
LCSD0731C	7/31/2003	1.00	50.0
PBS0731C	7/31/2003	1.07	50.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: AS

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLUESTPSD05	8/1/2003	1.16	50.0
BLUESTPSD05100	8/1/2003	1.33	50.0
ICV	8/1/2003	50.0	50.0
LCS0801A	8/1/2003	1.00	50.0
LCSD0801A	8/1/2003	1.00	50.0
PBS0801A	8/1/2003	1.02	50.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
BLUESTPSD06	8/1/2003	1.02	50.0
BLUESTPSD07	8/1/2003	1.03	50.0
BLUESTPSD08	8/1/2003	1.11	50.0
BLUESTRSD08	8/1/2003	1.06	50.0
ICV	8/1/2003	50.0	50.0
LCS0801B	8/1/2003	1.00	50.0
LCSD0801B	8/1/2003	1.00	50.0
PBS0801B	8/1/2003	1.01	50.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXPDSSD06	8/8/2003	0.67	100.0
AJAXSTPSD04	8/8/2003	0.60	100.0
AJAXSTRSD04	8/8/2003	0.62	100.0
AJAXSTSSD52	8/8/2003	0.62	100.0
GRANSTPSD53	8/8/2003	0.61	100.0
GRANSTPSD53D	8/8/2003	0.61	100.0
GRANSTPSD53S	8/8/2003	0.64	100.0
GRANSTPSD54	8/8/2003	0.66	100.0
GRANSTRSD53	8/8/2003	0.64	100.0
GRANSTRSD54	8/8/2003	0.60	100.0
LCSS0808B	8/8/2003	1.00	100.0
MAGNPDSSD11	8/8/2003	0.62	100.0
MAGNSTPSD01	8/8/2003	0.68	100.0
MAGNSTPSD02	8/8/2003	0.63	100.0
MAGNSTPSD03	8/8/2003	0.66	100.0
PBS0808B	8/8/2003	0.60	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLUESTPSD05	8/13/2003	0.64	100.0
BLUESTPSD05100	8/13/2003	0.66	100.0
BLUESTPSD06	8/13/2003	0.64	100.0
BLUESTPSD07	8/13/2003	0.61	100.0
BLUESTPSD08	8/13/2003	0.67	100.0
BLUESTRSD08	8/13/2003	0.60	100.0
LCSDS0813A	8/13/2003	1.00	100.0
LCSS0813A	8/13/2003	1.00	100.0
PBS0813A	8/13/2003	0.60	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
BLUESTPSD05	8/16/2003	1.24	100.0
BLUESTPSD05100	8/16/2003	1.36	100.0
BLUESTPSD06	8/16/2003	1.11	100.0
BLUESTPSD07	8/16/2003	1.30	100.0
BLUESTPSD08	8/16/2003	1.25	100.0
BLUESTRSD08	8/16/2003	1.18	100.0
LCSDS0816A	8/16/2003	1.00	100.0
LCSS0816A	8/16/2003	1.00	100.0
PBS0816A	8/16/2003	1.00	100.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
AJAXPDSSD06	8/16/2003	1.19	100.0
AJAXSTPSD04	8/16/2003	1.11	100.0
AJAXSTRSD04	8/16/2003	1.17	100.0
AJAXSTSSD52	8/16/2003	1.25	100.0
GRANSTPSD53	8/16/2003	1.33	100.0
GRANSTPSD53D	8/16/2003	1.19	100.0
GRANSTPSD53S	8/16/2003	1.15	100.0
GRANSTPSD54	8/16/2003	1.21	100.0
GRANSTRSD53	8/16/2003	1.28	100.0
GRANSTRSD54	8/16/2003	1.35	100.0
LCSS0816C	8/16/2003	1.00	100.0
MAGNPDSSD11	8/16/2003	1.32	100.0
MAGNSTPSD01	8/16/2003	1.35	100.0
MAGNSTPSD02	8/16/2003	1.23	100.0
MAGNSTPSD03	8/16/2003	1.23	100.0
PBS0816C	8/16/2003	1.00	100.0

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/30/2003 End Date: 7/30/2003

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1650																								X
S10	1.00	1651																								X
S30	1.00	1652																								X
S50	1.00	1653																								X
S100	1.00	1654																								X
S200	1.00	1655																								X
S300	1.00	1656																								X
ICV	1.00	1658																								X
ICB	1.00	1659																								X
LRS	1.00	1700																								X
LRS	1.00	1701																								X
CCV	1.00	1702																								X
CCB	1.00	1703																								X
ZZZZZZ	1.00	1704																								
PBS0730B	1.00	1705																								X
LCS0730B	1.00	1706																								X
ZZZZZZ	1.00	1707																								
ZZZZZZ	1.00	1708																								
ZZZZZZ	1.00	1709																								
ZZZZZZ	1.00	1710																								
ZZZZZZ	1.00	1711																								
ZZZZZZ	1.00	1711																								
ZZZZZZ	1.00	1712																								
CCV	1.00	1713																								X
CCB	1.00	1714																								X
ZZZZZZ	1.00	1715																								
ZZZZZZ	1.00	1716																								
AJAXSTPSD04	1.00	1717																								X
AJAXPDSSD06	1.00	1718																								X
AJAXSTRSD04	1.00	1719																								X
AJAXSTSSD52	1.00	1720																								X
GRANSTRSD54	1.00	1721																								X
GRANSTPSD54	1.00	1722																								X
MAGNSTPSD03	1.00	1723																								X
MAGNPDSSD11	1.00	1724																								X
CCV	1.00	1725																								X
CCB	1.00	1726																								X
MAGNSTPSD02	1.00	1727																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/30/2003 End Date: 7/30/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MAGNSTPSD01	1.00	1728																								X
GRANSTRSD53	1.00	1729																								X
LCSD0730B	1.00	1730																								X
CCV	1.00	1731																								X
CCB	1.00	1732																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/31/2003 End Date: 7/31/2003

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1728																								X
S10	1.00	1729																								X
S30	1.00	1730																								X
S50	1.00	1731																								X
S100	1.00	1732																								X
S200	1.00	1733																								X
S300	1.00	1734																								X
ICV	1.00	1735																								X
ICB	1.00	1736																								X
LRS	1.00	1737																								X
LRS	1.00	1738																								X
CCV	1.00	1739																								X
CCB	1.00	1740																								X
ZZZZZZ	1.00	1741																								
PBS0731C	1.00	1742																								X
LCSD0731C	1.00	1743																								X
GRANSTPSD53	1.00	1744																								X
GRANSTPSD53D	1.00	1745																								X
GRANSTPSD53S	1.00	1746																								X
ZZZZZZ	1.00	1747																								
ZZZZZZ	1.00	1748																								
ZZZZZZ	1.00	1749																								
ZZZZZZ	1.00	1750																								
CCV	1.00	1751																								X
CCB	1.00	1752																								X
ZZZZZZ	1.00	1753																								
ZZZZZZ	1.00	1754																								
ZZZZZZ	1.00	1755																								
ZZZZZZ	1.00	1756																								
ZZZZZZ	1.00	1757																								
ZZZZZZ	1.00	1758																								
ZZZZZZ	1.00	1759																								
ZZZZZZ	1.00	1800																								
ZZZZZZ	1.00	1801																								
ZZZZZZ	1.00	1802																								
CCV	1.00	1803																								X
CCB	1.00	1803																								X
GRANSTPSD53A	1.00	1804																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/31/2003 End Date: 7/31/2003

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1805																								
ZZZZZZ	1.00	1806																								
CCV	1.00	1807																								X
CCB	1.00	1808																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 8/1/2003 End Date: 8/1/2003

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1352																								X
S10	1.00	1353																								X
S30	1.00	1354																								X
S50	1.00	1355																								X
S100	1.00	1356																								X
S200	1.00	1357																								X
S300	1.00	1358																								X
ICV	1.00	1400																								X
ICB	1.00	1401																								X
LRS	1.00	1402																								X
LRS	1.00	1403																								X
CCV	1.00	1404																								X
CCB	1.00	1405																								X
ZZZZZZ	1.00	1406																								
PBS0801A	1.00	1407																								X
LCS0801A	1.00	1408																								X
LCSD0801A	1.00	1409																								X
ZZZZZZ	1.00	1410																								
ZZZZZZ	1.00	1411																								
ZZZZZZ	1.00	1412																								
ZZZZZZ	1.00	1413																								
ZZZZZZ	1.00	1414																								
ZZZZZZ	1.00	1414																								
CCV	1.00	1415																								X
CCB	1.00	1416																								X
ZZZZZZ	1.00	1417																								
ZZZZZZ	1.00	1418																								
ZZZZZZ	1.00	1419																								
ZZZZZZ	1.00	1420																								
ZZZZZZ	1.00	1421																								
ZZZZZZ	1.00	1422																								
ZZZZZZ	1.00	1423																								
ZZZZZZ	1.00	1424																								
ZZZZZZ	1.00	1425																								
ZZZZZZ	1.00	1426																								
CCV	1.00	1427																								X
CCB	1.00	1428																								X
ZZZZZZ	1.00	1429																								

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 8/1/2003 End Date: 8/1/2003

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1430																								
BLUESTPSD05	1.00	1431																								X
BLUESTPSD05100	1.00	1432																								X
CCV	1.00	1433																								X
CCB	1.00	1434																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 8/1/2003 End Date: 8/1/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1707																								X
S10	1.00	1708																								X
S30	1.00	1709																								X
S50	1.00	1710																								X
S100	1.00	1711																								X
S200	1.00	1712																								X
S300	1.00	1713																								X
ICV	1.00	1715																								X
ICB	1.00	1716																								X
LRS	1.00	1717																								X
LRS	1.00	1718																								X
CCV	1.00	1719																								X
CCB	1.00	1720																								X
ZZZZZZ	1.00	1721																								
PBS0801B	1.00	1722																								X
LCS0801B	1.00	1723																								X
LCSD0801B	1.00	1724																								X
ZZZZZZ	1.00	1724																								
ZZZZZZ	1.00	1725																								
ZZZZZZ	1.00	1726																								
ZZZZZZ	1.00	1727																								
ZZZZZZ	1.00	1728																								
ZZZZZZ	1.00	1729																								
CCV	1.00	1730																								X
CCB	1.00	1731																								X
ZZZZZZ	1.00	1732																								
ZZZZZZ	1.00	1733																								
ZZZZZZ	1.00	1734																								
ZZZZZZ	1.00	1735																								
BLUESTPSD06	1.00	1736																								X
BLUESTRSD08	1.00	1737																								X
BLUESTPSD08	1.00	1738																								X
BLUESTPSD07	1.00	1739																								X
ZZZZZZ	1.00	1740																								
ZZZZZZ	1.00	1741																								
CCV	1.00	1742																								X
CCB	1.00	1743																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/30/2003 End Date: 8/30/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0107													X						X									
S	1.00	0111																												
S	1.00	0114													X						X									
S	1.00	0118																												
LRS	1.00	0123													X						X									
LRS	1.00	0127													X						X									
LRS	1.00	0131													X						X									
ICV	1.00	0135													X						X									
ICB	1.00	0139													X						X									
ICSA	1.00	0143													X						X									
ICSAB	1.00	0147													X						X									
CRI	1.00	0152													X						X									
CCV	1.00	0156													X						X									
CCB	1.00	0200													X						X									
PBS0816C	1.00	0204													X						X									
LCSS0816C	1.00	0208													X						X									
AJAXSTPSD04	1.00	0212													X						X									
AJAXPDSSD06	1.00	0216													X						X									
AJAXSTRSD04	1.00	0220													X						X									
AJAXSTSSD52	1.00	0224													X						X									
GRANSTRSD54	1.00	0228													X						X									
GRANSTPSD54	1.00	0233													X						X									
MAGNSTPSD03	1.00	0237													X						X									
MAGNPDSSD11	1.00	0241													X						X									
CCV	1.00	0245													X						X									
CCB	1.00	0249													X						X									
MAGNSTPSD02	1.00	0253													X						X									
MAGNSTPSD01	1.00	0257													X						X									
GRANSTPSD53	1.00	0301													X						X									
GRANSTPSD53L	5.00	0305													X						X									
GRANSTPSD53A	1.00	0310													X						X									
GRANSTPSD53D	1.00	0314													X						X									
GRANSTPSD53S	1.00	0318													X						X									
GRANSTRSD53	1.00	0322													X						X									
PBS0816A	1.00	0326																			X									
LCSS0816A	1.00	0330																			X									
CCV	1.00	0334													X						X									
CCB	1.00	0338													X						X									

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/30/2003 End Date: 8/30/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
LCSDS0816A	1.00	0342																		X						
BLUESTPSD05	1.00	0346																		X						
BLUESTPSD05100	1.00	0350																		X						
BLUESTPSD06	1.00	0355																		X						
BLUESTRSD08	1.00	0359																		X						
BLUESTPSD08	1.00	0403																		X						
BLUESTPSD07	1.00	0407																		X						
ICSA	1.00	0411												X						X						
ICSAB	1.00	0415												X						X						
CRI	1.00	0419												X						X						
CCV	1.00	0423												X						X						
CCB	1.00	0428												X						X						

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/7/2003 End Date: 9/7/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	1452		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
S	1.00	1457		X						X				X		X				X			X							
S	1.00	1501			X	X									X									X						
S	1.00	1505					X	X	X		X	X	X				X		X			X			X	X				
LRS	1.00	1510		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
LRS	1.00	1515		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
LRS	1.00	1521		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
ICV	1.00	1526		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
ICB	1.00	1531		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
ICSA	1.00	1536		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
ICSAB	1.00	1541		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
CRI	1.00	1546		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
CCV	1.00	1551		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
CCB	1.00	1556		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
PBS0816C	1.00	1602		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
LCSS0816C	1.00	1607		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
AJAXSTPSD04	1.00	1612		X	X	X	X	X	X	X	X	X	X	X		X			X	X		X	X	X	X	X				
AJAXPDSSD06	1.00	1617		X	X	X	X	X	X	X	X	X	X			X			X	X		X	X		X					
AJAXSTRSD04	1.00	1622		X	X		X	X	X	X	X	X	X	X		X			X	X		X	X	X	X	X				
AJAXSTSSD52	1.00	1627		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
GRANSTRSD54	1.00	1632		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
GRANSTPSD54	1.00	1637		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
MAGNSTPSD03	1.00	1642		X	X		X	X	X	X	X	X	X	X		X			X	X		X	X	X	X	X				
MAGNPDSSD11	1.00	1647		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
CCV	1.00	1652		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
CCB	1.00	1657		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
MAGNSTPSD02	1.00	1702		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
MAGNSTPSD01	1.00	1707		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
GRANSTPSD53	1.00	1712		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
GRANSTPSD53L	5.00	1717		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
GRANSTPSD53A	1.00	1722		X	X	X	X	X	X		X	X	X	X			X		X			X		X	X	X				
GRANSTPSD53D	1.00	1727		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
GRANSTPSD53S	1.00	1732		X	X	X	X	X	X		X	X	X	X			X		X			X		X	X	X				
GRANSTRSD53	1.00	1737		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X				
PBS0816A	1.00	1742		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
LCSS0816A	1.00	1747		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
CCV	1.00	1752		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
CCB	1.00	1758		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/7/2003 End Date: 9/7/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
LCSDS0816A	1.00	1803		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
BLUESTPSD05	1.00	1808		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
BLUESTPSD05100	1.00	1813		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
BLUESTPSD06	1.00	1818		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
BLUESTRSD08	1.00	1823		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
BLUESTPSD08	1.00	1828		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
BLUESTPSD07	1.00	1833		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
AJAXSTPSD04	10.00	1838															X										
AJAXPDSSD06	10.00	1843												X										X		X	
AJAXSTRSD04	10.00	1848				X											X										
CCV	1.00	1853		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCB	1.00	1858		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MAGNSTPSD03	10.00	1903				X											X										
ICSA	1.00	1908		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
ICSAB	1.00	1913		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CRI	1.00	1919		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCV	1.00	1924		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCB	1.00	1929		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/8/2003 End Date: 9/9/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2204															X										
S	1.00	2209																									
S	1.00	2213																									
S	1.00	2217															X										
LRS	1.00	2223															X										
LRS	1.00	2228															X										
LRS	1.00	2233															X										
ICV	1.00	2238															X										
ICB	1.00	2243															X										
ICSA	1.00	2248															X										
ICSAB	1.00	2254															X										
CRI	1.00	2259															X										
CRILOW	1.00	2304															X										
CCV	1.00	2309															X										
CCB	1.00	2314															X										
ZZZZZZ	1.00	2319																									
ZZZZZZ	1.00	2324																									
ZZZZZZ	1.00	2329																									
ZZZZZZ	5.00	2334																									
ZZZZZZ	1.00	2339																									
ZZZZZZ	1.00	2344																									
ZZZZZZ	5.00	2349																									
ZZZZZZ	1.00	2354																									
ZZZZZZ	1.00	2359																									
ZZZZZZ	1.00	0004																									
CCV	1.00	0009															X										
CCB	1.00	0015															X										
ZZZZZZ	5.00	0020																									
ZZZZZZ	1.00	0025																									
ZZZZZZ	1.00	0030																									
AJAXPDSSD06	100.00	0035															X										
ZZZZZZ	1.00	0040																									
ZZZZZZ	1.00	0045																									
ZZZZZZ	1.00	0050																									
ZZZZZZ	1.00	0055																									
ZZZZZZ	5.00	0100																									
ZZZZZZ	1.00	0105																									
CCV	1.00	0110															X										

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/8/2003 End Date: 9/9/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	0115															X										
ZZZZZZ	1.00	0120																									
ZZZZZZ	5.00	0125																									
ZZZZZZ	1.00	0130																									
ZZZZZZ	1.00	0135																									
ZZZZZZ	5.00	0140																									
ZZZZZZ	1.00	0145																									
ICSA	1.00	0150															X										
ICSAB	1.00	0156															X										
CRI	1.00	0201															X										
CRILOW	1.00	0206															X										
CCV	1.00	0211															X										
CCB	1.00	0216															X										

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/14/2003 End Date: 8/14/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1016																X									
S0.2	1.00	1018																X									
S0.5	1.00	1019																X									
S1	1.00	1021																X									
S5	1.00	1023																X									
S10	1.00	1025																X									
ICV	1.00	1027																X									
ICB	1.00	1029																X									
CRA	1.00	1031																X									
CCV	1.00	1033																X									
CCB	1.00	1035																X									
PBS0808B	1.00	1036																X									
LCSS0808B	1.00	1038																X									
ZZZZZZ	1.00	1040																									
ZZZZZZ	1.00	1042																									
ZZZZZZ	1.00	1044																									
ZZZZZZ	1.00	1046																									
ZZZZZZ	1.00	1048																									
ZZZZZZ	1.00	1049																									
ZZZZZZ	1.00	1051																									
CCV	1.00	1053																X									
CCB	1.00	1055																X									
ZZZZZZ	1.00	1057																									
ZZZZZZ	1.00	1058																									
ZZZZZZ	1.00	1100																									
AJAXSTPSD04	1.00	1102																X									
AJAXPDSSD06	1.00	1104																X									
AJAXSTRSD04	1.00	1105																X									
AJAXSTSSD52	1.00	1107																X									
GRANSTRSD54	1.00	1109																X									
GRANSTPSD54	1.00	1111																X									
CCV	1.00	1113																X									
CCB	1.00	1115																X									
MAGNSTPSD03	1.00	1116																X									
MAGNPDSSD11	1.00	1118																X									
MAGNSTPSD02	1.00	1120																X									
MAGNSTPSD01	1.00	1122																X									
GRANSTPSD53	1.00	1124																X									

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/14/2003 End Date: 8/14/2003

EPA Sample No.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
GRANSTPSD53D	1.00	1126																X								
GRANSTPSD53S	1.00	1128																X								
GRANSTRSD53	1.00	1130																X								
ZZZZZZ	1.00	1131																								
CCV	1.00	1133																X								
CCB	1.00	1135																X								

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/14/2003 End Date: 8/14/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1447																X									
S0.2	1.00	1449																X									
S0.5	1.00	1451																X									
S1	1.00	1453																X									
S5	1.00	1454																X									
S10	1.00	1456																X									
ICV	1.00	1458																X									
ICB	1.00	1500																X									
CRA	1.00	1501																X									
CCV	1.00	1503																X									
CCB	1.00	1505																X									
PBS0813A	1.00	1507																X									
LCSS0813A	1.00	1508																X									
LCSDS0813A	1.00	1510																X									
BLUESTPSD05	1.00	1512																X									
BLUESTPSD05100	1.00	1514																X									
BLUESTPSD06	1.00	1516																X									
BLUESTRSD08	1.00	1518																X									
BLUESTPSD08	1.00	1519																X									
BLUESTPSD07	1.00	1521																X									
CCV	1.00	1523																X									
CCB	1.00	1525																X									

SEVERN TRENT STL

Geotechnical Analysis
Sample Data Summary Package

EASEAT SDG # GCD002

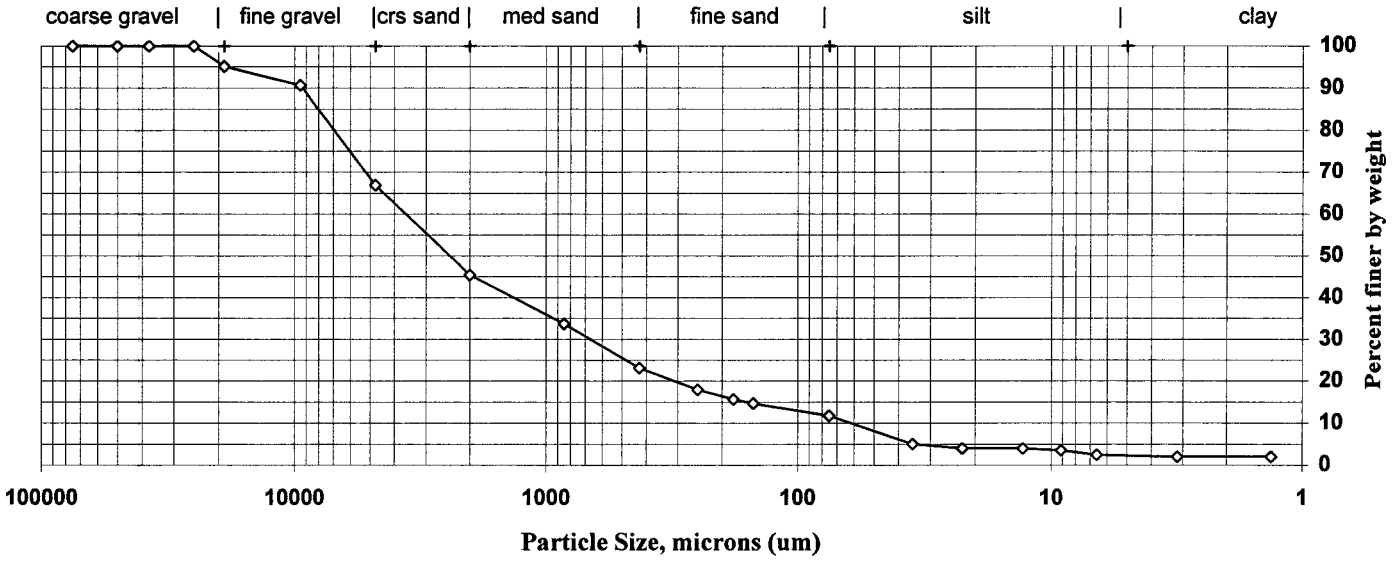
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535363 **Sample ID:** PSD04

Percent Solids:	83.8%		**Maximum Particle Size:**	25 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	95.1	4.9
3/8 inch	9500	90.7	4.4
#4	4750	66.9	23.8
#10	2000	45.4	21.4
#20	850	33.7	11.8
#40	425	23.1	10.6
#60	250	18.0	5.1
#80	180	15.7	2.3
#100	150	14.7	1.0
#200	75	11.8	2.9
Hydrometer	35.2	5.0	6.8
|	22.4	4.0	1.1
|	13.0	4.0	0.0
|	9.1	3.5	0.4
|	6.6	2.4	1.1
|	3.1	2.0	0.4
V	1.3	2.0	0.0

Soil Classification	Percent of Total Sample
Gravel	33.1
Sand	55.1
Coarse Sand	21.4
Medium Sand	22.4
Fine Sand	11.3
Silt	9.4
Clay	2.4

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

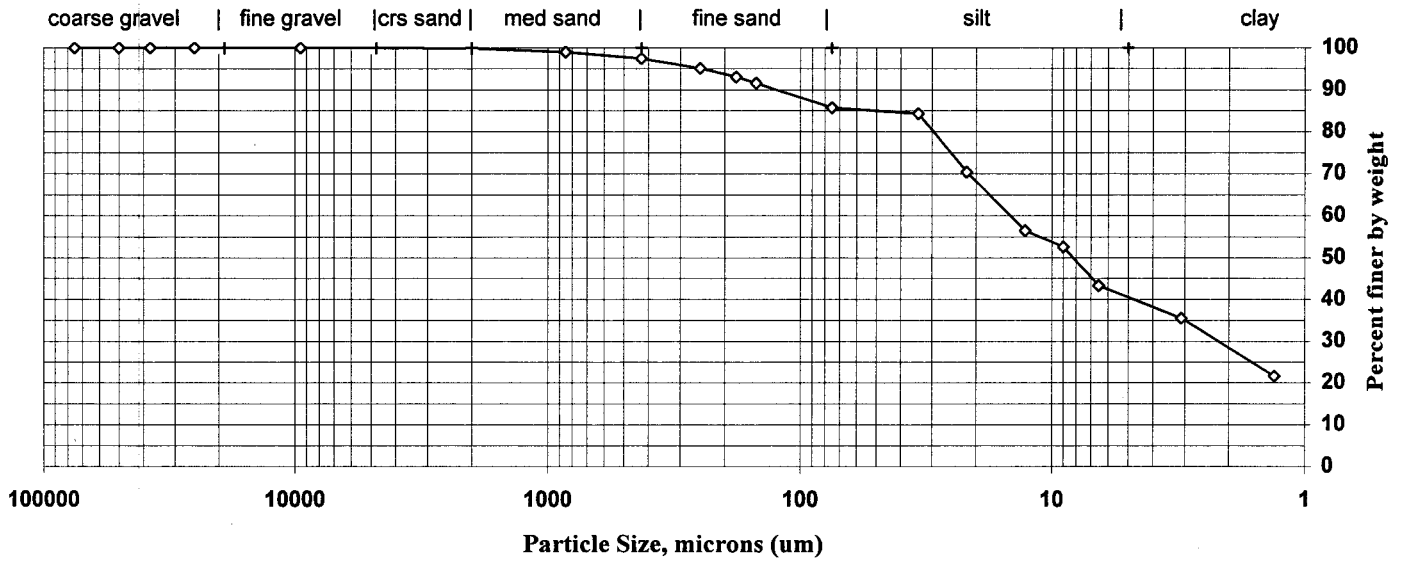
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535364 **Sample ID:** SSD06

Percent Solids:	32.8%		**Maximum Particle Size:**	Crs sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	0.9%		**Hardness (> #10):**	soft	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.9	0.1
#20	850	99.0	0.9
#40	425	97.5	1.5
#60	250	95.1	2.4
#80	180	93.1	2.0
#100	150	91.6	1.4
#200	75	85.7	5.9
Hydrometer	33.9	84.3	1.4
|	21.8	70.4	13.9
|	12.8	56.5	13.9
|	9.0	52.6	3.9
|	6.5	43.3	9.3
|	3.1	35.6	7.7
V	1.3	21.7	13.9

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	14.3
Coarse Sand	0.1
Medium Sand	2.4
Fine Sand	11.8
Silt	42.4
Clay	43.3

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

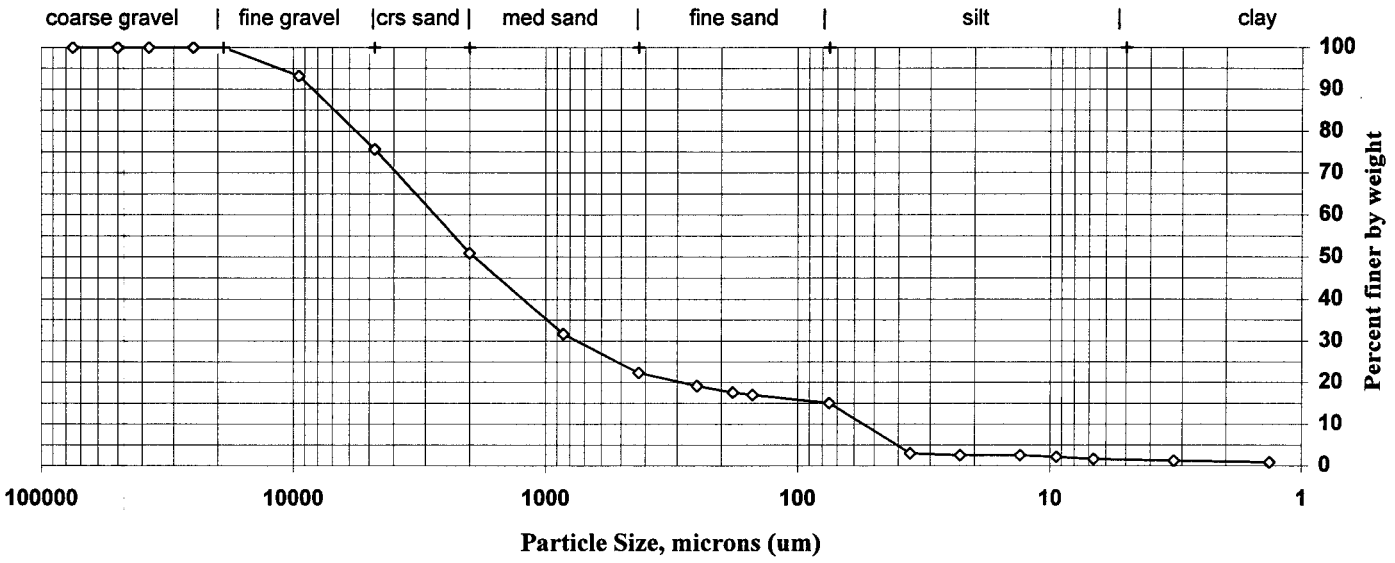
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535365 **Sample ID:** RSD04

Percent Solids:	83.7%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	93.2	6.8
#4	4750	75.6	17.6
#10	2000	50.9	24.7
#20	850	31.6	19.3
#40	425	22.3	9.3
#60	250	19.2	3.1
#80	180	17.7	1.5
#100	150	17.1	0.6
#200	75	15.0	2.0
Hydrometer	35.9	3.0	12.0
|	22.8	2.5	0.5
|	13.2	2.5	0.0
|	9.4	2.1	0.4
|	6.7	1.6	0.5
|	3.2	1.2	0.4
V	1.3	0.8	0.4

Soil Classification	Percent of Total Sample
Gravel	24.4
Sand	60.6
Coarse Sand	24.7
Medium Sand	28.6
Fine Sand	7.3
Silt	13.4
Clay	1.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

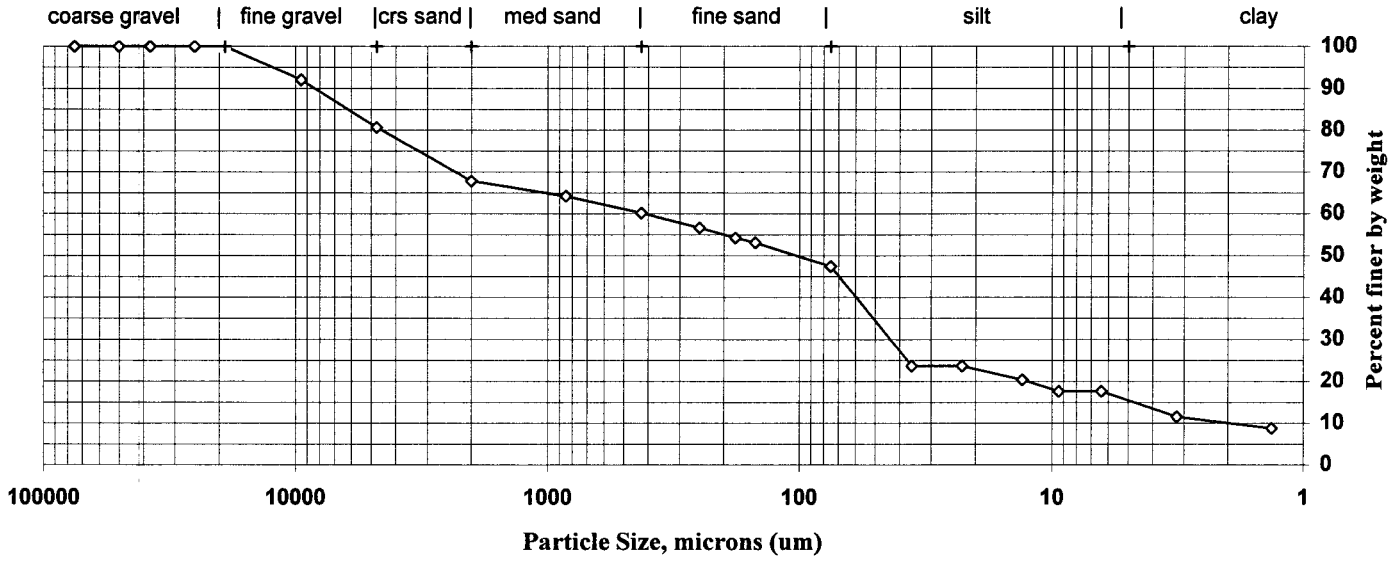
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535366 **Sample ID:** SSD52

Percent Solids:	26.6%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	7.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	92.1	7.9
#4	4750	80.7	11.4
#10	2000	67.8	12.8
#20	850	64.2	3.6
#40	425	60.2	4.0
#60	250	56.6	3.6
#80	180	54.2	2.4
#100	150	53.0	1.2
#200	75	47.4	5.6
Hydrometer	35.7	23.7	23.7
|	22.6	23.7	0.0
|	13.1	20.4	3.3
|	9.4	17.6	2.8
|	6.4	17.6	0.0
|	3.2	11.6	6.1
V	1.3	8.8	2.8

Soil Classification	Percent of Total Sample
Gravel	19.3
Sand	33.3
Coarse Sand	12.8
Medium Sand	7.6
Fine Sand	12.8
Silt	29.8
Clay	17.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

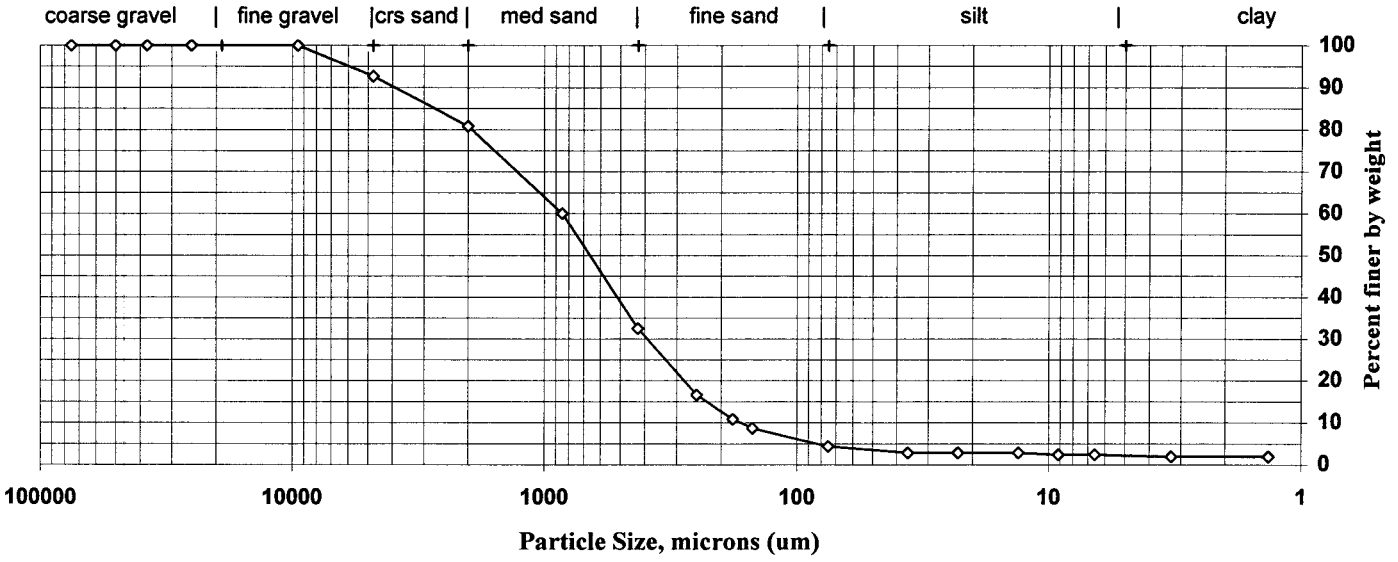
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535367 **Sample ID:** RSD54

Percent Solids:	81.2%		**Maximum Particle Size:**	9.5 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	92.6	7.4
#10	2000	80.8	11.8
#20	850	60.0	20.8
#40	425	32.5	27.5
#60	250	16.6	15.9
#80	180	10.9	5.7
#100	150	8.8	2.1
#200	75	4.4	4.4
Hydrometer	36.0	2.8	1.5
|	22.8	2.8	0.0
|	13.2	2.8	0.0
|	9.1	2.4	0.5
|	6.6	2.4	0.0
|	3.3	1.9	0.5
V	1.3	1.9	0.0

Soil Classification	Percent of Total Sample
Gravel	7.4
Sand	88.3
Coarse Sand	11.8
Medium Sand	48.3
Fine Sand	28.1
Silt	2.0
Clay	2.4

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

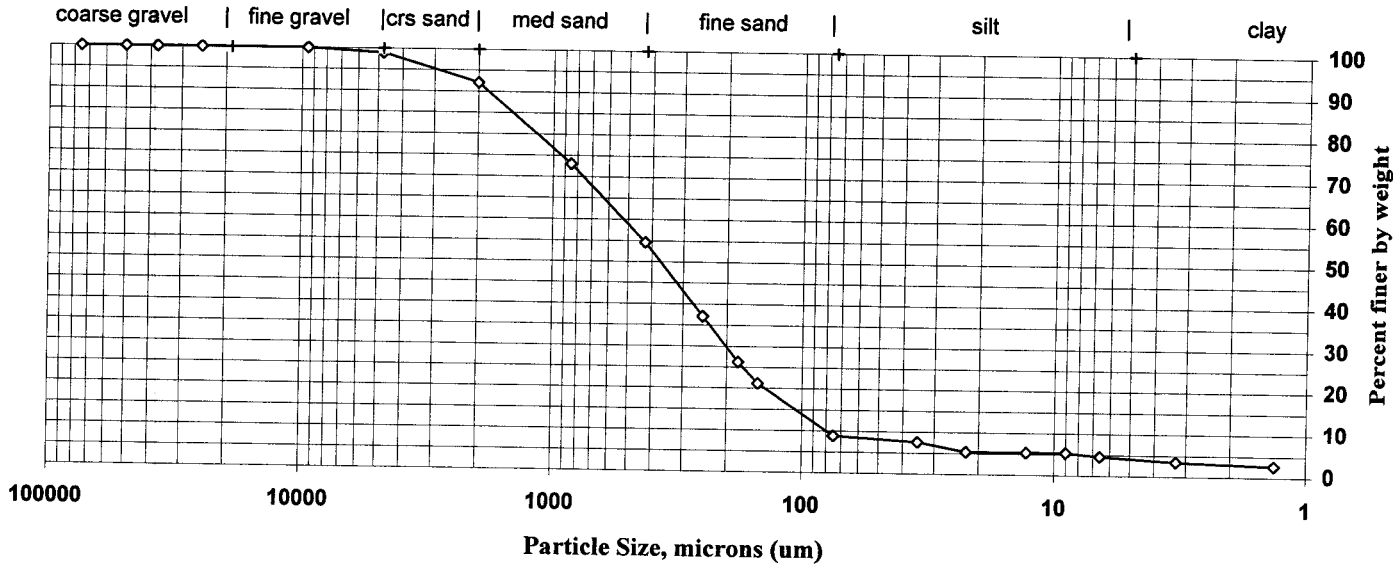
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535368 **Sample ID:** PSD54

Percent Solids:	70.4%		**Maximum Particle Size:**	9.5 mm
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular
Non-soil mass:	0.1%		**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	98.9	1.1
#10	2000	92.1	6.9
#20	850	73.0	19.1
#40	425	54.6	18.4
#60	250	37.1	17.5
#80	180	26.2	10.9
#100	150	21.2	5.0
#200	75	8.9	12.3
Hydrometer	35.0	7.5	1.4
|	22.4	5.4	2.2
|	13.0	5.4	0.0
|	9.0	5.4	0.0
|	6.6	4.6	0.7
|	3.3	3.4	1.2
V	1.3	2.7	0.7

Soil Classification	Percent of Total Sample
Gravel	1.1
Sand	90.0
Coarse Sand	6.9
Medium Sand	37.5
Fine Sand	45.7
Silt	4.3
Clay	4.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

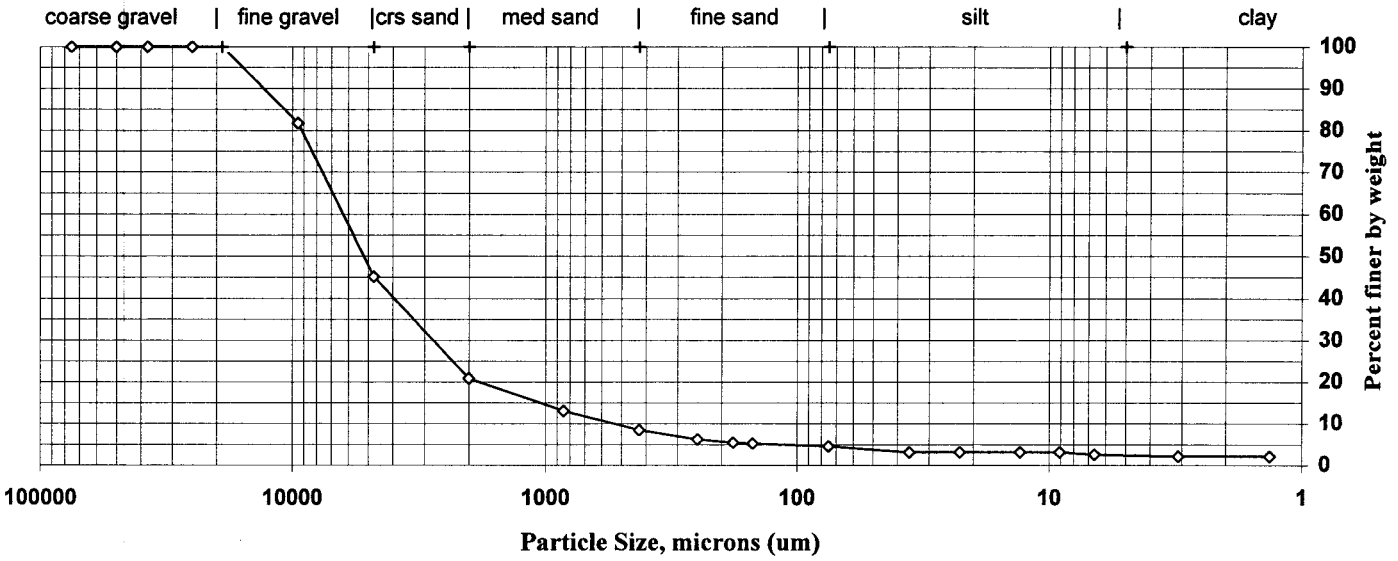
Particle Size of Soils by ASTM D422

Sample preparation method: D2217

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535369 **Sample ID:** PSD03

Percent Solids:	87.1%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	81.7	18.3
#4	4750	45.2	36.5
#10	2000	20.8	24.3
#20	850	13.1	7.8
#40	425	8.5	4.6
#60	250	6.3	2.2
#80	180	5.5	0.8
#100	150	5.3	0.3
#200	75	4.6	0.6
Hydrometer	35.8	3.2	1.5
|	22.6	3.2	0.0
|	13.1	3.2	0.0
|	9.1	3.2	0.0
|	6.6	2.6	0.6
|	3.1	2.2	0.4
V	1.3	2.2	0.0

Soil Classification	Percent of Total Sample
Gravel	54.8
Sand	40.6
Coarse Sand	24.3
Medium Sand	12.4
Fine Sand	3.8
Silt	2.0
Clay	2.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

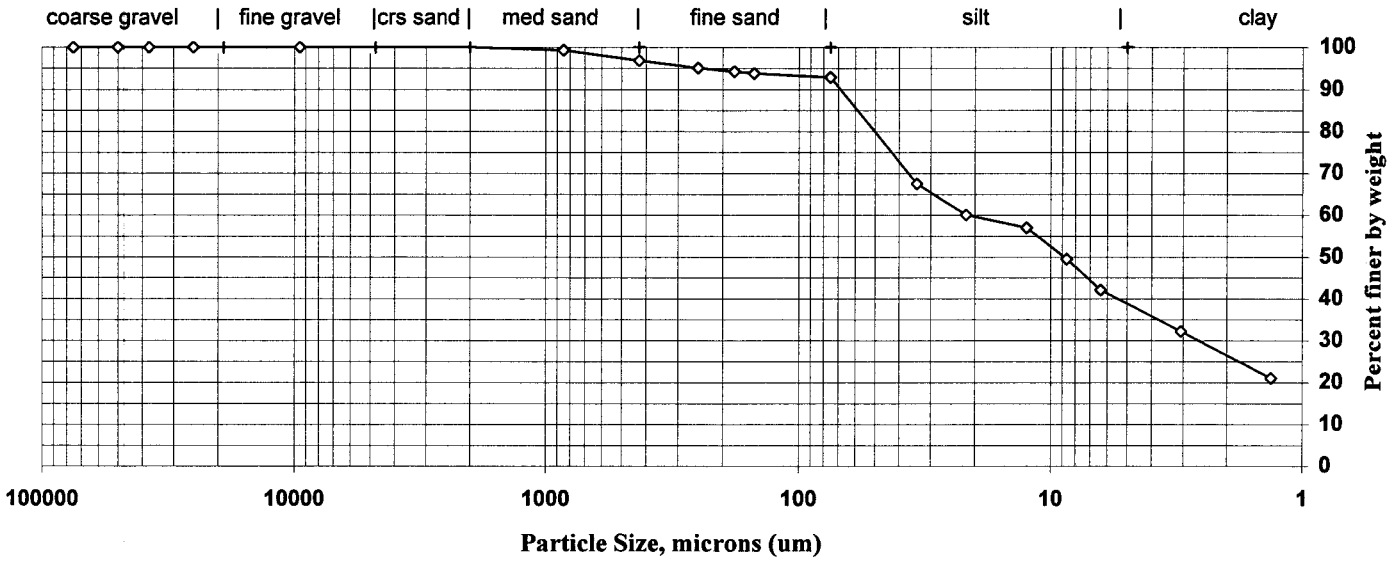
Particle Size of Soils by ASTM D422

Sample preparation method: D2217

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535370 **Sample ID:** SSD11

Percent Solids:	21.9%		**Maximum Particle Size:**	Med sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	N/A	
Non-soil mass:	0.3%		**Hardness (> #10):**	N/A	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.3	0.7
#40	425	96.9	2.5
#60	250	95.1	1.7
#80	180	94.3	0.9
#100	150	93.8	0.4
#200	75	92.9	0.9
Hydrometer	33.9	67.5	25.4
|	21.7	60.1	7.4
|	12.5	57.0	3.1
|	8.6	49.6	7.4
|	6.4	42.1	7.4
|	3.1	32.2	9.9
V	1.3	21.1	11.2

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	7.1
Coarse Sand	0.0
Medium Sand	3.1
Fine Sand	3.9
Silt	50.8
Clay	42.1

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

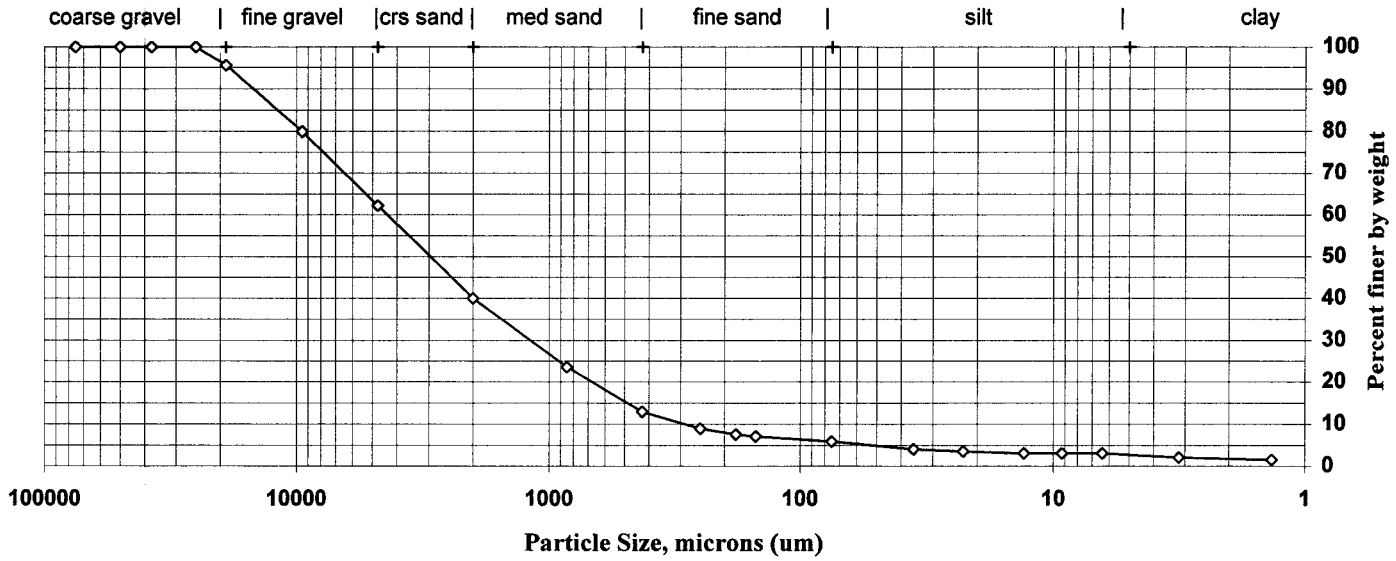
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535371 **Sample ID:** PSD02

Percent Solids:	81.2%		**Maximum Particle Size:**	25 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	95.5	4.5
3/8 inch	9500	79.9	15.6
#4	4750	62.2	17.7
#10	2000	40.0	22.2
#20	850	23.5	16.5
#40	425	12.9	10.6
#60	250	9.0	4.0
#80	180	7.6	1.4
#100	150	7.1	0.5
#200	75	5.9	1.2
Hydrometer	35.7	4.1	1.9
|	22.7	3.5	0.6
|	13.1	3.0	0.5
|	9.2	3.0	0.0
|	6.4	3.0	0.0
|	3.2	2.1	0.9
V	1.4	1.5	0.6

Soil Classification	Percent of Total Sample
Gravel	37.8
Sand	56.3
Coarse Sand	22.2
Medium Sand	27.1
Fine Sand	7.0
Silt	2.9
Clay	3.0

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

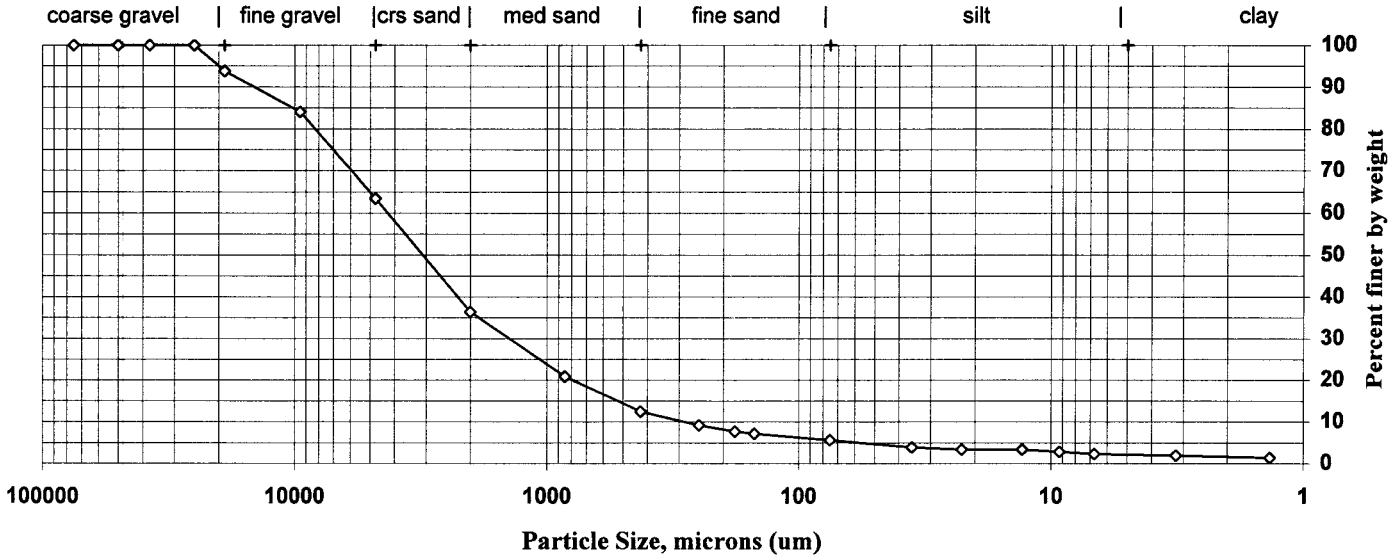
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535372 **Sample ID:** PSD01

Percent Solids:	78.0%		**Maximum Particle Size:**	25 mm
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular
Non-soil mass:	0.0%		**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	93.8	6.2
3/8 inch	9500	84.0	9.8
#4	4750	63.4	20.6
#10	2000	36.4	27.0
#20	850	20.9	15.5
#40	425	12.5	8.4
#60	250	9.2	3.3
#80	180	7.7	1.4
#100	150	7.2	0.5
#200	75	5.7	1.5
Hydrometer	35.5	3.9	1.8
|	22.5	3.4	0.5
|	13.0	3.4	0.0
|	9.2	2.8	0.5
|	6.7	2.3	0.5
|	3.2	1.9	0.4
V	1.4	1.4	0.5

Soil Classification	Percent of Total Sample
Gravel	36.6
Sand	57.7
Coarse Sand	27.0
Medium Sand	23.9
Fine Sand	6.8
Silt	3.4
Clay	2.3

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

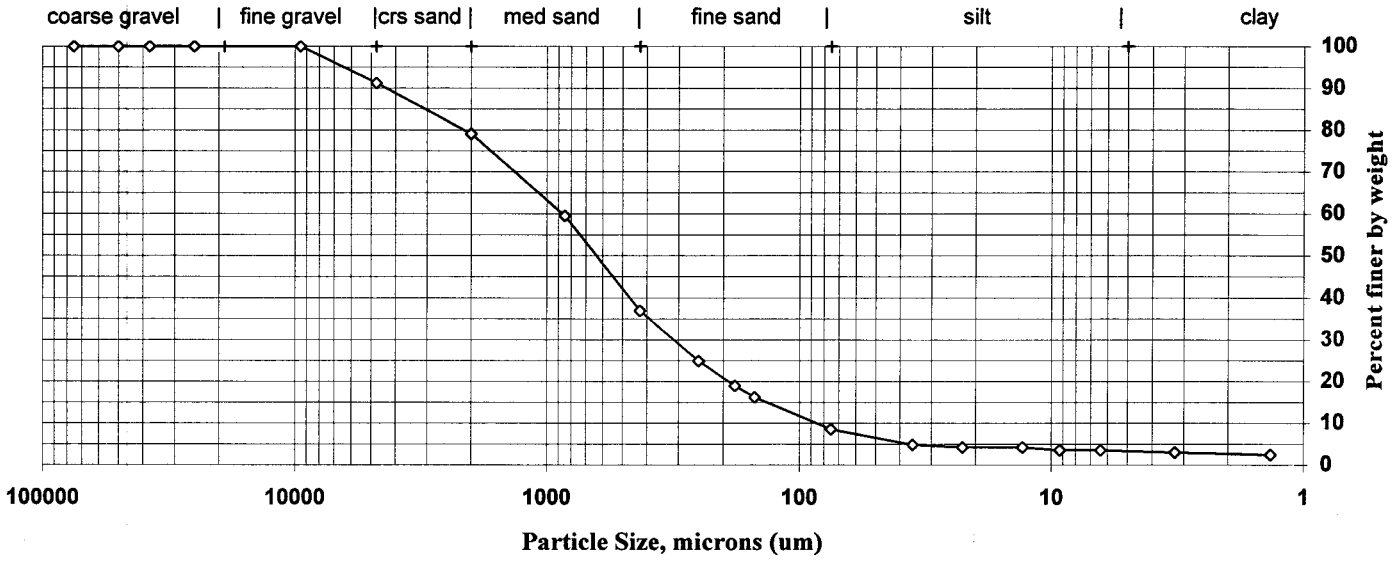
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535373 **Sample ID:** PSD53

Percent Solids:	81.1%		**Maximum Particle Size:**	9.5 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	91.2	8.8
#10	2000	79.0	12.2
#20	850	59.4	19.6
#40	425	36.9	22.5
#60	250	24.9	12.0
#80	180	19.0	5.9
#100	150	16.2	2.8
#200	75	8.6	7.6
Hydrometer	35.5	4.8	3.8
|	22.5	4.2	0.7
|	13.0	4.2	0.0
|	9.2	3.5	0.7
|	6.4	3.5	0.0
|	3.3	3.0	0.5
V	1.4	2.4	0.5

Soil Classification	Percent of Total Sample
Gravel	8.8
Sand	82.6
Coarse Sand	12.2
Medium Sand	42.1
Fine Sand	28.3
Silt	5.1
Clay	3.5

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

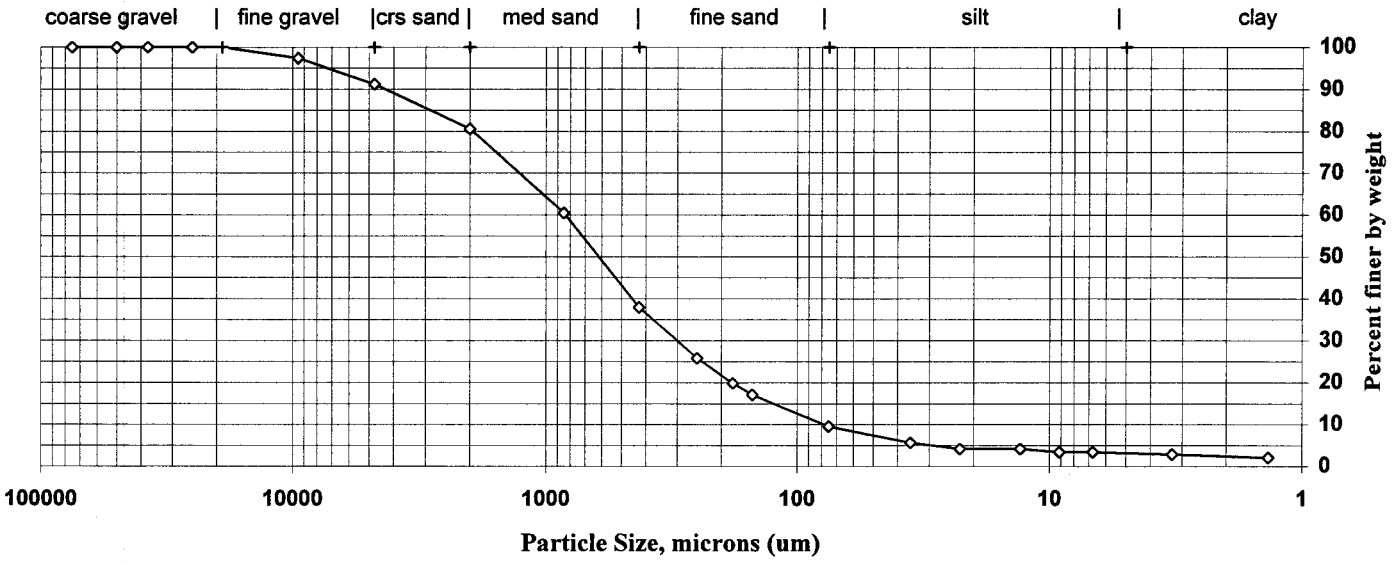
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535373DP **Sample ID:** PSD53REP

Percent Solids:	82.1%		**Maximum Particle Size:**	19 mm
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular
Non-soil mass:	0.0%		**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	97.4	2.6
#4	4750	91.2	6.2
#10	2000	80.6	10.6
#20	850	60.5	20.1
#40	425	38.0	22.6
#60	250	25.8	12.1
#80	180	19.9	6.0
#100	150	17.2	2.7
#200	75	9.6	7.6
Hydrometer	35.5	5.6	3.9
|	22.6	4.1	1.5
|	13.1	4.1	0.0
|	9.1	3.3	0.8
|	6.7	3.3	0.0
|	3.3	2.8	0.5
V	1.4	2.1	0.8

Soil Classification	Percent of Total Sample
Gravel	8.8
Sand	81.6
Coarse Sand	10.6
Medium Sand	42.6
Fine Sand	28.4
Silt	6.2
Clay	3.3

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

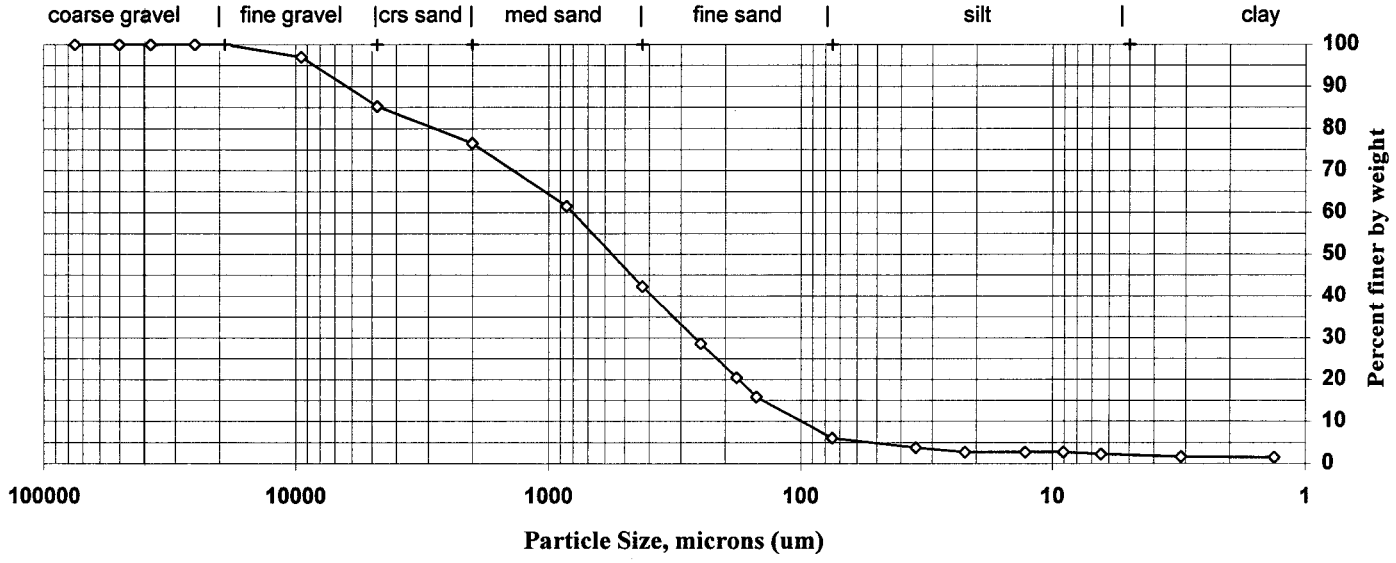
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	94941
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	22-Jul-03	**Start Date:**	04-Aug-03	**End Date:**	15-Aug-03

Lab ID: 535374 **Sample ID:** RSD53

Percent Solids:	76.3%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular	
Non-soil mass:	0.3%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	97.0	3.0
#4	4750	85.3	11.7
#10	2000	76.5	8.7
#20	850	61.5	15.0
#40	425	42.3	19.3
#60	250	28.6	13.7
#80	180	20.5	8.1
#100	150	15.8	4.7
#200	75	6.0	9.8
Hydrometer	34.7	3.8	2.3
|	22.2	2.7	1.1
|	12.8	2.7	0.0
|	9.1	2.7	0.0
|	6.4	2.2	0.5
|	3.1	1.6	0.6
V	1.3	1.5	0.1

Soil Classification	Percent of Total Sample
Gravel	14.7
Sand	79.2
Coarse Sand	8.7
Medium Sand	34.2
Fine Sand	36.2
Silt	3.8
Clay	2.2

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

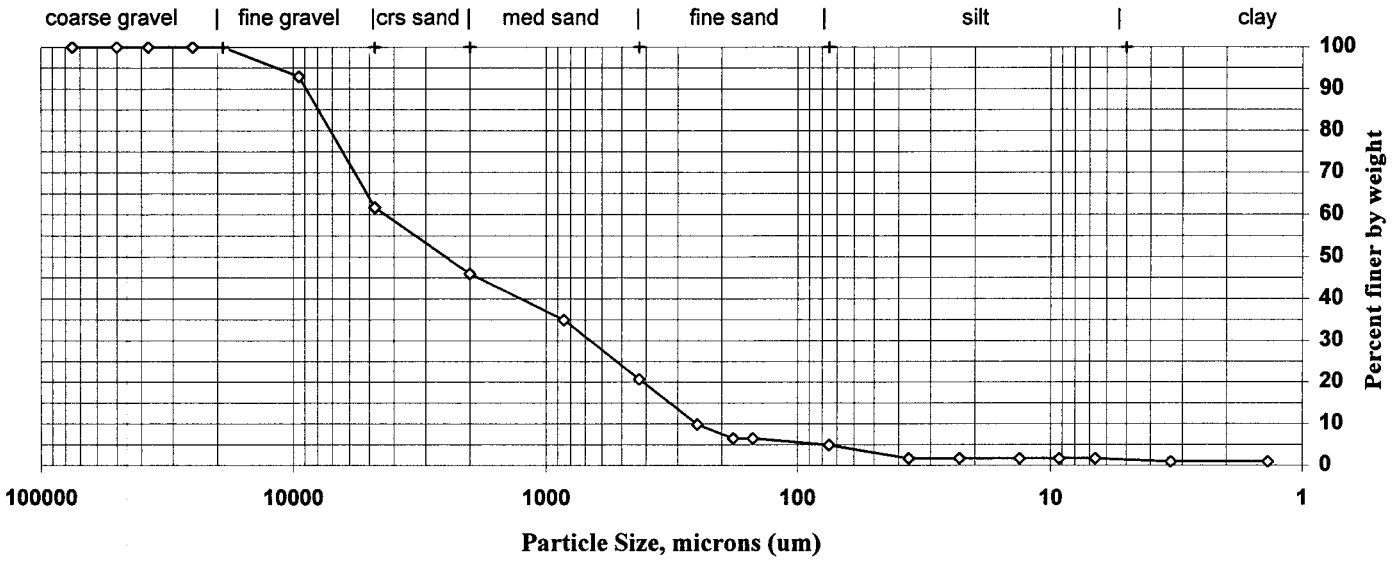
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95000
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	24-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 535813 **Sample ID:** SD05

Percent Solids:	82.4%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	0.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	93.0	7.0
#4	4750	61.7	31.3
#10	2000	45.9	15.8
#20	850	35.0	10.9
#40	425	20.7	14.2
#60	250	9.8	10.9
#80	180	6.5	3.3
#100	150	6.5	0.0
#200	75	4.9	1.6
Hydrometer	36.3	1.7	3.2
|	23.0	1.7	0.0
|	13.3	1.7	0.0
|	9.2	1.7	0.0
|	6.6	1.7	0.0
|	3.3	0.9	0.8
V	1.4	0.9	0.0

Soil Classification	Percent of Total Sample
Gravel	38.3
Sand	56.8
Coarse Sand	15.8
Medium Sand	25.2
Fine Sand	15.8
Silt	3.2
Clay	1.7

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

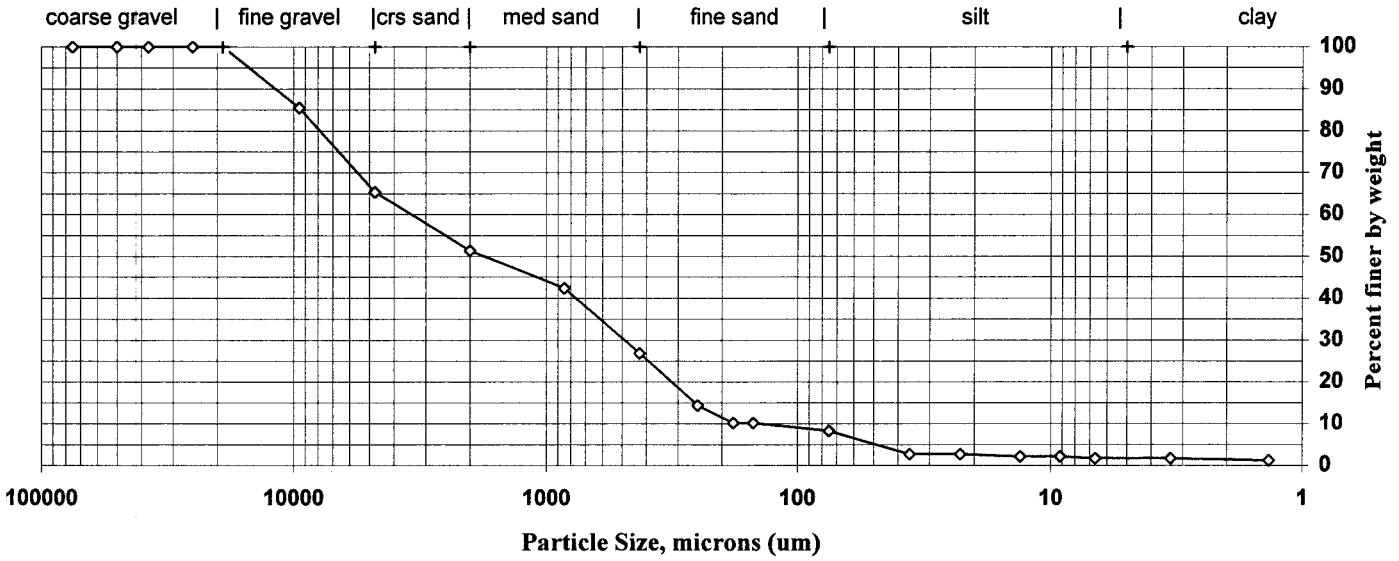
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95000
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	24-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 535814 **Sample ID:** SD05100

Percent Solids:	85.1%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	NA		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	85.4	14.6
#4	4750	65.3	20.1
#10	2000	51.4	13.9
#20	850	42.4	9.0
#40	425	26.9	15.4
#60	250	14.4	12.5
#80	180	10.2	4.2
#100	150	10.2	0.0
#200	75	8.2	2.0
Hydrometer	35.9	2.7	5.5
|	22.7	2.7	0.0
|	13.2	2.2	0.5
|	9.2	2.2	0.0
|	6.7	1.6	0.5
|	3.3	1.6	0.0
V	1.4	1.2	0.4

Soil Classification	Percent of Total Sample
Gravel	34.7
Sand	57.1
Coarse Sand	13.9
Medium Sand	24.5
Fine Sand	18.7
Silt	6.6
Clay	1.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

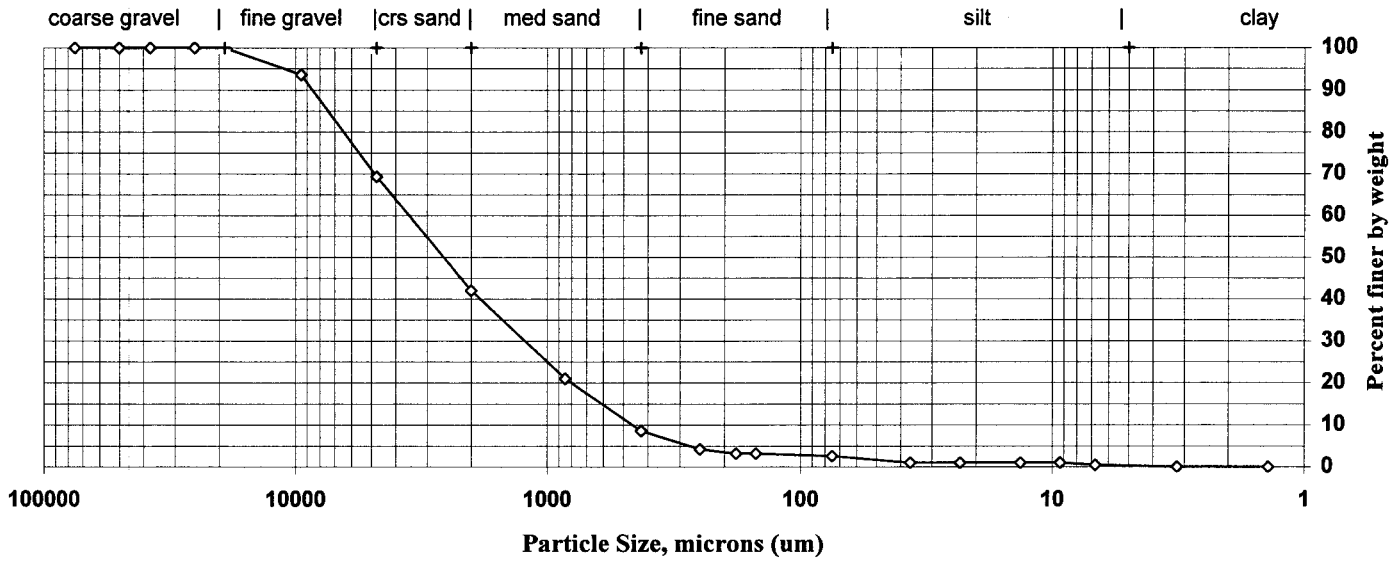
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95000
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	24-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 535815 **Sample ID:** SD06

Percent Solids:	84.7%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	0.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	93.6	6.4
#4	4750	69.4	24.2
#10	2000	42.0	27.3
#20	850	21.0	21.0
#40	425	8.7	12.4
#60	250	4.3	4.4
#80	180	3.2	1.0
#100	150	3.2	0.0
#200	75	2.6	0.6
Hydrometer	36.6	1.0	1.7
|	23.1	1.0	0.0
|	13.4	1.0	0.0
|	9.3	1.0	0.0
|	6.8	0.5	0.5
|	3.2	0.0	0.5
V	1.4	0.0	0.0

Soil Classification	Percent of Total Sample
Gravel	30.6
Sand	66.7
Coarse Sand	27.3
Medium Sand	33.4
Fine Sand	6.0
Silt	2.1
Clay	0.5

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

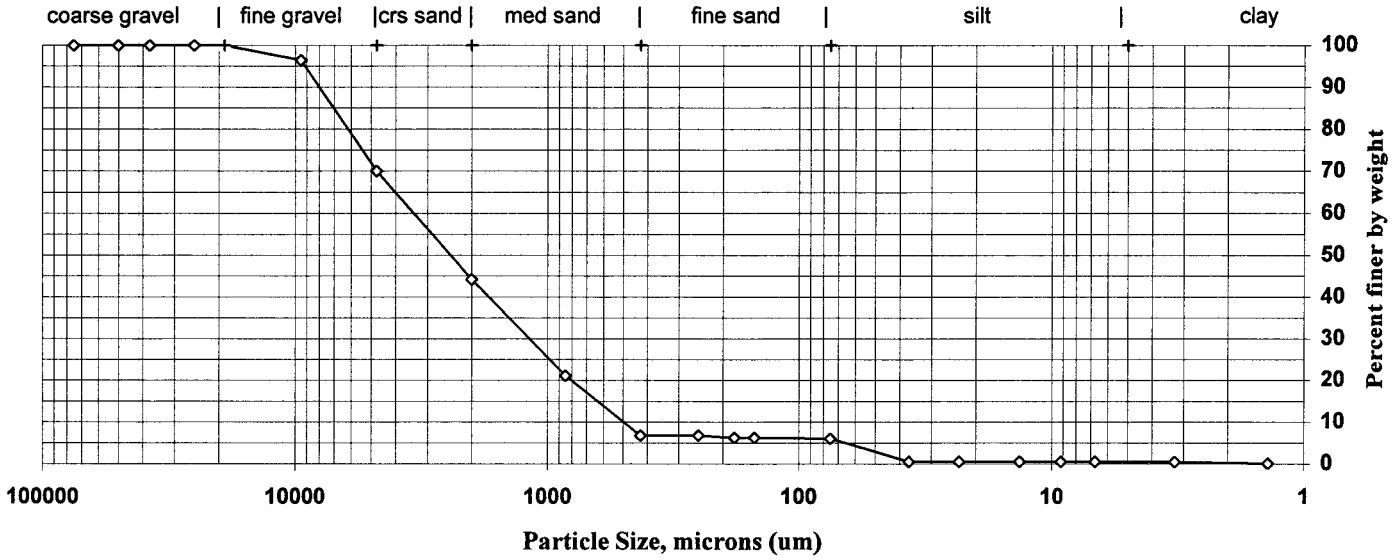
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95000
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	24-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 535816 **Sample ID:** SD08

Percent Solids:	82.1%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	0.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	96.4	3.6
#4	4750	70.0	26.4
#10	2000	44.2	25.8
#20	850	21.1	23.1
#40	425	6.8	14.3
#60	250	6.8	0.0
#80	180	6.3	0.5
#100	150	6.3	0.0
#200	75	6.0	0.3
Hydrometer	36.7	0.6	5.5
|	23.2	0.6	0.0
|	13.4	0.6	0.0
|	9.2	0.6	0.0
|	6.7	0.6	0.0
|	3.3	0.5	0.1
V	1.4	0.1	0.4

Soil Classification	Percent of Total Sample
Gravel	30.0
Sand	64.0
Coarse Sand	25.8
Medium Sand	37.4
Fine Sand	0.8
Silt	5.5
Clay	0.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

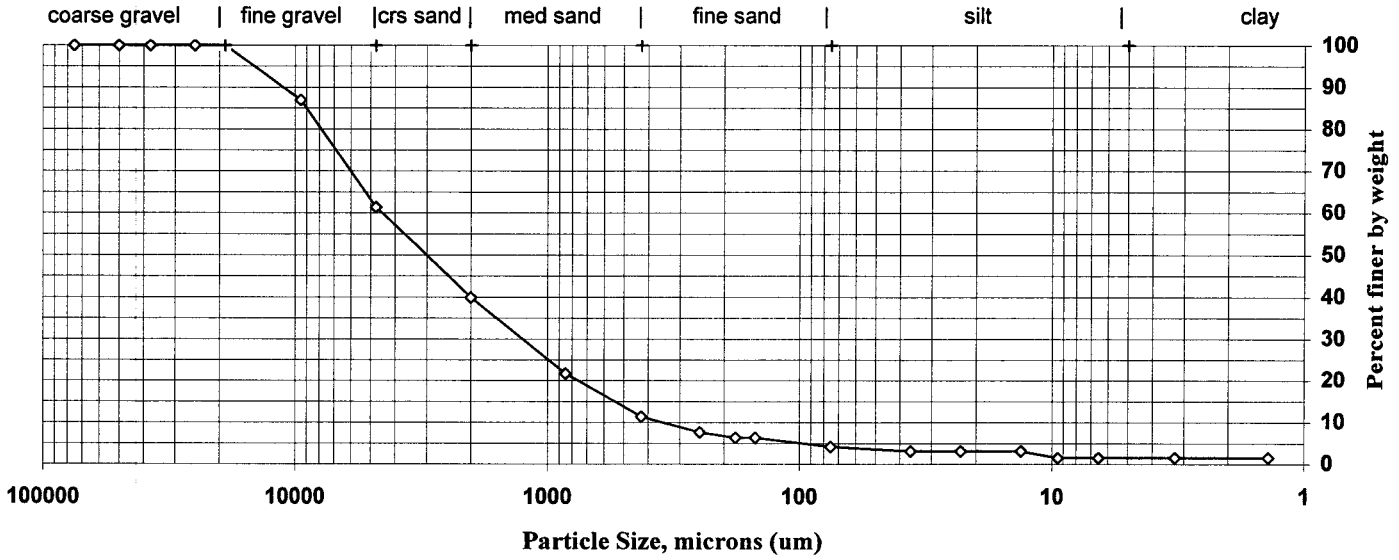
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95000
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD002
Date Received:	24-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 535818 **Sample ID:** SD07

Percent Solids:	78.5%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	0.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	86.9	13.1
#4	4750	61.4	25.5
#10	2000	39.9	21.5
#20	850	21.7	18.2
#40	425	11.4	10.3
#60	250	7.6	3.8
#80	180	6.3	1.3
#100	150	6.3	0.0
#200	75	4.2	2.1
Hydrometer	36.3	3.1	1.1
|	22.9	3.1	0.0
|	13.2	3.1	0.0
|	9.4	1.6	1.6
|	6.5	1.6	0.0
|	3.3	1.6	0.0
V	1.4	1.6	0.0

Soil Classification	Percent of Total Sample
Gravel	38.6
Sand	57.2
Coarse Sand	21.5
Medium Sand	28.5
Fine Sand	7.2
Silt	2.7
Clay	1.6

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: GCD003

SEVERN TRENT STL

September 17, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCD003

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 26, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/26/03 ETR No: 95020		
536011	BLACSTRSD42	07/22/03	Sediment
536012	BLACPDSSD41	07/22/03	Sediment
536013	BLACSTPSD01	07/23/03	Sediment
536013MS	BLACSTPSD01MS	07/23/03	Sediment
536013DP	BLACSTPSD01REP	07/23/03	Sediment
536014	BLACADSSD11	07/23/03	Sediment
536015	BLACPDSSD43	07/23/03	Sediment
536016	BLACSTPSD02	07/23/03	Sediment
536017	BLACSTPSD42	07/22/03	Sediment
536018	BLACSTRSD02	07/22/03	Sediment
536019	BLACSTPSD03	07/22/03	Sediment
536020	BLUEPDSSD16	07/22/03	Sediment
536021	BLACPDSSD10	07/22/03	Sediment
536022	BLACSTPSD04	07/22/03	Sediment
536023	BLACSTRSD04	07/22/03	Sediment

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample login is included in the Sample Handling section of this submittal.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-

of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Metals by 6010B:
The relative percent differences (RPDs) between the initial and duplicate analysis of sample BLACSTPSD01 for aluminum (34.8%), arsenic (57.6%), calcium (26.0%), chromium (51.6%), lead (22.0%), magnesium (77.8%) and vanadium (25.4%) were above the established control limit of ±20 percent. Corresponding sample results have been flagged with a "*" to denote this anomaly.

The recoveries of the following metals from the laboratory fortified aliquot of sample BLACSTPSD01 were outside of the laboratory established control limits of 75-125 percent: antimony (65.0%), nickel (142.3%) and selenium (56.6%). Sample results have been flagged with an "N" accordingly.

The following samples displayed a severe (greater negative than –20 ppb) for thallium: BLACPDSSD41 and BLUEPDSSD16. BLUEPDSSD16 also displayed a negative interference (-15.45 ppb) for silver.

Please note that due to a log-in error, all samples in this delivery group were analyzed for mercury outside of holding time. The client will not be charged for these analyses.

Total Organic Carbon by Lloyd Kahn:
The duplicate analysis of the sample designated BLACSTPSD01 yielded a relative percent difference of 45.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0360.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The Laboratory Director or his designee, as verified by the following signature, has authorized the release of the data contained in this hardcopy data package.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtw/jmm

0001-B Last Alpha

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Sediment 1 of 1

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7400
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Sampler's Name: Jen Kindred, Don Norman
Sampler's Signature: Jen Kindred, Don Norman

Proj. No.: 13890.16
Project Name: Granite Creek watershed

Analysis Requested: TOC; TAL metals; Cyanides; Grain size

Lab Use Only
Due Date:
Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5
Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2]: VOA	A/G 1 Lt.	250 ml	P/O	Lab/Sample ID (Lab Use Only)
SD	7/22/03	1200		X	BLAC-ST-RSD-42			2		
SD	7/22	1650		X	BLAC-PD-SSD-41			2		
SD	7/23	1115		X	BLAC-ST-PSD-01 MS		(2u)	4	2	
SD	7/23	1330		X	BLAC-AD-SSD-11			2		
SD	7/23	1430		X	BLAC-PD-SSD-43			2		
SD	7/22	1815		X	BLAC-ST-PSD-02			2		
SD	7/22	1230		X	BLAC-ST-PSD-42			2		
SD	7/22	1830		X	BLAC-ST-RSD-02			2		
SD	7/22	1800		X	BLAC-ST-PSD-03			2		
SD	7/22	1620		X	BWE-PD-SSD-16			2		

year = 03

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
			Jennifer Hey	07/23/03	1045
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks
* Grain size collected at 1655.
** MS for TOC, TAL + CN only.

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____
SD = Sediment

STL cannot accept verbal changes.
Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Sediment 2 of 2

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: EA Engineering	Company: Same
Address: 12011 Bel-Red Rd Suite 200 Bellevue, WA 98005	Address:
Contact: J Kindred	Contact:
Phone: 425-451-7400	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Sampler's Name: Don Norman

Sampler's Signature: Don Norman

Proj. No.: 13890.16

Project Name: Granite Cr watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TOC	TAL Metals	Cyanide	Gram Size	Lab/Sample ID (Lab Use Only)
SD	7/22	1730		X	BLAC-PD-SSD-10			2		X	X	X	X	
SD	7/22	1015		X	BLAC-ST-PSD-04			2		X	X	X	X	
SD	7/22	1035		X	BLAC-ST-RSD-04			2		X	X	X	X	

Year = 03

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
				7/24/03	10[45]
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil

[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

SD = Sediment

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTRSD42

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536011

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 72.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		72.5	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	138	1310	

Printed on: 09/16/03 10:06 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACPDSSD41

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536012

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 22.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		22.7	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	441	3680	

Printed on: 09/16/03 10:07 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTPSD01

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536013

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 77.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		77.9	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	129	1490	

Printed on: 09/16/03 10:07 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACADSSD11

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 536014

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/26/03

% Solids: 8.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		8.5	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	1180	40700	

Printed on: 09/16/03 10:09 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACPDSSD43

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536015

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 71.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		71.5	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	140	32700	

Printed on: 09/16/03 10:09 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTPSD02

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536016

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 70.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		70.9	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	142	557	

Printed on: 09/16/03 10:09 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLACSTPSD42

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD003

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 536017

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/26/03

% Solids: 19.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		19.2	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	521	111800	

Printed on: 09/16/03 10:10 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTRSD02

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536018

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 77.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		77.4	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	130	4610	

Printed on: 09/16/03 10:10 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTPSD03

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 536019

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/26/03

% Solids: 79.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		79.6	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	126	1330	

Printed on: 09/16/03 10:11 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLUEPDSSD16

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 536020

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/26/03

% Solids: 13.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		13.5	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	741	18100	

Printed on: 09/16/03 10:11 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACPDSSD10

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 536021

Matrix: SEDIMENT

Client: EASEAT

Date Received: 07/26/03

% Solids: 16.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		16.9	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	592	9960	

Printed on: 09/16/03 10:12 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTPSD04

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 536022

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/26/03

% Solids: 74.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		74.9	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	134	697	

Printed on: 09/16/03 10:12 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTRSD04

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 536023

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/26/03

% Solids: 82.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		82.2	
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1	122	4090	

Printed on: 09/16/03 10:13 AM

WET CHEMISTRY

Method Blank Report Summary

Lab Name: STL BURLINGTON

Contract: LSO1024805

SDG No.: GCD003

Lab Code: STLVT

Case No.: 23046

Matrix: SOIL

Client: EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Conc.	Units	Qual.	DF	RL	Analytical Run Date	Analytical Batch
BLKLK0731A	IN847	TOC by Lloyd Kahn	100	mg/Kg	U	1	100	07/31/03	BLKLK0731A

Printed on: 09/16/03 10:14 AM

WET CHEMISTRY

Matrix Spike Sample Report Summary

Client Sample No.
BLACSTPSD01MS

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCD003

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 536013MS

Matrix: SEDIMENT
Client: EASEAT
Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Matrix Spike Result Conc.	Qual.	Sample Result Conc.	Qual.	Spike Added	% Recovery*
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	167600		1490		184510.00	90.0

** Control Limit for Percent Recovery is 75-125%, unless otherwise specified.*

Printed on: 09/16/03 10:08 AM

WET CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.
BLACSTPSD01REP

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 536013DP

Matrix: SEDIMENT | Client: EASEAT | Date Received: 07/26/03

% Solids: 76.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD*
IN623	Solids, Percent	08/05/03	N/A	%	77.9		76.1		2
IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	1490		938		45

** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/16/03 10:08 AM

WET CHEMISTRY

Laboratory Control Sample Report Summary

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCD003

Lab Code: STLVT | Case No.: 23046

Matrix: SOIL | Client: EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCS Conc.	True Value	% Recovery*
LCSLK0731A	IN847	TOC by Lloyd Kahn	07/31/03	BLKLK0731A	mg/Kg	8880	8500.0000	104.5

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*

Printed on: 09/16/03 10:16 AM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA - CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
BLACADSSD11	536014
BLACPDSSD10	536021
BLACPDSSD41	536012
BLACPDSSD43	536015
BLACSTPSD01	536013
BLACSTPSD01D	536013DP
BLACSTPSD01S	536013MS
BLACSTPSD02	536016
BLACSTPSD03	536019
BLACSTPSD04	536022
BLACSTPSD42	536017
BLACSTRSD02	536018
BLACSTRSD04	536023
BLACSTRSD42	536011
BLUEPDSSD16	536020

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACADSSD11

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536014

Level (low/med): LOW Date Received: 07/26/03

% Solids: 8.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1720		*	P
7440-36-0	Antimony	9.7	B	N	P
7440-38-2	Arsenic	34.0		*	P
7440-39-3	Barium	227			P
7440-41-7	Beryllium	4.2	B		P
7440-43-9	Cadmium	5.1	B		P
7440-70-2	Calcium	1250	B	*	P
7440-47-3	Chromium	1.6	U	*	P
7440-48-4	Cobalt	20.9	B		P
7440-50-8	Copper	81.9			P
7439-89-6	Iron	729000			P
7439-92-1	Lead	21.8		*	P
7439-95-4	Magnesium	457	B	*	P
7439-96-5	Manganese	982			P
7439-97-6	Mercury	0.57			CV
7440-02-0	Nickel	159		N	P
7440-09-7	Potassium	440	U		P
7782-49-2	Selenium	3.8	U	N	P
7440-22-4	Silver	2.5	U		P
7440-23-5	Sodium	690	B		P
7440-28-0	Thallium	35.5			P
7440-62-2	Vanadium	4.8	B	*	P
7440-66-6	Zinc	2230			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACPDSSD10

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536021

Level (low/med): LOW Date Received: 07/26/03

% Solids: 16.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15300		*	P
7440-36-0	Antimony	7.4	B	N	P
7440-38-2	Arsenic	136		*	P
7440-39-3	Barium	9.1	B		P
7440-41-7	Beryllium	0.26	B		P
7440-43-9	Cadmium	1.4	B		P
7440-70-2	Calcium	108	U	*	P
7440-47-3	Chromium	31.8		*	P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	1280			P
7439-89-6	Iron	531000			P
7439-92-1	Lead	19.4		*	P
7439-95-4	Magnesium	106	U	*	P
7439-96-5	Manganese	110			P
7439-97-6	Mercury	1.4			CV
7440-02-0	Nickel	1.2	U	N	P
7440-09-7	Potassium	233	U		P
7782-49-2	Selenium	2.0	U	N	P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	280	U		P
7440-28-0	Thallium	22.3			P
7440-62-2	Vanadium	16.2	B	*	P
7440-66-6	Zinc	75.4			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACPDSSD41

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536012

Level (low/med): LOW Date Received: 07/26/03

% Solids: 22.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	40900		*	P
7440-36-0	Antimony	2.9	B	N	P
7440-38-2	Arsenic	110		*	P
7440-39-3	Barium	837			P
7440-41-7	Beryllium	1.6	B		P
7440-43-9	Cadmium	21.2			P
7440-70-2	Calcium	6880		*	P
7440-47-3	Chromium	144		*	P
7440-48-4	Cobalt	283			P
7440-50-8	Copper	1080			P
7439-89-6	Iron	70000			P
7439-92-1	Lead	11.8		*	P
7439-95-4	Magnesium	15400		*	P
7439-96-5	Manganese	32600			P
7439-97-6	Mercury	0.25			CV
7440-02-0	Nickel	1810		N	P
7440-09-7	Potassium	2400			P
7782-49-2	Selenium	9.0		N	P
7440-22-4	Silver	0.97	U		P
7440-23-5	Sodium	463	B		P
7440-28-0	Thallium	2.5	U		P
7440-62-2	Vanadium	110		*	P
7440-66-6	Zinc	1310			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACPDSSD43

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536015

Level (low/med): LOW Date Received: 07/26/03

% Solids: 71.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1440		*	P
7440-36-0	Antimony	0.64	U	N	P
7440-38-2	Arsenic	0.81	B	*	P
7440-39-3	Barium	12.4	B		P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.27	B		P
7440-70-2	Calcium	999		*	P
7440-47-3	Chromium	4.4		*	P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	49.3			P
7439-89-6	Iron	4550			P
7439-92-1	Lead	2.4		*	P
7439-95-4	Magnesium	808		*	P
7439-96-5	Manganese	492			P
7439-97-6	Mercury	0.069			CV
7440-02-0	Nickel	72.9		N	P
7440-09-7	Potassium	160	B		P
7782-49-2	Selenium	0.47	U	N	P
7440-22-4	Silver	0.30	U		P
7440-23-5	Sodium	155	B		P
7440-28-0	Thallium	0.78	U		P
7440-62-2	Vanadium	2.9	B	*	P
7440-66-6	Zinc	60.9			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPSD01

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536013

Level (low/med): LOW Date Received: 07/26/03

% Solids: 77.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12400		*	P
7440-36-0	Antimony	2.1	B	N	P
7440-38-2	Arsenic	34.7		*	P
7440-39-3	Barium	67.5			P
7440-41-7	Beryllium	0.33	B		P
7440-43-9	Cadmium	0.33	B		P
7440-70-2	Calcium	3120		*	P
7440-47-3	Chromium	102		*	P
7440-48-4	Cobalt	20.0			P
7440-50-8	Copper	30.0			P
7439-89-6	Iron	30000			P
7439-92-1	Lead	3.3		*	P
7439-95-4	Magnesium	10400		*	P
7439-96-5	Manganese	543			P
7439-97-6	Mercury	0.019	U		CV
7440-02-0	Nickel	131		N	P
7440-09-7	Potassium	809			P
7782-49-2	Selenium	0.50	B	N	P
7440-22-4	Silver	0.27	U		P
7440-23-5	Sodium	277	B		P
7440-28-0	Thallium	0.71	U		P
7440-62-2	Vanadium	58.5		*	P
7440-66-6	Zinc	55.4			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACSTPSD02

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536016

Level (low/med): LOW Date Received: 07/26/03

% Solids: 70.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17300		*	P
7440-36-0	Antimony	2.5	B	N	P
7440-38-2	Arsenic	52.6		*	P
7440-39-3	Barium	102			P
7440-41-7	Beryllium	0.40	B		P
7440-43-9	Cadmium	0.48	B		P
7440-70-2	Calcium	4170		*	P
7440-47-3	Chromium	193		*	P
7440-48-4	Cobalt	32.8			P
7440-50-8	Copper	37.2			P
7439-89-6	Iron	36600			P
7439-92-1	Lead	4.9		*	P
7439-95-4	Magnesium	21500		*	P
7439-96-5	Manganese	873			P
7439-97-6	Mercury	0.023	U		CV
7440-02-0	Nickel	224		N	P
7440-09-7	Potassium	904			P
7782-49-2	Selenium	0.68		N	P
7440-22-4	Silver	0.30	U		P
7440-23-5	Sodium	217	B		P
7440-28-0	Thallium	0.77	U		P
7440-62-2	Vanadium	71.9		*	P
7440-66-6	Zinc	66.8			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPSD03

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536019

Level (low/med): LOW Date Received: 07/26/03

% Solids: 79.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12000		*	P
7440-36-0	Antimony	1.4	B	N	P
7440-38-2	Arsenic	19.2		*	P
7440-39-3	Barium	68.1			P
7440-41-7	Beryllium	0.28	B		P
7440-43-9	Cadmium	0.27	B		P
7440-70-2	Calcium	3170		*	P
7440-47-3	Chromium	122		*	P
7440-48-4	Cobalt	21.0			P
7440-50-8	Copper	38.9			P
7439-89-6	Iron	25900			P
7439-92-1	Lead	3.2		*	P
7439-95-4	Magnesium	15200		*	P
7439-96-5	Manganese	638			P
7439-97-6	Mercury	0.026	B		CV
7440-02-0	Nickel	138		N	P
7440-09-7	Potassium	937			P
7782-49-2	Selenium	0.40	U	N	P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium	265	B		P
7440-28-0	Thallium	0.68	U		P
7440-62-2	Vanadium	49.4		*	P
7440-66-6	Zinc	50.7			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS
-1-
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACSTPSD04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536022

Level (low/med): LOW Date Received: 07/26/03

% Solids: 74.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7930		*	P
7440-36-0	Antimony	0.75	B	N	P
7440-38-2	Arsenic	24.6		*	P
7440-39-3	Barium	112			P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	0.39	B		P
7440-70-2	Calcium	2700		*	P
7440-47-3	Chromium	65.7		*	P
7440-48-4	Cobalt	20.8			P
7440-50-8	Copper	23.8			P
7439-89-6	Iron	18800			P
7439-92-1	Lead	3.2		*	P
7439-95-4	Magnesium	6510		*	P
7439-96-5	Manganese	1620			P
7439-97-6	Mercury	0.022	U		CV
7440-02-0	Nickel	99.8		N	P
7440-09-7	Potassium	710			P
7782-49-2	Selenium	0.88		N	P
7440-22-4	Silver	0.27	U		P
7440-23-5	Sodium	308	B		P
7440-28-0	Thallium	0.70	U		P
7440-62-2	Vanadium	28.8		*	P
7440-66-6	Zinc	37.7			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPSD42

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536017

Level (low/med): LOW Date Received: 07/26/03

% Solids: 19.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	42700		*	P
7440-36-0	Antimony	5.9	B	N	P
7440-38-2	Arsenic	55.7		*	P
7440-39-3	Barium	405			P
7440-41-7	Beryllium	1.2	B		P
7440-43-9	Cadmium	4.2			P
7440-70-2	Calcium	6750		*	P
7440-47-3	Chromium	191		*	P
7440-48-4	Cobalt	85.5			P
7440-50-8	Copper	323			P
7439-89-6	Iron	61100			P
7439-92-1	Lead	11.6		*	P
7439-95-4	Magnesium	18400		*	P
7439-96-5	Manganese	3090			P
7439-97-6	Mercury	0.35			CV
7440-02-0	Nickel	503		N	P
7440-09-7	Potassium	2650			P
7782-49-2	Selenium	2.9		N	P
7440-22-4	Silver	2.6	B		P
7440-23-5	Sodium	516	B		P
7440-28-0	Thallium	2.5	U		P
7440-62-2	Vanadium	106		*	P
7440-66-6	Zinc	556			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTRSD02

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536018

Level (low/med): LOW Date Received: 07/26/03

% Solids: 77.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16700		*	P
7440-36-0	Antimony	2.1	B	N	P
7440-38-2	Arsenic	54.4		*	P
7440-39-3	Barium	106			P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	0.59	B		P
7440-70-2	Calcium	4280		*	P
7440-47-3	Chromium	145		*	P
7440-48-4	Cobalt	34.4			P
7440-50-8	Copper	49.8			P
7439-89-6	Iron	41700			P
7439-92-1	Lead	1.4		*	P
7439-95-4	Magnesium	15100		*	P
7439-96-5	Manganese	1010			P
7439-97-6	Mercury	0.019	U		CV
7440-02-0	Nickel	172		N	P
7440-09-7	Potassium	856			P
7782-49-2	Selenium	0.70		N	P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium	152	B		P
7440-28-0	Thallium	0.86	B		P
7440-62-2	Vanadium	67.3		*	P
7440-66-6	Zinc	78.2			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTRSD04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536023

Level (low/med): LOW Date Received: 07/26/03

% Solids: 82.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10500		*	P
7440-36-0	Antimony	1.5	B	N	P
7440-38-2	Arsenic	24.2		*	P
7440-39-3	Barium	70.3			P
7440-41-7	Beryllium	0.26	B		P
7440-43-9	Cadmium	0.32	B		P
7440-70-2	Calcium	2940		*	P
7440-47-3	Chromium	87.0		*	P
7440-48-4	Cobalt	18.9			P
7440-50-8	Copper	27.9			P
7439-89-6	Iron	21700			P
7439-92-1	Lead	3.1		*	P
7439-95-4	Magnesium	10900		*	P
7439-96-5	Manganese	600			P
7439-97-6	Mercury	0.019	U		CV
7440-02-0	Nickel	124		N	P
7440-09-7	Potassium	833			P
7782-49-2	Selenium	0.80		N	P
7440-22-4	Silver	0.27	U		P
7440-23-5	Sodium	292	B		P
7440-28-0	Thallium	0.69	U		P
7440-62-2	Vanadium	36.7		*	P
7440-66-6	Zinc	50.0			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTRSD42

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536011

Level (low/med): LOW Date Received: 07/26/03

% Solids: 72.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14300		*	P
7440-36-0	Antimony	1.3	B	N	P
7440-38-2	Arsenic	30.9		*	P
7440-39-3	Barium	89.8			P
7440-41-7	Beryllium	0.32	B		P
7440-43-9	Cadmium	0.50	B		P
7440-70-2	Calcium	4560		*	P
7440-47-3	Chromium	105		*	P
7440-48-4	Cobalt	27.2			P
7440-50-8	Copper	42.6			P
7439-89-6	Iron	33300			P
7439-92-1	Lead	3.1		*	P
7439-95-4	Magnesium	20200		*	P
7439-96-5	Manganese	1090			P
7439-97-6	Mercury	0.023	U		CV
7440-02-0	Nickel	215		N	P
7440-09-7	Potassium	888			P
7782-49-2	Selenium	0.45	U	N	P
7440-22-4	Silver	0.29	U		P
7440-23-5	Sodium	532	B		P
7440-28-0	Thallium	0.76	U		P
7440-62-2	Vanadium	58.5		*	P
7440-66-6	Zinc	85.2			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLUEPDSSD16

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Lab Sample ID: 536020

Level (low/med): LOW Date Received: 07/26/03

% Solids: 13.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600		*	P
7440-36-0	Antimony	5.8	B	N	P
7440-38-2	Arsenic	279		*	P
7440-39-3	Barium	688			P
7440-41-7	Beryllium	1.6	B		P
7440-43-9	Cadmium	8.7			P
7440-70-2	Calcium	1680	B	*	P
7440-47-3	Chromium	24.8		*	P
7440-48-4	Cobalt	1480			P
7440-50-8	Copper	100			P
7439-89-6	Iron	459000			P
7439-92-1	Lead	22.1		*	P
7439-95-4	Magnesium	830	B	*	P
7439-96-5	Manganese	178000			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	1300		N	P
7440-09-7	Potassium	886	B		P
7782-49-2	Selenium	50.3		N	P
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	494	B		P
7440-28-0	Thallium	4.2	U		P
7440-62-2	Vanadium	10.4	B	*	P
7440-66-6	Zinc	1470			P

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	996.00	99.6	400.0	395.30	98.8	390.90	97.7	P

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

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead				400.0	397.40	99.4	392.10	98.0	P

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

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				400.0	390.50	97.6			P

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

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury	3.0	3.05	101.7	5.0	5.03	100.6	5.28	105.6	CV

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

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury				5.0	5.23	104.6			CV

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

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26160.00	100.6	30200.0	30610.00	101.4	30560.00	101.2	P
Antimony	250.0	251.10	100.4	300.0	307.80	102.6	308.30	102.8	P
Arsenic	250.0	250.40	100.2	100.0	105.00	105.0	104.30	104.3	P
Barium	500.0	497.30	99.5	200.0	204.20	102.1	202.70	101.4	P
Beryllium	500.0	502.60	100.5	100.0	101.60	101.6	101.40	101.4	P
Cadmium	500.0	493.10	98.6	100.0	101.20	101.2	99.97	100.0	P
Calcium	25000.0	25390.00	101.6	30200.0	30920.00	102.4	30580.00	101.3	P
Chromium	500.0	501.20	100.2	200.0	209.30	104.6	208.20	104.1	P
Cobalt	500.0	492.50	98.5	200.0	203.40	101.7	202.00	101.0	P
Copper	500.0	503.00	100.6	200.0	205.80	102.9	204.10	102.0	P
Iron	25500.0	26330.00	103.3	30200.0	30950.00	102.5	30850.00	102.2	P
Magnesium	25000.0	25410.00	101.6	30200.0	30800.00	102.0	30590.00	101.3	P
Manganese	500.0	495.40	99.1	200.0	204.20	102.1	202.50	101.2	P
Nickel	500.0	497.10	99.4	200.0	211.80	105.9	210.00	105.0	P
Potassium	25000.0	26340.00	105.4	30200.0	31480.00	104.2	31320.00	103.7	P
Selenium	250.0	246.50	98.6	100.0	100.90	100.9	100.10	100.1	P
Silver	500.0	499.70	99.9	100.0	102.20	102.2	101.80	101.8	P
Sodium	25000.0	25280.00	101.1	30200.0	30020.00	99.4	30070.00	99.6	P
Thallium	250.0	238.10	95.2	100.0	101.90	101.9	102.10	102.1	P
Vanadium	500.0	497.90	99.6	200.0	203.80	101.9	202.10	101.0	P
Zinc	500.0	498.80	99.8	200.0	204.00	102.0	203.00	101.5	P

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

USEPA - CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	30620.00	101.4	30540.00	101.1	P
Antimony				300.0	306.80	102.3	308.20	102.7	P
Arsenic				100.0	101.00	101.0	104.10	104.1	P
Barium				200.0	203.30	101.6	202.80	101.4	P
Beryllium				100.0	100.40	100.4	101.10	101.1	P
Cadmium				100.0	98.92	98.9	100.40	100.4	P
Calcium				30200.0	30250.00	100.2	30750.00	101.8	P
Chromium				200.0	207.70	103.8	208.70	104.4	P
Cobalt				200.0	200.40	100.2	202.50	101.2	P
Copper				200.0	204.20	102.1	203.00	101.5	P
Iron				30200.0	30700.00	101.7	30940.00	102.5	P
Magnesium				30200.0	30250.00	100.2	30610.00	101.4	P
Manganese				200.0	201.40	100.7	202.10	101.0	P
Nickel				200.0	208.20	104.1	211.90	106.0	P
Potassium				30200.0	31660.00	104.8	31500.00	104.3	P
Selenium				100.0	99.50	99.5	103.00	103.0	P
Silver				100.0	101.90	101.9	101.30	101.3	P
Sodium				30200.0	30090.00	99.6	29940.00	99.1	P
Thallium				100.0	102.10	102.1	101.20	101.2	P
Vanadium				200.0	201.20	100.6	202.10	101.0	P
Zinc				200.0	201.40	100.7	203.00	101.5	P

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

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead				6.0	4.18	69.7	5.93	98.8

Control Limits: no limits have been established by EPA at this time

USEPA - CLP FORMS

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.2	0.19	95.0					

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	499.30	124.8	497.00	124.2
Antimony				120.0	121.80	101.5	122.30	101.9
Arsenic				20.0	20.17	100.8	20.41	102.0
Barium				400.0	395.70	98.9	397.40	99.4
Beryllium				10.0	10.18	101.8	10.16	101.6
Cadmium				10.0	10.46	104.6	10.20	102.0
Calcium				10000.0	10420.00	104.2	10400.00	104.0
Chromium				20.0	17.09	85.4	18.13	90.6
Cobalt				100.0	98.29	98.3	98.55	98.6
Copper				50.0	54.57	109.1	54.73	109.5
Iron				200.0	234.60	117.3	253.00	126.5
Magnesium				10000.0	10180.00	101.8	10150.00	101.5
Manganese				30.0	28.80	96.0	28.88	96.3
Nickel				80.0	76.81	96.0	80.10	100.1
Potassium				10000.0	10720.00	107.2	10920.00	109.2
Selenium				10.0	9.02	90.2	11.13	111.3
Silver				20.0	20.27	101.4	19.58	97.9
Sodium				10000.0	9830.00	98.3	10030.00	100.3
Thallium				20.0	20.81	104.0	22.22	111.1
Vanadium				100.0	99.27	99.3	98.92	98.9
Zinc				40.0	42.82	107.0	42.95	107.4

Control Limits: no limits have been established by EPA at this time

USEPA - CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead	1.3	U	1.3	U	1.3	U	1.3	U	0.130	U	P

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead			1.3	U	1.3	U					P

USEPA - CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV

USEPA - CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	-39.7	B	-51.4	B	2.360	U	P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U	0.470	U	P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U	0.480	U	P
Barium	5.9	U	5.9	U	5.9	U	5.9	U	0.590	U	P
Beryllium	0.2	U	0.2	U	0.2	B	0.2	U	0.020	U	P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.060	U	P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U	18.210	U	P
Chromium	-4.3	B	-3.9	B	-4.0	B	-4.8	B	-0.343	B	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	0.200	U	P
Copper	2.4	U	2.4	U	2.4	U	-3.6	B	0.240	U	P
Iron	33.3	U	33.3	U	33.3	U	-47.2	B	3.330	U	P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U	17.830	U	P
Manganese	-1.4	B	-1.4	B	-1.4	B	-1.1	B	-0.104	B	P
Nickel	-8.4	B	-7.9	B	-8.6	B	-8.2	B	-1.129	B	P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U	39.300	U	P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U	0.340	U	P
Silver	2.2	U	2.2	U	2.2	U	2.2	U	0.220	U	P
Sodium	472.7	U	472.7	U	472.7	U	472.7	U	79.380	B	P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U	0.570	U	P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	0.200	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	0.111	B	P

USEPA - CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			23.6	U							P
Antimony			4.7	U							P
Arsenic			4.8	U							P
Barium			5.9	U							P
Beryllium			0.2	U							P
Cadmium			0.6	U							P
Calcium			182.1	U							P
Chromium			-4.0	B							P
Cobalt			2.0	U							P
Copper			2.4	U							P
Iron			33.3	U							P
Magnesium			178.3	U							P
Manganese			-1.3	B							P
Nickel			-8.4	B							P
Potassium			393.0	U							P
Selenium			3.4	U							P
Silver			2.2	U							P
Sodium			472.7	U							P
Thallium			5.7	U							P
Vanadium			2.0	U							P
Zinc			1.0	U							P

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	41	1	48.1	117.3	3	48.0	117.1

USEPA - CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	504000	501800.0	103.9	506000	503700.0	104.3
Antimony	0	596	-5	623.9	104.7	-3	625.7	105.0
Arsenic	0	102	9	106.9	104.8	9	103.6	101.6
Barium	0	503	2	508.3	101.1	2	508.8	101.2
Beryllium	0	482	0	486.9	101.0	0	484.9	100.6
Cadmium	0	938	1	946.0	100.9	1	939.2	100.1
Calcium	500000	477840	496200	494000.0	103.4	497100	492000.0	103.0
Chromium	0	483	0	482.8	100.0	-1	481.3	99.6
Cobalt	0	457	-1	464.7	101.7	-1	462.7	101.2
Copper	0	526	3	520.9	99.0	3	519.5	98.8
Iron	200000	191980	203400	200100.0	104.2	204800	200200.0	104.3
Magnesium	500000	521880	545300	543600.0	104.2	546000	540400.0	103.5
Manganese	0	474	0	478.4	100.9	0	474.3	100.1
Nickel	0	952	-7	964.0	101.3	-6	959.8	100.8
Potassium	0	0	19	-29.1		61	-4.8	
Selenium	0	47	0	50.0	106.4	3	51.0	108.5
Silver	0	213	0	215.8	101.3	1	214.8	100.8
Sodium	0	0	18	-132.4		-94	-118.6	
Thallium	0	89	-2	90.4	101.6	-2	91.7	103.0
Vanadium	0	478	0	473.5	99.1	0	472.3	98.8
Zinc	0	998	5	1014.0	101.6	4	1006.0	100.8

USEPA - CLP FORMS

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

BLACSTPSD01S

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 77.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		15170.9600		12400.7598		233.40	1186.9		P
Antimony	75 - 125	40.0163		2.0776	B	58.35	65.0	N	P
Arsenic		24.3669		34.7097		4.67	-221.5		P
Barium	75 - 125	282.7635		67.4751		233.40	92.2		P
Beryllium	75 - 125	5.9587		0.3275	B	5.83	96.6		P
Cadmium	75 - 125	5.8093		0.3267	B	5.83	94.0		P
Chromium		164.0798		101.5118		23.34	268.1		P
Cobalt	75 - 125	77.5236		20.0157		58.35	98.6		P
Copper	75 - 125	57.5096		30.0360		29.17	94.2		P
Iron		33481.1484		29973.7109		116.70	3005.5		P
Lead	75 - 125	5.3868		3.2770		2.38	88.6		P
Manganese		671.7237		542.6425		58.35	221.2		P
Mercury	75 - 125	0.2344		0.0186	U	0.19	123.4		CV
Nickel	75 - 125	213.9106		130.8623		58.35	142.3	N	P
Selenium	75 - 125	1.1589		0.4965	B	1.17	56.6	N	P
Silver	75 - 125	5.3087		0.2742	U	5.83	91.1		P
Thallium	75 - 125	5.7965		0.7104	U	5.83	99.4		P
Vanadium	75 - 125	124.4019		58.5266		58.35	112.9		P
Zinc	75 - 125	117.0498		55.3610		58.35	105.7		P

Comments:

USEPA - CLP FORMS

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

BLACSTPSD01A

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS SDG No.: GCD003

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		101200.00		99500.00		2000.0	85.0		P
Antimony		541.30		16.67	B	500.0	104.9		P
Arsenic		311.50		278.50		40.0	82.5		P
Barium		2619.00		541.40		2000.0	103.9		P
Beryllium		54.46		2.63	B	50.0	103.7		P
Cadmium		53.21		2.62	B	50.0	101.2		P
Chromium		1015.00		814.50		200.0	100.2		P
Cobalt		666.40		160.60		500.0	101.2		P
Copper		511.40		241.00		250.0	108.2		P
Iron		238000.00		240500.00		1000.0	-250.0		P
Lead		44.34		27.57		20.0	83.8		P
Manganese		4802.00		4354.00		500.0	89.6		P
Nickel		1547.00		1050.00		500.0	99.4		P
Selenium		13.10		3.98	B	10.0	91.2		P
Silver		52.32		2.20	U	50.0	104.6		P
Thallium		53.18		5.70	U	50.0	106.4		P
Vanadium		991.10		469.60		500.0	104.3		P
Zinc		947.00		444.20		500.0	100.6		P

Comments:

6
DUPLICATES

SAMPLE NO.

BLACSTPSD01D

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 77.9 % Solids for Duplicate: 76.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		12400.7598		17632.6699		34.8	*	P
Antimony		2.0776	B	1.7899	B	14.9		P
Arsenic		34.7097		19.1949		57.6	*	P
Barium	24.9	67.4751		73.7762		8.9		P
Beryllium		0.3275	B	0.2586	B	23.5		P
Cadmium		0.3267	B	0.2567	B	24.0		P
Calcium		3117.0161		4049.7009		26.0	*	P
Chromium		101.5118		172.0881		51.6	*	P
Cobalt	6.2	20.0157		23.8090		17.3		P
Copper		30.0360		25.1532		17.7		P
Iron		29973.7109		32516.2891		8.1		P
Lead		3.2770		2.6268		22.0	*	P
Magnesium		10387.9805		23615.1797		77.8	*	P
Manganese		542.6425		590.6218		8.5		P
Mercury		0.0186	U	0.0189	U			CV
Nickel		130.8623		152.8326		15.5		P
Potassium	623.2	808.9785		755.9280		6.8		P
Selenium		0.4965	B	0.4495	B	9.9		P
Silver		0.2742	U	0.2664	U			P
Sodium		276.6804	B	245.1135	B	12.1		P
Thallium		0.7104	U	0.8815	B	200.0		P
Vanadium		58.5266		75.5444		25.4	*	P
Zinc		55.3610		50.0642		10.0		P

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Solid LCS Source: ERA lot249/USEPA 0996/ERA lot0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Lead				22.0	22.1		17.6 26.4	100.5

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Solid LCS Source: ERA lot249/USEPA 0996/ERA lot0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 0.1	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Solid LCS Source: ERA lot249/USEPA 0996/ERA lot0899

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum				200.0	218.6		160.0	240.0	109.3
Antimony				50.0	54.4		40.0	60.0	108.8
Arsenic				24.0	25.0		19.2	28.8	104.2
Barium				200.0	213.6		160.0	240.0	106.8
Beryllium				5.0	5.4		4.0	6.0	108.0
Cadmium				25.0	26.6		20.0	30.0	106.4
Calcium				2000.0	2174.0		1600.0	2400.0	108.7
Chromium				20.0	21.7		16.0	24.0	108.5
Cobalt				50.0	53.0		40.0	60.0	106.0
Copper				25.0	28.1		20.0	30.0	112.4
Iron				100.0	109.3		80.0	120.0	109.3
Magnesium				2000.0	2127.0		1600.0	2400.0	106.4
Manganese				50.0	54.1		40.0	60.0	108.2
Nickel				50.0	52.6		40.0	60.0	105.2
Potassium				2000.0	2083.0		1600.0	2400.0	104.2
Selenium				21.0	20.5		16.8	25.2	97.6
Silver				25.0	26.7		20.0	30.0	106.8
Sodium				2000.0	2179.0		1600.0	2400.0	109.0
Thallium				25.0	25.8		20.0	30.0	103.2
Vanadium				50.0	54.4		40.0	60.0	108.8
Zinc				50.0	53.3		40.0	60.0	106.6

9
ICP SERIAL DILUTIONS

SAMPLE NO.

BLACSTPSD01L

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	99500.00		104400.00		4.9		P
Antimony	16.67	B	23.50	U	100.0		P
Arsenic	278.50		300.60		7.9		P
Barium	541.40		552.90	B	2.1		P
Beryllium	2.63	B	3.56	B	35.4		P
Cadmium	2.62	B	3.37	B	28.6		P
Calcium	25010.00		26560.00		6.2		P
Chromium	814.50		826.80		1.5		P
Cobalt	160.60		166.60	B	3.7		P
Copper	241.00		235.50		2.3		P
Iron	240500.00		250200.00		4.0		P
Lead	27.57		24.28		11.9		P
Magnesium	83350.00		85790.00		2.9		P
Manganese	4354.00		4519.00		3.8		P
Nickel	1050.00		1059.00		0.9		P
Potassium	6491.00		6961.00	B	7.2		P
Selenium	3.98	B	17.00	U	100.0		P
Silver	2.20	U	11.00	U			P
Sodium	2220.00	B	3054.00	B	37.6		P
Thallium	5.70	U	28.50	U			P
Vanadium	469.60		482.50		2.7		P
Zinc	444.20		467.30		5.2		P

USEPA - CLP FORMS

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

ICP ID Number: _____ Date: 08/20/03

Flame AA ID Number: LEEMAN PS200

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments: _____

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	23.6	P
Antimony	206.838		60	4.7	P
Arsenic	189.042		10	4.8	P
Barium	493.409		200	5.9	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.6	P
Calcium	317.933		5000	182.1	P
Chromium	267.716		10	1.4	P
Cobalt	228.616		50	2.0	P
Copper	324.754		25	2.4	P
Iron	271.441		100	33.3	P
Lead	220.353		3	1.3	P
Magnesium	279.078		5000	178.3	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.1	P
Potassium	766.491		5000	393.0	P
Selenium	196.026		5	3.4	P
Silver	328.068		10	2.2	P
Sodium	330.232		5000	472.7	P
Thallium	190.864		10	5.7	P
Vanadium	292.402		50	2.0	P
Zinc	213.856		20	1.0	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

USEPA - CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	10000.0	P
Iron	10.00	1000000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	10000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	5000.0	P

Comments:

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
BLACADSSD11	09/16/03	0.65	100.0
BLACPDSSD10	09/16/03	0.67	100.0
BLACPDSSD41	09/16/03	0.63	100.0
BLACPDSSD43	09/16/03	0.68	100.0
BLACSTPSD01	09/16/03	0.69	100.0
BLACSTPSD01D	09/16/03	0.68	100.0
BLACSTPSD01S	09/16/03	0.69	100.0
BLACSTPSD02	09/16/03	0.61	100.0
BLACSTPSD03	09/16/03	0.68	100.0
BLACSTPSD04	09/16/03	0.60	100.0
BLACSTPSD42	09/16/03	0.70	100.0
BLACSTRSD02	09/16/03	0.67	100.0
BLACSTRSD04	09/16/03	0.63	100.0
BLACSTRSD42	09/16/03	0.60	100.0
BLUEPDSSD16	09/16/03	0.70	100.0
LCSS0916A	09/16/03	1.00	100.0
PBS0916A	09/16/03	0.60	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
BLACADSSD11	08/22/03	1.05	100.0
BLACPDSSD10	08/22/03	1.00	100.0
BLACPDSSD41	08/22/03	1.00	100.0
BLACPDSSD43	08/22/03	1.02	100.0
BLACSTPSD01	08/22/03	1.03	100.0
BLACSTPSD01D	08/22/03	1.06	100.0
BLACSTPSD01S	08/22/03	1.10	100.0
BLACSTPSD02	08/22/03	1.05	100.0
BLACSTPSD03	08/22/03	1.06	100.0
BLACSTPSD04	08/22/03	1.09	100.0
BLACSTPSD42	08/22/03	1.20	100.0
BLACSTRSD02	08/22/03	1.08	100.0
BLACSTRSD04	08/22/03	1.00	100.0
BLACSTRSD42	08/22/03	1.04	100.0
BLUEPDSSD16	08/22/03	1.00	100.0
LCSS0822D	08/22/03	1.00	100.0
PBS0822D	08/22/03	1.00	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
BLACADSSD11	09/11/03	1.07	100.0
BLACPDSSD10	09/11/03	1.04	100.0
BLACPDSSD41	09/11/03	1.10	100.0
BLACPDSSD43	09/11/03	1.02	100.0
BLACSTPSD01	09/11/03	1.08	100.0
BLACSTPSD01D	09/11/03	1.08	100.0
BLACSTPSD01S	09/11/03	1.08	100.0
BLACSTPSD02	09/11/03	1.10	100.0
BLACSTPSD03	09/11/03	1.08	100.0
BLACSTPSD04	09/11/03	1.06	100.0
BLACSTPSD42	09/11/03	1.00	100.0
BLACSTRSD02	09/11/03	1.13	100.0
BLACSTRSD04	09/11/03	1.01	100.0
BLACSTRSD42	09/11/03	1.12	100.0
BLUEPDSSD16	09/11/03	1.04	100.0
LCSS0911I	09/11/03	1.00	100.0
PBS0911I	09/11/03	1.00	100.0

USEPA - CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/13/03 End Date: 09/13/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1033													X												
S	1.00	1038																									
S	1.00	1042													X												
S	1.00	1045																									
LRS	1.00	1050													X												
LRS	1.00	1055													X												
LRS	1.00	1100													X												
ICV	1.00	1105													X												
ICB	1.00	1109													X												
ICSA	1.00	1114													X												
ICSAB	1.00	1119													X												
CRI	1.00	1124													X												
CRILOW	1.00	1128													X												
CCV	1.00	1133													X												
CCB	1.00	1138													X												
ZZZZZZ	1.00	1143																									
ZZZZZZ	1.00	1147																									
ZZZZZZ	1.00	1152																									
ZZZZZZ	5.00	1157																									
ZZZZZZ	1.00	1201																									
ZZZZZZ	1.00	1206																									
ZZZZZZ	1.00	1211																									
ZZZZZZ	1.00	1215																									
ZZZZZZ	1.00	1220																									
ZZZZZZ	1.00	1225																									
CCV	1.00	1229													X												
CCB	1.00	1234													X												
PBS0911I	1.00	1239													X												
LCSS0911I	1.00	1244													X												
BLACSTRSD42	1.00	1248													X												
BLACPDSSD41	1.00	1253													X												
BLACSTPSD01	1.00	1258													X												
BLACSTPSD01L	5.00	1302													X												
BLACSTPSD01A	1.00	1307													X												
BLACSTPSD01D	1.00	1312													X												
BLACSTPSD01S	1.00	1316													X												
BLACADSSD11	1.00	1321													X												
CCV	1.00	1326													X												

USEPA - CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/13/03 End Date: 09/13/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1331													X												
BLACPDSSD43	1.00	1335													X												
BLACSTPSD02	1.00	1340													X												
BLACSTPSD42	1.00	1345													X												
BLACSTRSD02	1.00	1349													X												
BLACSTPSD03	1.00	1354													X												
BLUEPDSSD16	1.00	1359													X												
BLACPDSSD10	1.00	1403													X												
BLACSTPSD04	1.00	1408													X												
BLACSTRSD04	1.00	1413													X												
CCV	1.00	1417													X												
CCB	1.00	1422													X												
ICSA	1.00	1427													X												
ICSAB	1.00	1432													X												
CRI	1.00	1437													X												
CRILOW	1.00	1441													X												
CCV	1.00	1446													X												
CCB	1.00	1451													X												

USEPA - CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCD003

Instrument ID Number: LEEMAN PS200 Method: CV

Start Date: 09/16/03 End Date: 09/16/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	2029																X												
S0.2	1.00	2032																X												
S0.5	1.00	2036																X												
S1	1.00	2039																X												
S5	1.00	2042																X												
S10	1.00	2046																X												
ICV	1.00	2050																X												
ICB	1.00	2053																X												
cra	1.00	2056																X												
CCV	1.00	2059																X												
CCB	1.00	2103																X												
PBS0916A	1.00	2106																X												
LCSS0916A	1.00	2109																X												
BLACSTRSD42	1.00	2112																X												
BLACPDSSD41	1.00	2115																X												
BLACSTPSD01	1.00	2119																X												
BLACSTPSD01D	1.00	2122																X												
BLACSTPSD01S	1.00	2125																X												
BLACADSSD11	1.00	2128																X												
BLACPDSSD43	1.00	2131																X												
CCV	1.00	2134																X												
CCB	1.00	2138																X												
BLACSTPSD02	1.00	2141																X												
BLACSTPSD42	1.00	2144																X												
BLACSTRSD02	1.00	2147																X												
BLACSTPSD03	1.00	2150																X												
BLUEPDSSD16	1.00	2153																X												
BLACPDSSD10	1.00	2156																X												
BLACSTPSD04	1.00	2159																X												
BLACSTRSD04	1.00	2203																X												
CCV	1.00	2206																X												
CCB	1.00	2209																X												

USEPA - CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/09/03 End Date: 09/09/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	0222		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
S	1.00	0227		X						X				X		X				X			X						
S	1.00	0231			X	X															X			X					
S	1.00	0235					X	X	X		X	X	X				X		X			X			X	X			
LRS	1.00	0240		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
LRS	1.00	0246		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
LRS	1.00	0251		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICV	1.00	0256		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICB	1.00	0301		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICSA	1.00	0306		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICSAB	1.00	0311		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CRI	1.00	0316		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCV	1.00	0321		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCB	1.00	0327		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
PBS0822D	1.00	0332		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
LCSS0822D	1.00	0337		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTRSD42	1.00	0342		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACPDSSD41	1.00	0347		X	X	X	X	X	X	X	X	X	X	X		X			X	X	X	X	X	X	X	X			
BLACSTPSD01	1.00	0352		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD01L	5.00	0357		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD01A	1.00	0402		X	X	X	X	X	X		X	X	X	X			X		X		X	X		X	X	X			
BLACSTPSD01D	1.00	0407		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD01S	1.00	0412		X	X	X	X	X	X		X	X	X	X			X		X		X	X		X	X	X			
BLACADSSD11	1.00	0417		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCV	1.00	0422		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCB	1.00	0427		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACPDSSD43	1.00	0432		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD02	1.00	0437		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD42	1.00	0443		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTRSD02	1.00	0448		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD03	1.00	0453		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLUEPDSSD16	1.00	0458		X	X	X	X	X	X	X	X	X	X	X		X			X	X	X	X	X	X	X	X			
BLACPDSSD10	1.00	0503		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACSTPSD04	1.00	0508		X	X	X	X	X	X	X	X	X	X	X		X			X	X	X	X	X	X	X	X			
BLACSTRSD04	1.00	0513		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
BLACPDSSD41	10.00	0518															X													
CCV	1.00	0523		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCB	1.00	0528		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			

USEPA - CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCD003

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/09/03 End Date: 09/09/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	10.00	0533																										
BLUEPDSSD16	100.00	0538															X											
BLACSTPSD04	10.00	0543															X											
ICSA	1.00	0548		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
ICSAB	1.00	0553		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CRI	1.00	0559		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CCV	1.00	0604		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CCB	1.00	0609		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		

SEVERN TRENT STL

Geotechnical Analysis
Sample Data Summary Package

EASEAT SDG # GCD003

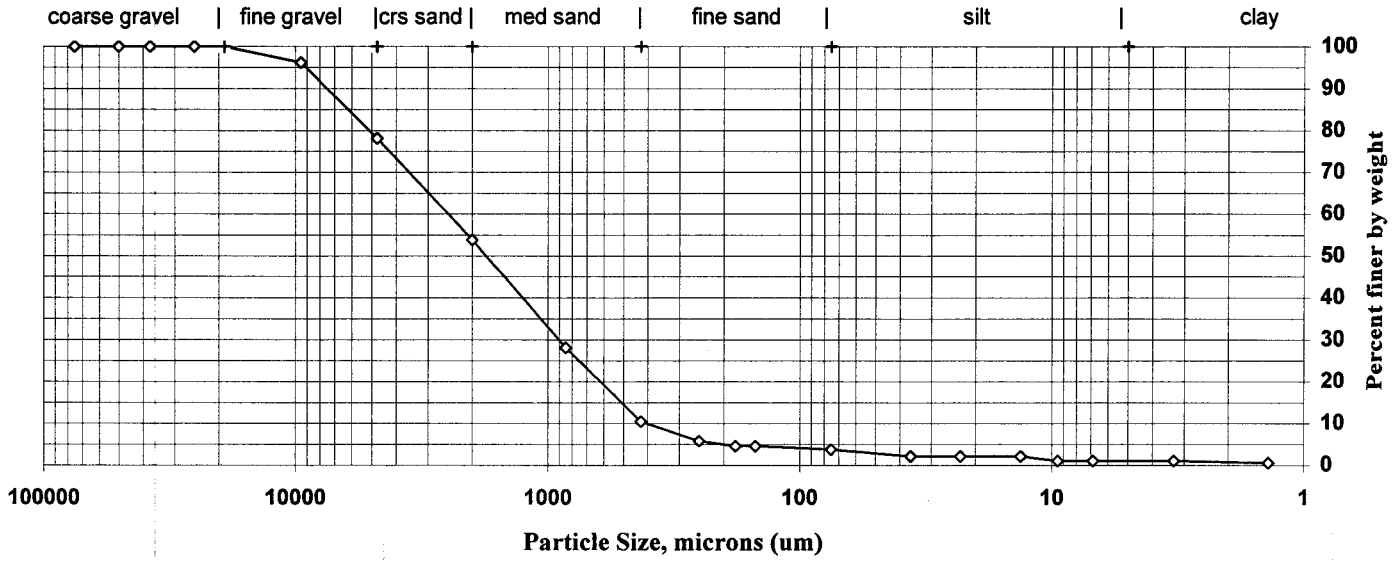
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536011 **Sample ID:** RSD-42

Percent Solids:	78.1%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	NA		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	96.2	3.8
#4	4750	78.2	18.0
#10	2000	53.8	24.4
#20	850	28.1	25.7
#40	425	10.5	17.6
#60	250	5.8	4.7
#80	180	4.6	1.2
#100	150	4.6	0.0
#200	75	3.7	0.8
Hydrometer	36.3	2.1	1.6
|	22.9	2.1	0.0
|	13.2	2.1	0.0
|	9.4	1.1	1.1
|	6.9	1.1	0.0
|	3.3	1.1	0.0
V	1.4	0.6	0.4

Soil Classification	Percent of Total Sample
Gravel	21.8
Sand	74.4
Coarse Sand	24.4
Medium Sand	43.3
Fine Sand	6.8
Silt	2.7
Clay	1.1

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

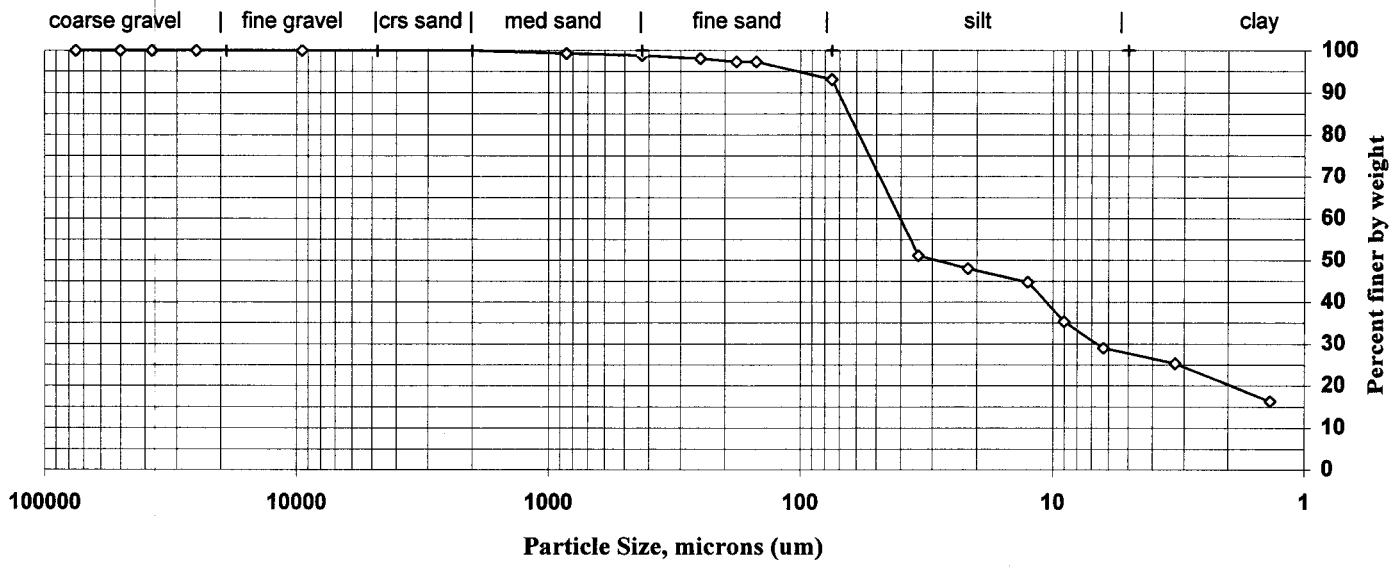
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536012 **Sample ID:** SSD-41

Percent Solids:	24.2%		**Maximum Particle Size:**	Med sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	N/A	
Non-soil mass:	0.3%		**Hardness (> #10):**	N/A	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.3	0.7
#40	425	98.9	0.5
#60	250	98.1	0.7
#80	180	97.3	0.8
#100	150	97.3	0.0
#200	75	93.1	4.2
Hydrometer	34.1	51.2	41.9
|	21.7	48.0	3.2
|	12.6	44.8	3.2
|	9.0	35.3	9.5
|	6.3	29.0	6.3
|	3.2	25.3	3.7
V	1.4	16.3	9.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	6.9
Coarse Sand	0.0
Medium Sand	1.1
Fine Sand	5.8
Silt	64.1
Clay	29.0

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

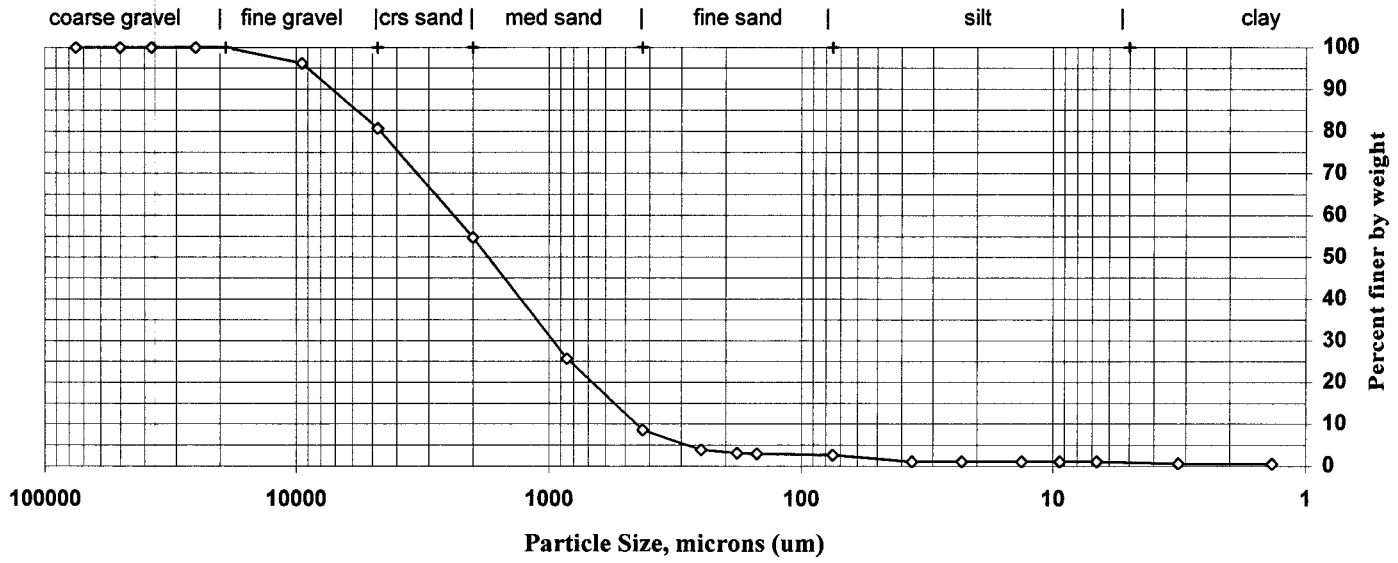
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536013 **Sample ID:** PSD-01

Percent Solids:	83.1%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	NA		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	96.2	3.8
#4	4750	80.6	15.6
#10	2000	54.8	25.9
#20	850	25.7	29.1
#40	425	8.6	17.1
#60	250	3.9	4.7
#80	180	3.1	0.8
#100	150	2.9	0.1
#200	75	2.6	0.4
Hydrometer	36.3	1.0	1.5
|	23.0	1.0	0.0
|	13.3	1.0	0.0
|	9.4	1.0	0.0
|	6.7	1.0	0.0
|	3.2	0.6	0.4
V	1.4	0.6	0.1

Soil Classification	Percent of Total Sample
Gravel	19.4
Sand	78.1
Coarse Sand	25.9
Medium Sand	46.2
Fine Sand	6.0
Silt	1.5
Clay	1.0

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

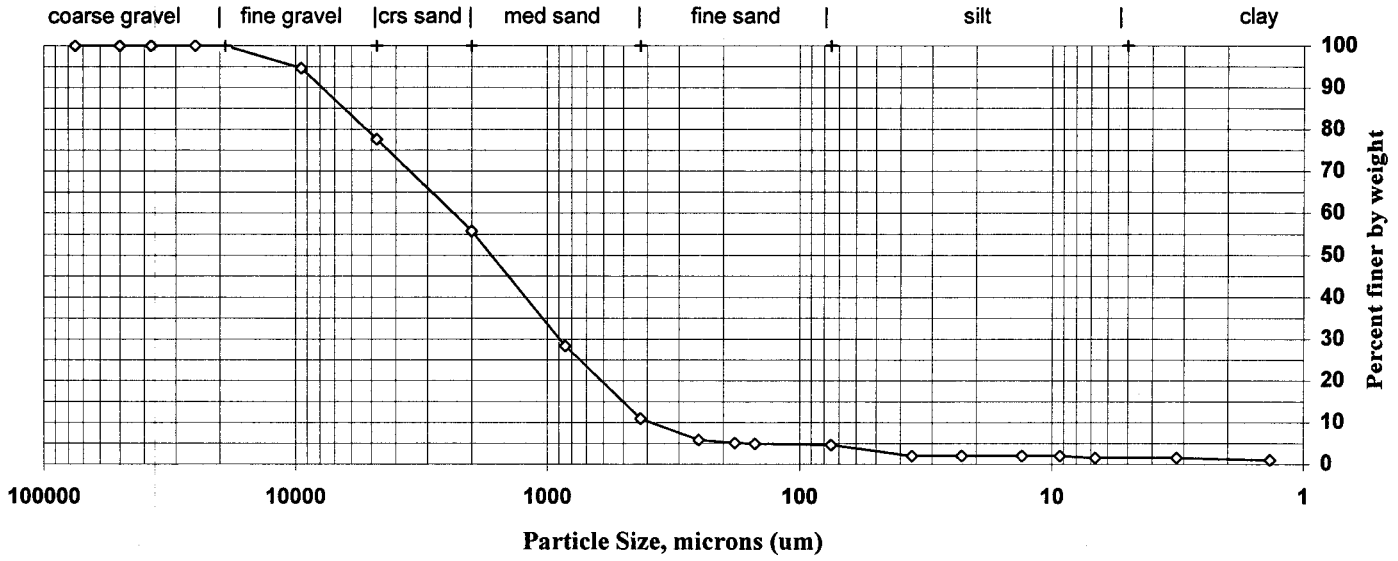
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536013DP **Sample ID:** PSD-01REP

Percent Solids:	84.7%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	NA		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	94.6	5.4
#4	4750	77.6	17.0
#10	2000	55.7	21.9
#20	850	28.4	27.3
#40	425	11.0	17.4
#60	250	5.8	5.1
#80	180	5.0	0.8
#100	150	4.9	0.1
#200	75	4.6	0.3
Hydrometer	36.0	2.0	2.6
|	22.8	2.0	0.0
|	13.2	2.0	0.0
|	9.3	2.0	0.0
|	6.7	1.5	0.5
|	3.2	1.5	0.0
V	1.4	1.0	0.5

Soil Classification	Percent of Total Sample
Gravel	22.4
Sand	73.0
Coarse Sand	21.9
Medium Sand	44.7
Fine Sand	6.4
Silt	3.1
Clay	1.5

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

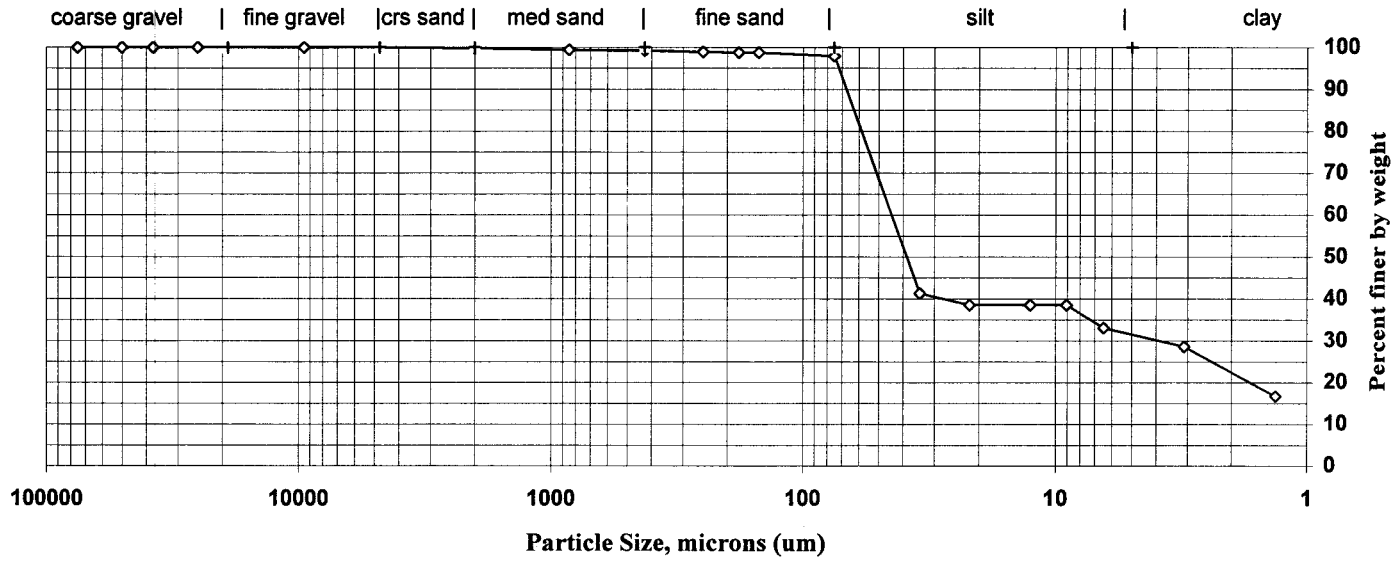
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536014 **Sample ID:** SSD-11

Percent Solids:	26.6%		**Maximum Particle Size:**	Crs sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	1.1%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.8	0.2
#20	850	99.4	0.3
#40	425	99.3	0.2
#60	250	98.9	0.3
#80	180	98.8	0.1
#100	150	98.7	0.0
#200	75	97.9	0.8
Hydrometer	34.3	41.3	56.7
|	21.8	38.5	2.7
|	12.6	38.5	0.0
|	9.0	38.5	0.0
|	6.5	33.1	5.4
|	3.1	28.6	4.5
V	1.3	16.8	11.8

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	2.1
Coarse Sand	0.2
Medium Sand	0.5
Fine Sand	1.3
Silt	64.8
Clay	33.1

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

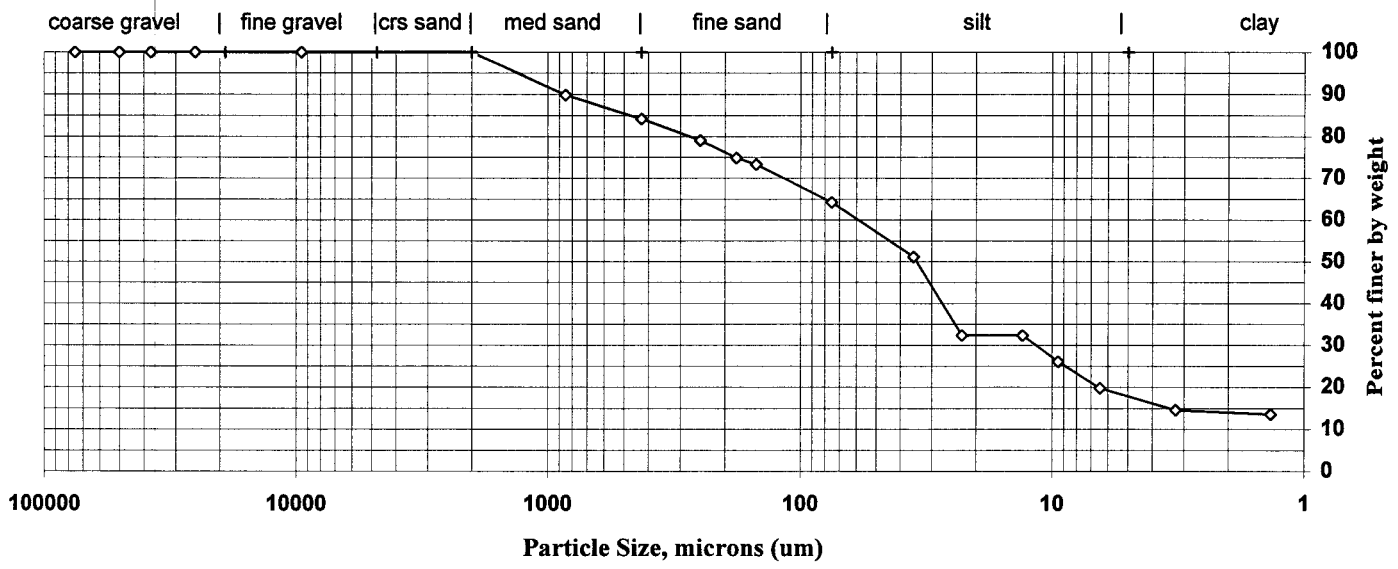
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536015 **Sample ID:** SSD-43

Percent Solids:	12.7%		**Maximum Particle Size:**	Med sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	N/A	
Non-soil mass:	16.8%		**Hardness (> #10):**	N/A	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	89.9	10.1
#40	425	84.2	5.7
#60	250	79.0	5.1
#80	180	74.9	4.1
#100	150	73.3	1.6
#200	75	64.2	9.1
Hydrometer	35.4	51.2	13.0
|	22.7	32.4	18.8
|	13.1	32.4	0.0
|	9.5	26.1	6.3
|	6.4	19.8	6.3
|	3.2	14.6	5.2
V	1.4	13.6	1.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	35.8
Coarse Sand	0.0
Medium Sand	15.8
Fine Sand	20.0
Silt	44.4
Clay	19.8

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

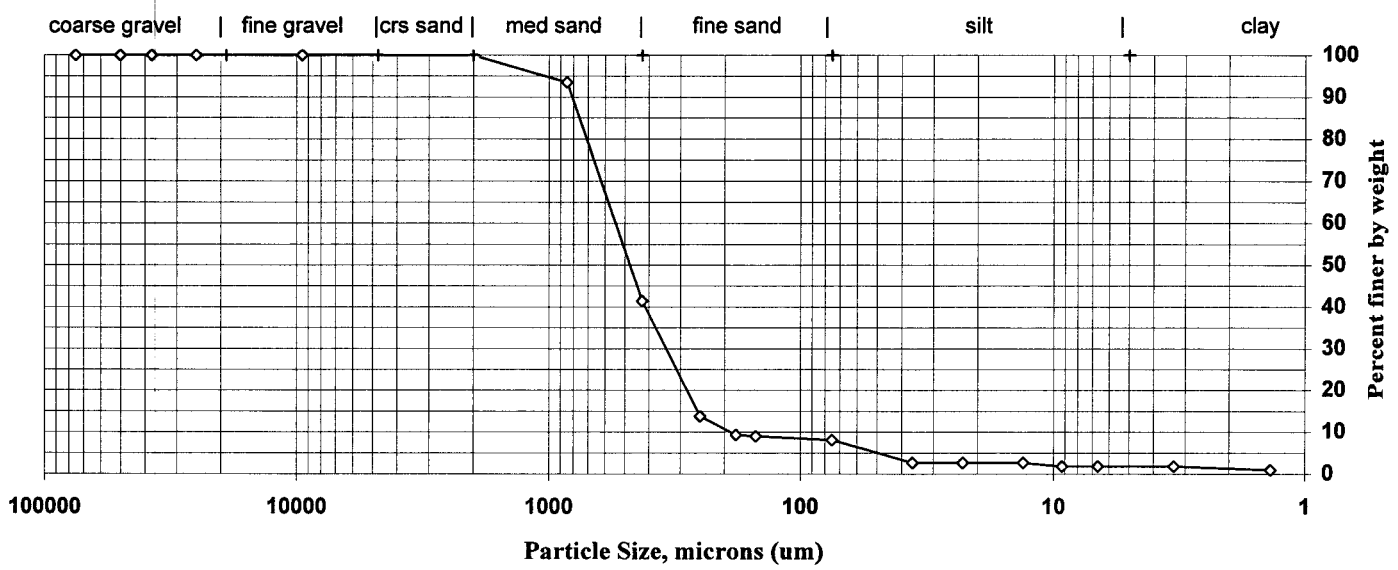
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536016 **Sample ID:** PSD-02

Percent Solids:	79.0%		**Maximum Particle Size:**	Crs sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	0.0%		**Hardness (> #10):**	brittle	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	93.5	6.5
#40	425	41.5	52.0
#60	250	13.7	27.7
#80	180	9.3	4.5
#100	150	9.0	0.3
#200	75	8.1	0.9
Hydrometer	36.2	2.7	5.4
|	22.9	2.7	0.0
|	13.2	2.7	0.0
|	9.2	1.8	0.8
|	6.6	1.8	0.0
|	3.3	1.8	0.0
V	1.4	1.0	0.8

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	91.9
Coarse Sand	0.0
Medium Sand	58.5
Fine Sand	33.4
Silt	6.3
Clay	1.8

Dispersion Device: Mechanical mixer with a metal paddle.

Dispersion Period: 1 minute

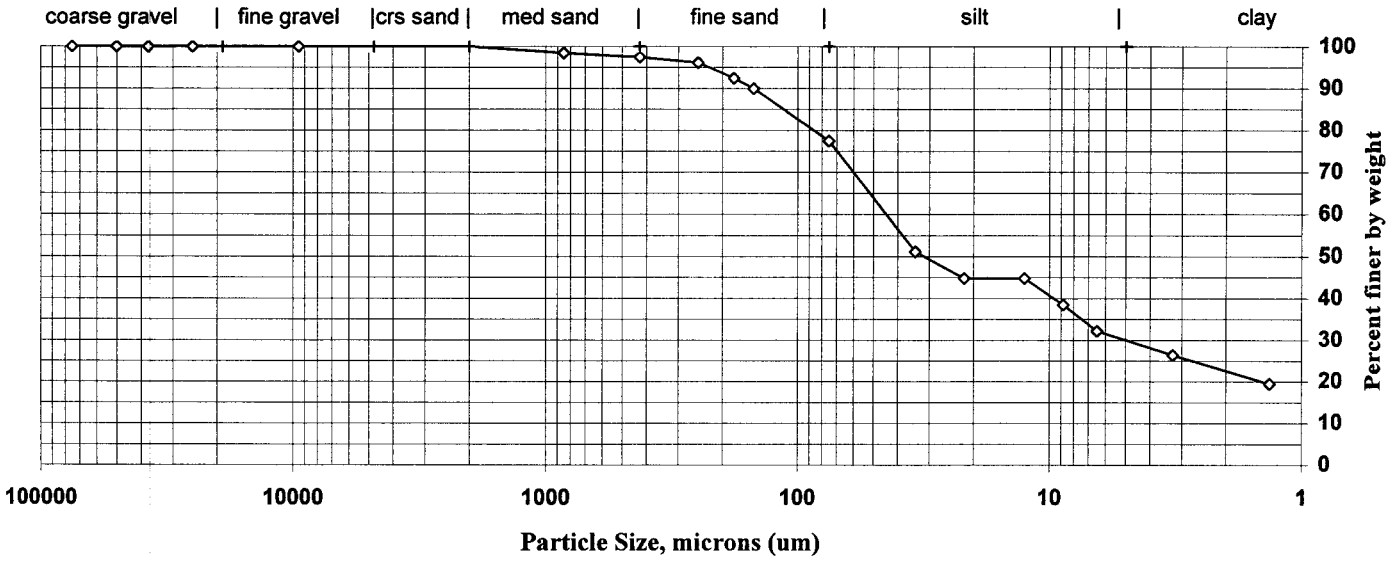
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536017 **Sample ID:** PSD-42

Percent Solids:	22.9%		**Maximum Particle Size:**	Med sand
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	N/A
Non-soil mass:	0.9%		**Hardness (> #10):**	N/A



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	98.5	1.5
#40	425	97.5	1.0
#60	250	96.2	1.3
#80	180	92.4	3.7
#100	150	90.0	2.5
#200	75	77.4	12.5
Hydrometer	34.1	51.1	26.3
|	21.8	44.8	6.3
|	12.6	44.8	0.0
|	8.8	38.5	6.3
|	6.5	32.2	6.3
|	3.3	26.4	5.8
V	1.3	19.5	6.9

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	22.6
Coarse Sand	0.0
Medium Sand	2.5
Fine Sand	20.0
Silt	45.3
Clay	32.2

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

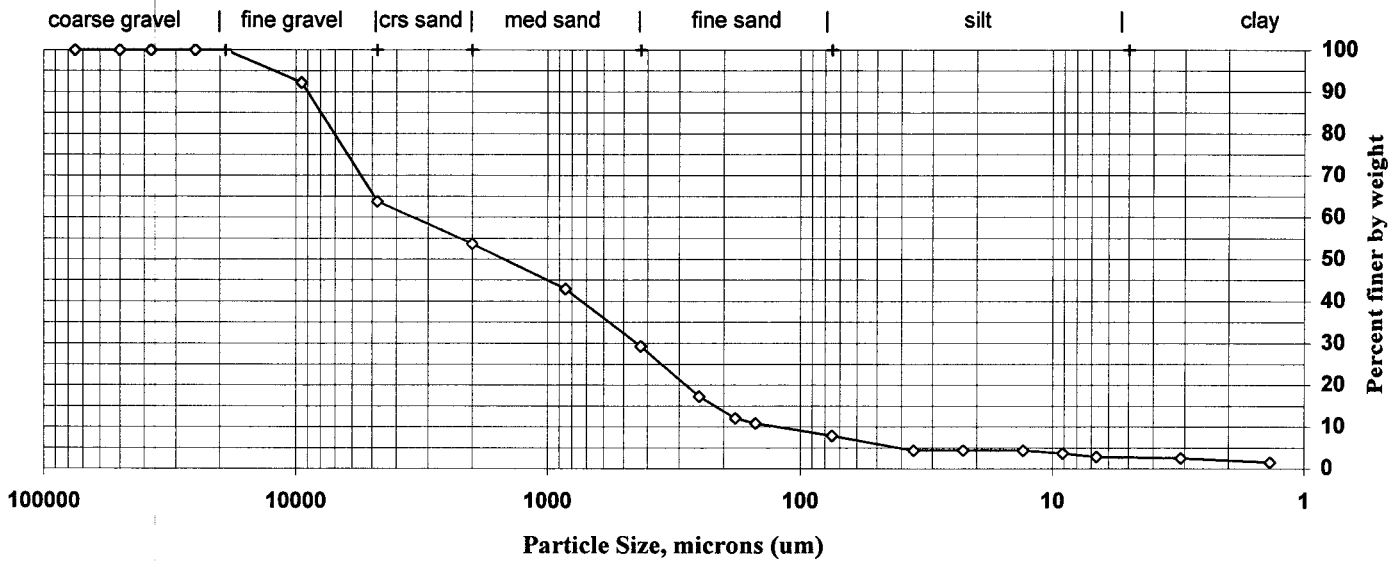
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536018 **Sample ID:** RSD-02

Percent Solids:	87.3%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subangular	
Non-soil mass:	0.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	92.2	7.8
#4	4750	63.7	28.5
#10	2000	53.7	10.1
#20	850	42.9	10.8
#40	425	29.3	13.6
#60	250	17.3	12.0
#80	180	12.0	5.2
#100	150	10.9	1.2
#200	75	7.9	3.0
Hydrometer	35.7	4.4	3.5
|	22.6	4.4	0.0
|	13.0	4.4	0.0
|	9.1	3.7	0.7
|	6.7	2.8	0.8
|	3.1	2.5	0.4
V	1.4	1.5	0.9

Soil Classification	Percent of Total Sample
Gravel	36.3
Sand	55.8
Coarse Sand	10.1
Medium Sand	24.4
Fine Sand	21.4
Silt	5.0
Clay	2.8

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

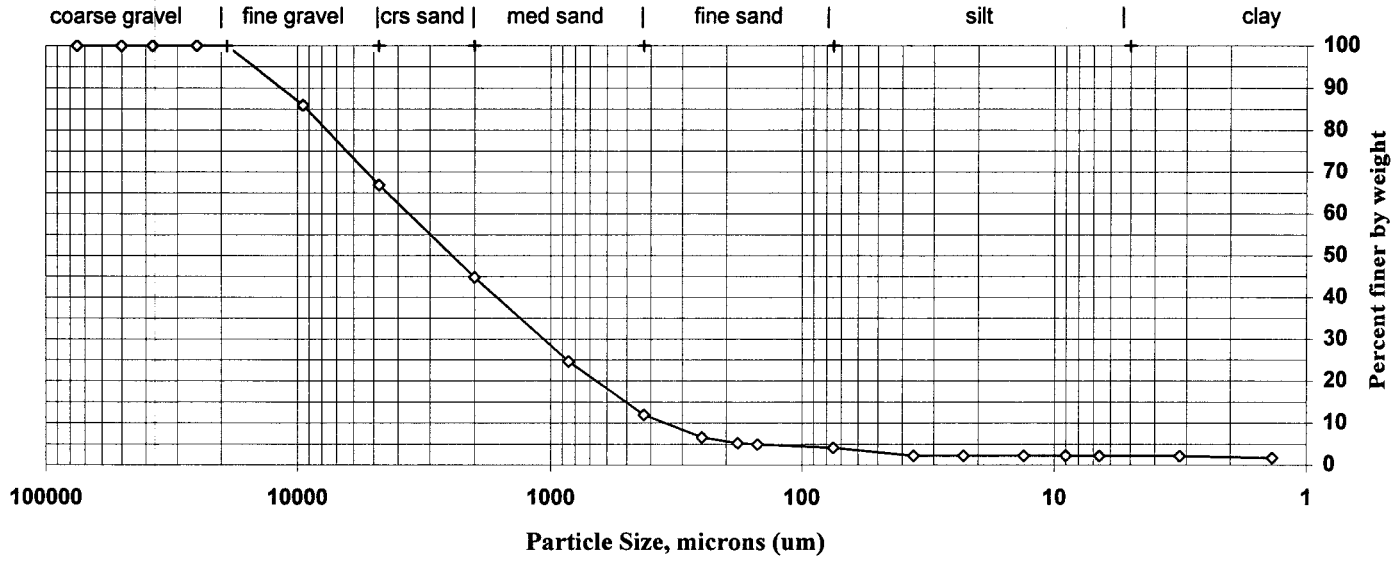
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536019 **Sample ID:** PSD-03

Percent Solids:	86.7%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	NA		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	85.9	14.1
#4	4750	66.9	19.1
#10	2000	44.8	22.0
#20	850	24.6	20.2
#40	425	12.0	12.7
#60	250	6.6	5.3
#80	180	5.2	1.4
#100	150	5.0	0.2
#200	75	4.2	0.8
Hydrometer	36.0	2.2	1.9
|	22.8	2.2	0.0
|	13.2	2.2	0.0
|	9.0	2.2	0.0
|	6.6	2.1	0.1
|	3.2	2.1	0.0
V	1.4	1.7	0.4

Soil Classification	Percent of Total Sample
Gravel	33.1
Sand	62.7
Coarse Sand	22.0
Medium Sand	32.9
Fine Sand	7.8
Silt	2.0
Clay	2.1

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

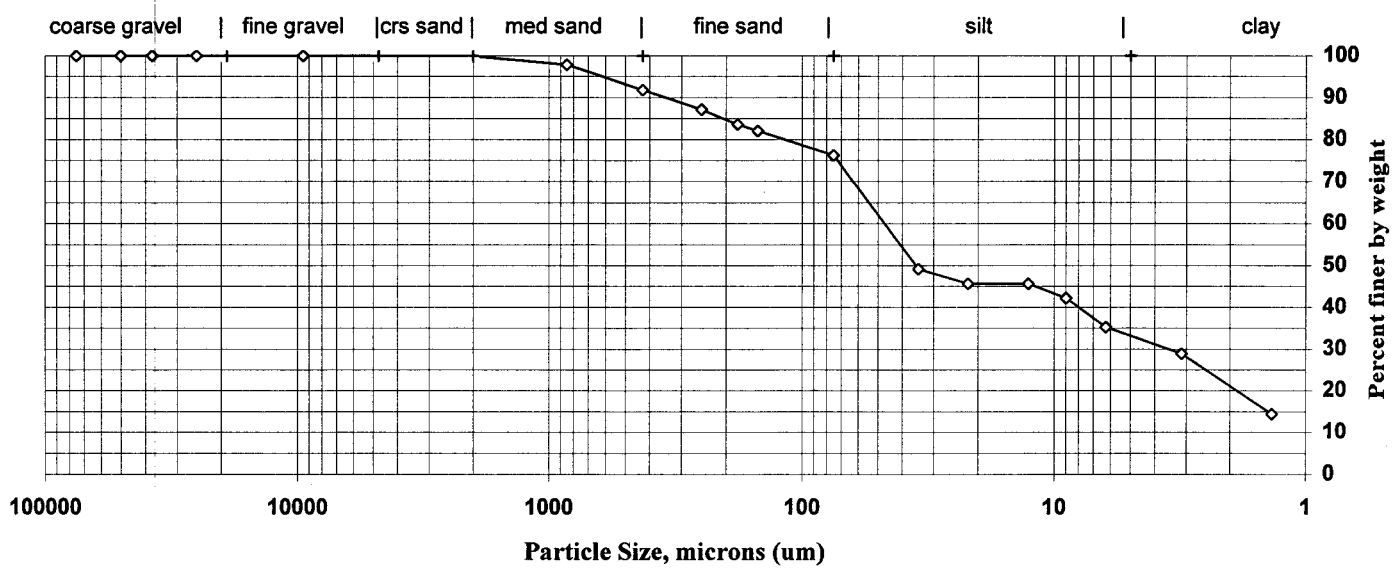
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536020 **Sample ID:** SSD-16

Percent Solids:	17.8%		**Maximum Particle Size:**	Crs sand	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	0.2%		**Hardness (> #10):**	soft	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	97.9	2.1
#40	425	91.8	6.0
#60	250	87.2	4.7
#80	180	83.5	3.6
#100	150	82.0	1.5
#200	75	76.2	5.8
Hydrometer	34.4	49.1	27.1
|	21.9	45.7	3.5
|	12.6	45.7	0.0
|	9.0	42.2	3.5
|	6.3	35.3	6.9
|	3.1	28.9	6.4
V	1.4	14.5	14.5

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	23.8
Coarse Sand	0.0
Medium Sand	8.1
Fine Sand	15.6
Silt	41.0
Clay	35.3

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

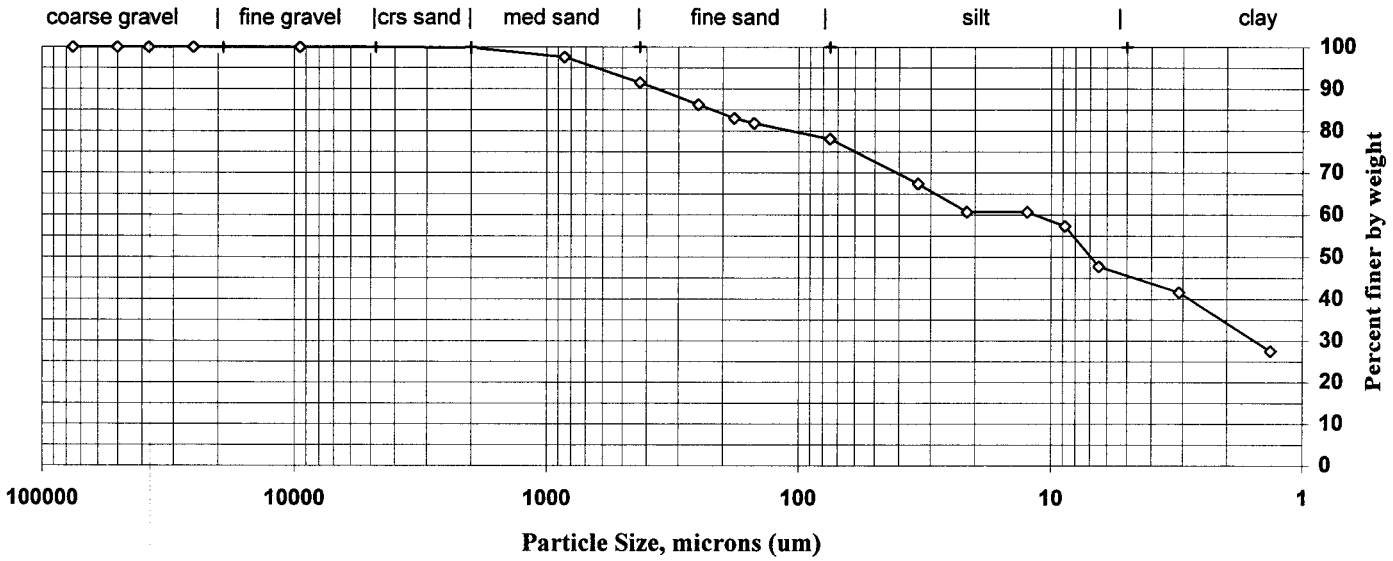
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536021 **Sample ID:** SSD-10

Percent Solids:	18.8%		**Maximum Particle Size:**	Crs sand
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	angular
Non-soil mass:	1.0%		**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.8	0.2
#20	850	97.6	2.3
#40	425	91.5	6.1
#60	250	86.2	5.2
#80	180	83.0	3.3
#100	150	81.8	1.1
#200	75	78.0	3.8
Hydrometer	33.7	67.4	10.6
|	21.5	60.7	6.7
|	12.4	60.7	0.0
|	8.8	57.3	3.4
|	6.5	47.8	9.6
|	3.1	41.6	6.2
V	1.3	27.5	14.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	22.0
Coarse Sand	0.2
Medium Sand	8.4
Fine Sand	13.4
Silt	30.3
Clay	47.8

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

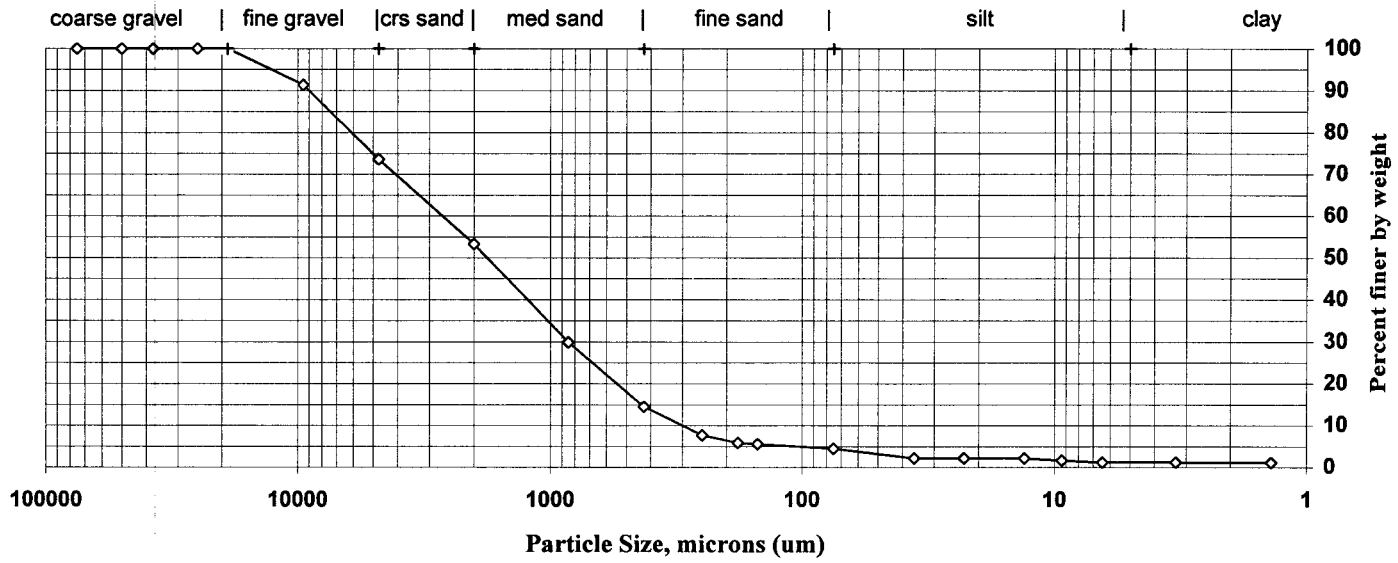
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536022 **Sample ID:** PSD-04

Percent Solids:	85.7%		**Maximum Particle Size:**	19 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	NA		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	91.4	8.6
#4	4750	73.6	17.7
#10	2000	53.3	20.3
#20	850	29.9	23.4
#40	425	14.5	15.4
#60	250	7.7	6.8
#80	180	5.9	1.8
#100	150	5.6	0.3
#200	75	4.5	1.1
Hydrometer	36.0	2.2	2.2
|	22.8	2.2	0.0
|	13.2	2.2	0.0
|	9.3	1.7	0.5
|	6.4	1.3	0.4
|	3.3	1.3	0.0
V	1.4	1.2	0.1

Soil Classification	Percent of Total Sample
Gravel	26.4
Sand	69.2
Coarse Sand	20.3
Medium Sand	38.8
Fine Sand	10.0
Silt	3.2
Clay	1.3

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

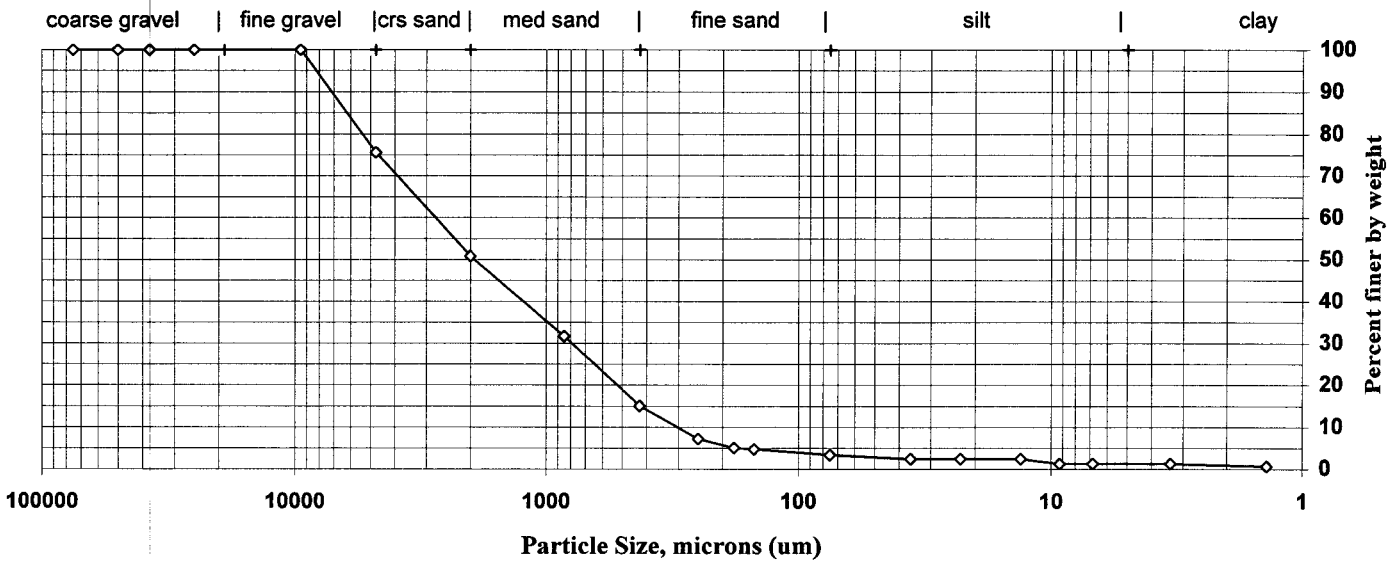
Particle Size of Soils by ASTM D422

Sample preparation method: **D2217**

Client:	EASEAT	**Project No.:**	23046	**ETR(s) #:**	95020
Client Code:	EASEAT	**Job No.:**	N/A	**SDG(s):**	GCD003
Date Received:	26-Jul-03	**Start Date:**	12-Aug-03	**End Date:**	22-Aug-03

Lab ID: 536023 **Sample ID:** RSD-04

Percent Solids:	83.4%		**Maximum Particle Size:**	9.5 mm	
Specific Gravity:	2.65	(assumed)	**Shape (> #10):**	subrounded	
Non-soil mass:	0.0%		**Hardness (> #10):**	hard	



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	75.6	24.4
#10	2000	50.8	24.8
#20	850	31.6	19.2
#40	425	15.0	16.6
#60	250	7.3	7.8
#80	180	5.1	2.2
#100	150	4.7	0.4
#200	75	3.3	1.4
Hydrometer	36.0	2.5	0.9
|	22.8	2.5	0.0
|	13.2	2.5	0.0
|	9.2	1.3	1.2
|	6.8	1.3	0.0
|	3.4	1.3	0.0
V	1.4	0.7	0.6

Soil Classification	Percent of Total Sample
Gravel	24.4
Sand	72.3
Coarse Sand	24.8
Medium Sand	35.8
Fine Sand	11.7
Silt	2.1
Clay	1.3

Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

STL Burlington
Colchester, Vermont

Sample Data Summary
Package

SDG: GCS002

SEVERN TRENT STL

September 23, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCS002

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 18 and 22, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/18/03 ETR No: 94855		
534799	SHERWPSUS23(3.5)	07/14/03	Soil
534800	SHERWPSUS23(3.5)SPLP	07/14/03	Extract
534801	CAPMWPSUS20(4.0)	07/15/03	Soil
534802	CAPMWPSUS20(4.0)SPLP	07/15/03	Extract
534803	CAPMWPSUS21(2.5)	07/15/03	Soil
534804	CAPMWPSUS21(2.5)SPLP	07/15/03	Extract
534805	CAPMTASUS22(1.5)	07/15/03	Soil
534806	SHERTASUS25(1.5)	07/14/03	Soil
534807	CAPMWPSUS39(2.0)	07/15/03	Soil
534808	CAPMWPSUS39(2.0)SPLP	07/15/03	Extract
534809	GRANBGSSS34(0.5)	07/15/03	Soil
534810	GRANBGSSS34(0.5)SPLP	07/15/03	Extract
534811	GRANBGSSS35(0.5)	07/15/03	Soil
534812	GRANBGSSS35(0.5)SPLP	07/15/03	Extract
534813	GRANBGSSS36(0.5)	07/15/03	Soil
534814	GRANBGSSS36(0.5)SPLP	07/15/03	Extract
	Received: 07/22/03 ETR No: 94964		
535438	AJAXWPSUS08(1.2)	07/17/03	Soil
535439	AJAXWPSUS08(1.2)SPLP	07/17/03	Extract
535440	AJAXWPSUS09(1.0)	07/17/03	Soil
535441	AJAXWPSUS09(1.0)SPLP	07/17/03	Extract
535442	MAGNTASSS15(0.5)	07/19/03	Soil
535443	MAGNTASSS15(0.5)SPLP	07/19/03	Extract

Severn Trent Laboratories, Inc.
STL Burlington • 208 South Park Drive, Suite 1, Colchester, VT 05446
Tel 802 655 1203 Fax 802 655 1248 • www.stl-inc.com

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/22/03 ETR No: 94964 (Cont.)		
535444	MAGNTASSS15(0.5)(100)	07/19/03	Soil
535445	MAGNTASSS150.5100SPLP	07/19/03	Extract
535446	LUCABGSSS19(0.5)	07/19/03	Soil
535447	LUCABGSSS19(0.5)SPLP	07/19/03	Extract
535448	MAGNTASUS18(1.5)	07/18/03	Soil
535449	MAGNPDSSS12(0.3)	07/18/03	Soil
535450	MAGNWPSSS16(0.5)	07/18/03	Soil
535451	MAGNWPSSS16(0.5)SPLP	07/18/03	Extract
535452	AJAXWPSUS10(2.0)	07/18/03	Soil
535453	AJAXWPSUS10(2.0)SPLP	07/18/03	Extract
535454	MAGNWPSUS14(3.0)	07/18/03	Soil
535454MS	MAGNWPSUS14(3.0)MS	07/18/03	Soil
535454DP	MAGNWPSUS14(3.0)REP	07/18/03	Soil
535455	MAGNWPSUS14(3.0)SPLP	07/18/03	Extract
535455MS	MAGNWPSUS143.0SPLPMS	07/18/03	Extract
535455DP	MAGNWPSUS143.0SPLPREP	07/18/03	Extract
535456	MAGNWPSUS17(2.0)	07/18/03	Soil
535457	MAGNWPSUS17(2.0)SPLP	07/18/03	Extract

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed. Please note that the "SPLP" suffix refers to the lab generated Synthetic Precipitation Leachate Procedure (SPLP) extract.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample log-in is included in the Sample Handling section of this submittal. Please note the one of the containers for samples AJAXWPSUS08(1.2) and MAGNWPSUS14(3.0) were received broken but intact. The laboratory transferred all contents to clean containers upon arrival.

The analysis for hexavalent chromium was performed by STL's Chicago facility, as approved by EA Engineering. STL Chicago assigned "Lot" numbers as samples were received. Though laboratory numbers may differ, the client's sample identifications were maintained. The results for this delivery group including a case narrative prepared by the Chicago laboratory can be found at the end of the extended submittal.

The analysis for acid base accounting (ABA) was performed by BC Research Inc. Please note that the ABA results for these samples were included in SDG GCS003. These samples were inadvertently consolidated with that shipment.

Metals by ICP / CVAA

The percent difference between the original determinations and serial dilution determinations for beryllium (17.6%), calcium (12.4%), lead (14.0%), magnesium (12.5%), potassium (19.9%) and zinc (13.1%) in sample MAGNWPSUS14(3.0) were above the control criteria of ±10%. Matrix interference is suspected and results have been flagged with an "E" accordingly.

The recoveries of antimony (22.2%), selenium (61.7%), and zinc (22.8%) from the laboratory fortified aliquot of sample MAGNWPSUS14(3.0) were below the laboratory control limit of 75-125%. Corresponding sample results have been flagged with an "N". Recovery from the laboratory control samples proved acceptable. Recovery from the post digestate spike of this same sample proved acceptable.

The relative percent differences (RPDs) between the initial and duplicate analysis of sample MAGNWPSUS14(3.0) for barium (70.7%), calcium (22.5%), lead (21.1%), magnesium (35.8%) and mercury (56.7%) were above the established control limit of ±20 percent. Corresponding sample results have been flagged with a "*" to denote this anomaly.

Please note that the following samples displayed a slight negative interference (concentration less than 0 but greater than −10 ppb) for cadmium: AJAXWPSUS08(1.2), MAGNWPSSS16(0.5), and MAGNWPSUS14(3.0).

For the analysis performed on ICP6 on August 28, 2003, the second continuing calibration blank failed slightly high for manganese (110.8%). The laboratory noted that all sample results reported for manganese from this analytical run were those that required dilutions for this element.

Reportable concentrations of the following metals were detected in one or more of the SPLP preparation blanks associated with this delivery group: lead, sodium, and zinc. The laboratory noted that the digestion preparation blanks associated with the above samples did not contain metals in concentrations greater than their respective reporting limits.

Please note that not all elements were included in the matrix spiking solution for the SPLP extract. The routine protocol of spiking with only the Toxicity Characteristic Leachate Procedure (TCLP) / SEM elements was followed. The spiking solution thus contained arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver plus copper and zinc.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0855.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtw/jmm

0002-D LAST ALPHA

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd. Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425 451 7400
Fax:
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Sampler's Name: James Gatherer
Sampler's Signature:

Proj. No.: 13890.13
Project Name: GRANITE CREEK WATERSHED MINES

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	Analysis Requested: pH	TAL Metals	CN	SO4	ABA	Lab/Sample ID (Lab Use Only)
S	7/14/03	1330		X	SHER-WP-SOS-23 (3.5)			2		X	X	X	X	X	
S	7/15/03	1035		X	CAPM-WP-SOS-20 (4.0)			2		X	X	X	X	X	
S	7/15/03	1135		X	CAPM-WP-SOS-21 (2.5)			2		X	X	X	X	X	
S	7/15/03	1400		X	CAPM-TA-SOS-22 (1.5)			1		X	X	X			
S	7/14/03	1330		X	SHER-TA-SOS-25 (1.5)			1		X	X	X			
S	7/15/03	1305		X	CAPM-WP-SOS-39 (2.0)			2		X	X	X	X	X	
S	7/15/03	1657		X	GRAN-BG-SSS-34 (0.5)			2		X	X	X	X	X	
S	7/15/03	1657		X	GRAN-BG-SSS-35 (0.5)			2		X	X	X	X	X	
S	7/15/03	1744		X	GRAN-BG-SSS-36 (0.5)			2		X	X	X	X	X	

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
	7/16/03	1500		7/18/03	1000
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes.
Please Fax written changes to
(802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Soil

p 1 of 2

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: EA Engineering	Company: Same
Address: 12011 Bel-Red Rd Bellevue, WA 98	Address:
Contact: Jen Kindred	Contact:
Phone: 425 451-7400	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Sampler's Name: James Gatherer

Sampler's Signature:

Proj. No.: 13890.13

Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	pH	TAL Metals	CN	ORP	ABA	Chromium VI	Lab/Sample ID (Lab Use Only)
S	7/17/03	1115		X	AJAX-WP-SUS-08 (1.2)			2		X	X	X	X	X	X	
S	7/17/03	1250		X	AJAX-WP-SUS-09 (1.0)			2		X	X	X	X	X	X	
~~S~~	~~7/17/03~~	~~1330~~		~~X~~	~~AJAX-PD-SSD-06~~											
S	7/19/03	1415		X	MAGN-TA-SSS-15 (0.5)			2		X	X	X	X	X	X	
S	7/19/03	1420		X	MAGN-TA-SSS-15 (0.5)(100)			2		X	X	X	X	X	X	
S	7/19/03	1330		X	LUCA-BG-SSS-19 (0.5)			2		X	X	X	X	X	X	
S	7/18/03	1445		X	MAGN-TA-SUS-18 (1.5)			1		X	X	X			X	
S	7/18/03	1600		X	MAGN-PD-SSS-12 (0.3)			1		X	X	X			X	
S	7/18/03	1420		X	MAGN-WP-SSS-16 (0.5)			2		X	X	X	X	X	X	
~~S~~	~~7/18/03~~	~~1320~~		~~X~~	~~MAGN-WP-SUS-14 (3.0)~~			2		X	X	X	X	X		

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Jen Kindred	7-21-03	0800		7/22/03	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube Sl - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**
SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Soil p 2 of 2

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: See p. 1 - EA	Company: See p. 1
Address: 12011 Bel-Red Rd Suite 200 Bellevue, WA 98005	Address:
Contact: Jen Kindred	Contact:
Phone: 425-451-7400	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Sampler's Name: James Gothener
Sampler's Signature:

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Proj. No.	Project Name
see p 1	see p 1

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	PH	TAL Metals	CN	SPLP	ABA	Chromium VI	Lab/Sample ID (Lab Use Only)
S	7/18/03	1240		X	AJAX-WP-SUS-10 (2.0)			2		X	X	X	X	X	X	
S	7/18/03	1320		X	MAGN-WP-SUS-14 (3.0) MS			4 2		X	X	X	X	X	X	MS
S	7/18/03	1535		X	MAGN-WP-SUS-17 (2.0)			2		X	X	X	X	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
	7-21-03	0800		7/22/03	1070
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.
SHERWPSUS23(3.5)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 534799

Matrix: SOIL
Client: EASEAT
Date Received: 07/18/03

% Solids: 93.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.0	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		93.0	

Printed on: 09/04/03 05:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

CAPMWPSUS20(4.0)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534801

Matrix: SOIL | Client: EASEAT | Date Received: 07/18/03

% Solids: 91.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.4	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		91.2	

Printed on: 09/04/03 05:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
CAPMWPSUS21(2.5)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 534803

Matrix: SOIL
Client: EASEAT
Date Received: 07/18/03

% Solids: 92.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	8.0	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		92.8	

Printed on: 09/04/03 05:23 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
CAPMTASUS22(1.5)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534805

Matrix: SOIL | Client: EASEAT | Date Received: 07/18/03

% Solids: 86.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.1	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		86.5	

Printed on: 09/04/03 05:23 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
SHERTASUS25(1.5)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 534806

Matrix: SOIL
Client: EASEAT
Date Received: 07/18/03

% Solids: 93.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	6.8	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		93.0	

Printed on: 09/04/03 05:23 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
CAPMWPSUS39(2.0)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534807

Matrix: SOIL | Client: EASEAT | Date Received: 07/18/03

% Solids: 91.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	4.9	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		91.4	

Printed on: 09/04/03 05:24 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

GRANBGSSS34(0.5)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534809

Matrix: SOIL | Client: EASEAT | Date Received: 07/18/03

% Solids: 78.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	6.4	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		78.1	

Printed on: 09/04/03 05:24 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

GRANBGSSS35(0.5)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534811

Matrix: SOIL | Client: EASEAT | Date Received: 07/18/03

% Solids: 73.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	6.7	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		73.7	

Printed on: 09/04/03 05:24 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

GRANBGSSS36(0.5)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534813

Matrix: SOIL | Client: EASEAT | Date Received: 07/18/03

% Solids: 91.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	6.6	
IN623	Solids, Percent	07/22/03	N/A	%	1.0		91.6	

Printed on: 09/04/03 05:25 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXWPSUS08(1.2)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535438

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 89.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.8	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		89.6	

Printed on: 09/04/03 05:25 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXWPSUS09(1.0)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535440

Matrix: SOIL
Client: EASEAT
Date Received: 07/22/03

% Solids: 95.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	8.2	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		95.1	

Printed on: 09/04/03 05:25 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNTASSS15(0.5)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535442

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 93.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	4.5	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		93.6	

Printed on: 09/04/03 05:26 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNTASSS15(0.5)(100)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535444

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 93.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	4.5	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		93.9	

Printed on: 09/04/03 05:26 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
LUCABGSSS19(0.5)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535446

Matrix: SOIL
Client: EASEAT
Date Received: 07/22/03

% Solids: 92.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	5.9	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		92.5	

Printed on: 09/04/03 05:27 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNTASUS18(1.5)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535448

Matrix: SOIL
Client: EASEAT
Date Received: 07/22/03

% Solids: 92.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.2	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		92.4	

Printed on: 09/04/03 05:27 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNPDSSS12(0.3)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535449

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 31.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.7	
IN623	Solids, Percent	07/31/03	N/A	%	1.0		31.3	

Printed on: 09/04/03 05:27 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MAGNWPSSS16(0.5)

Lab Name: STL BURLINGTON

Contract:

SDG No.: GCS002

Lab Code: STLVT

Case No.: 23046

Lab Sample ID: 535450

Matrix: SOIL

Client: EASEAT

Date Received: 07/22/03

% Solids: 91.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	2.7	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		91.0	

Printed on: 09/04/03 05:28 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXWPSUS10(2.0)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535452

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 92.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	3.9	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		92.1	

Printed on: 09/04/03 05:29 PM

WET CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.
MAGNWPSUS14(3.0)REP

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535454DP

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 89.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD*
9040B	Corrosivity by pH	07/26/03		pH	5.7		5.7		0
IN623	Solids, Percent	07/29/03	N/A	%	88.4		89.1		1

** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/04/03 05:29 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNWPSUS14(3.0)

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535454

Matrix: SOIL | Client: EASEAT | Date Received: 07/22/03

% Solids: 88.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	5.7	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		88.4	

Printed on: 09/04/03 05:30 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNWPSUS17(2.0)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCS002

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535456

Matrix: SOIL
Client: EASEAT
Date Received: 07/22/03

% Solids: 95.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
9040B	Corrosivity by pH	07/26/03		pH	1	0.000	7.7	
IN623	Solids, Percent	07/29/03	N/A	%	1.0		95.0	

Printed on: 09/04/03 05:31 PM

WET CHEMISTRY

Laboratory Control Sample Report Summary

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCS002

Lab Code: STLVT | Case No.: 23046

Matrix: SOIL | Client: EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCS Conc.	True Value	% Recovery*
LCSPH0726A	9040B	Corrosivity by pH	07/26/03		pH	6.0	6.0000	100.5

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*

Printed on: 09/04/03 05:32 PM

WET CHEMISTRY

Laboratory Control Sample Duplicate
Report Summary

Lab Name: STL BURLINGTON Contract: SDG No.: GCS002

Lab Code: STLVT Case No.: 23046

Matrix: SOIL Client: EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCSD Conc.	True Value	% Recovery*	RPD**
LCSDPH0726A	9040B	Corrosivity by pH	07/26/03		pH	6.0	6.0000	100.3	0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*
*** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/04/03 05:32 PM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
AJAXWPSUS08(1.2)	535438
AJAXWPSUS09(1.0)	535440
AJAXWPSUS10(2.0)	535452
CAPMTASUS22(1.5)	534805
CAPMWPSUS20(4.0)	534801
CAPMWPSUS21(2.5)	534803
CAPMWPSUS39(2.0)	534807
GRANBGSSS34(0.5)	534809
GRANBGSSS35(0.5)	534811
GRANBGSSS36(0.5)	534813
LUCABGSSS19(0.5)	535446
MAGNPDSSS12(0.3)	535449
MAGNTASSS15(0.5)	535442
MAGNTASSS15(0.5)(100)	535444
MAGNTASUS18(1.5)	535448
MAGNWPSSS16(0.5)	535450
MAGNWPSUS14(3.0)	535454
MAGNWPSUS14(3.0)D	535454DP
MAGNWPSUS14(3.0)S	535454MS
MAGNWPSUS17(2.0)	535456
SHERTASUS25(1.5)	534806
SHERWPSUS23(3.5)	534799

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPSUS08(1.2)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535438

Level (low/med): LOW Date Received: 07/22/03

% Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3870			P
7440-36-0	Antimony	6.2		N	P
7440-38-2	Arsenic	411			P
7440-39-3	Barium	25.5		*	P
7440-41-7	Beryllium	0.59		E	P
7440-43-9	Cadmium	0.030	U		P
7440-70-2	Calcium	5800		E*	P
7440-47-3	Chromium	14.3			P
7440-48-4	Cobalt	14.6			P
7440-50-8	Copper	58.7			P
7439-89-6	Iron	37500			P
7439-92-1	Lead	8.4		E*	P
7439-95-4	Magnesium	3600		E*	P
7439-96-5	Manganese	1700			P
7439-97-6	Mercury	1.2		*	CV
7440-02-0	Nickel	27.4			P
7440-09-7	Potassium	1430		E	P
7782-49-2	Selenium	1.6		N	P
7440-22-4	Silver	0.77	B		P
7440-23-5	Sodium	39.6	B		P
7440-28-0	Thallium	2.6			P
7440-62-2	Vanadium	19.4			P
7440-66-6	Zinc	71.0		NE	P
57-12-5	Cyanide	0.42	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPSUS09(1.0)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535440

Level (low/med): LOW Date Received: 07/22/03

% Solids: 95.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2660			P
7440-36-0	Antimony	3.3	B	N	P
7440-38-2	Arsenic	154			P
7440-39-3	Barium	38.7		*	P
7440-41-7	Beryllium	0.46		E	P
7440-43-9	Cadmium	0.025	U		P
7440-70-2	Calcium	25100		E*	P
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt	7.8			P
7440-50-8	Copper	67.9			P
7439-89-6	Iron	23400			P
7439-92-1	Lead	5.0		E*	P
7439-95-4	Magnesium	9600		E*	P
7439-96-5	Manganese	2130			P
7439-97-6	Mercury	1.9		*	CV
7440-02-0	Nickel	22.7			P
7440-09-7	Potassium	1990		E	P
7782-49-2	Selenium	0.96		N	P
7440-22-4	Silver	0.32	B		P
7440-23-5	Sodium	145	B		P
7440-28-0	Thallium	2.4			P
7440-62-2	Vanadium	15.1			P
7440-66-6	Zinc	47.3		NE	P
57-12-5	Cyanide	0.50	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPSUS10(2.0)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535452

Level (low/med): LOW Date Received: 07/22/03

% Solids: 92.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18800			P
7440-36-0	Antimony	1.6	B	N	P
7440-38-2	Arsenic	95.7			P
7440-39-3	Barium	186		*	P
7440-41-7	Beryllium	0.89		E	P
7440-43-9	Cadmium	0.025	U		P
7440-70-2	Calcium	985		E*	P
7440-47-3	Chromium	39.5			P
7440-48-4	Cobalt	16.8			P
7440-50-8	Copper	84.7			P
7439-89-6	Iron	35500			P
7439-92-1	Lead	9.7		E*	P
7439-95-4	Magnesium	4260		E*	P
7439-96-5	Manganese	762			P
7439-97-6	Mercury	0.43		*	CV
7440-02-0	Nickel	26.8			P
7440-09-7	Potassium	3730		E	P
7782-49-2	Selenium	1.1		N	P
7440-22-4	Silver	1.4			P
7440-23-5	Sodium	714			P
7440-28-0	Thallium	1.5			P
7440-62-2	Vanadium	65.8			P
7440-66-6	Zinc	87.4		NE	P
57-12-5	Cyanide	0.52	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMTASUS22(1.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534805

Level (low/med): LOW Date Received: 07/18/03

% Solids: 86.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12500			P
7440-36-0	Antimony	0.68	B	N	P
7440-38-2	Arsenic	6.3			P
7440-39-3	Barium	155		*	P
7440-41-7	Beryllium	0.38	B	E	P
7440-43-9	Cadmium	0.030	U		P
7440-70-2	Calcium	1940		E*	P
7440-47-3	Chromium	5.2			P
7440-48-4	Cobalt	8.0			P
7440-50-8	Copper	3.3			P
7439-89-6	Iron	16300			P
7439-92-1	Lead	2.8		E*	P
7439-95-4	Magnesium	5180		E*	P
7439-96-5	Manganese	408			P
7439-97-6	Mercury	0.058		*	CV
7440-02-0	Nickel	3.8	B		P
7440-09-7	Potassium	3720		E	P
7782-49-2	Selenium	0.24	B	N	P
7440-22-4	Silver	0.28	B		P
7440-23-5	Sodium	982			P
7440-28-0	Thallium	0.28	U		P
7440-62-2	Vanadium	40.6			P
7440-66-6	Zinc	41.8		NE	P
57-12-5	Cyanide	0.56	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPSUS20(4.0)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534801

Level (low/med): LOW Date Received: 07/18/03

% Solids: 91.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15600			P
7440-36-0	Antimony	0.38	B	N	P
7440-38-2	Arsenic	10.1			P
7440-39-3	Barium	180		*	P
7440-41-7	Beryllium	0.48		E	P
7440-43-9	Cadmium	0.027	U		P
7440-70-2	Calcium	2850		E*	P
7440-47-3	Chromium	8.4			P
7440-48-4	Cobalt	9.1			P
7440-50-8	Copper	5.5			P
7439-89-6	Iron	19700			P
7439-92-1	Lead	3.6		E*	P
7439-95-4	Magnesium	5320		E*	P
7439-96-5	Manganese	270			P
7439-97-6	Mercury	0.026	B	*	CV
7440-02-0	Nickel	4.3			P
7440-09-7	Potassium	4080		E	P
7782-49-2	Selenium	0.31	U	N	P
7440-22-4	Silver	0.63	B		P
7440-23-5	Sodium	1100			P
7440-28-0	Thallium	0.25	U		P
7440-62-2	Vanadium	52.2			P
7440-66-6	Zinc	48.6		NE	P
57-12-5	Cyanide	0.54	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPSUS21(2.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534803

Level (low/med): LOW Date Received: 07/18/03

% Solids: 92.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10400			P
7440-36-0	Antimony	2.0	B	N	P
7440-38-2	Arsenic	198			P
7440-39-3	Barium	177		*	P
7440-41-7	Beryllium	0.50		E	P
7440-43-9	Cadmium	14.1			P
7440-70-2	Calcium	6320		E*	P
7440-47-3	Chromium	5.5			P
7440-48-4	Cobalt	7.4			P
7440-50-8	Copper	43.5			P
7439-89-6	Iron	20700			P
7439-92-1	Lead	44.1		E*	P
7439-95-4	Magnesium	2980		E*	P
7439-96-5	Manganese	504			P
7439-97-6	Mercury	0.30		*	CV
7440-02-0	Nickel	4.1			P
7440-09-7	Potassium	3240		E	P
7782-49-2	Selenium	0.40	B	N	P
7440-22-4	Silver	4.2			P
7440-23-5	Sodium	122	B		P
7440-28-0	Thallium	0.45	B		P
7440-62-2	Vanadium	33.9			P
7440-66-6	Zinc	495		NE	P
57-12-5	Cyanide	0.54	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPSUS39(2.0)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534807

Level (low/med): LOW Date Received: 07/18/03

% Solids: 91.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14900			P
7440-36-0	Antimony	0.61	B	N	P
7440-38-2	Arsenic	17.5			P
7440-39-3	Barium	167		*	P
7440-41-7	Beryllium	0.44		E	P
7440-43-9	Cadmium	0.025	U		P
7440-70-2	Calcium	905		E*	P
7440-47-3	Chromium	9.7			P
7440-48-4	Cobalt	9.6			P
7440-50-8	Copper	11.0			P
7439-89-6	Iron	19600			P
7439-92-1	Lead	4.2		E*	P
7439-95-4	Magnesium	4560		E*	P
7439-96-5	Manganese	321			P
7439-97-6	Mercury	0.064		*	CV
7440-02-0	Nickel	4.8			P
7440-09-7	Potassium	3560		E	P
7782-49-2	Selenium	0.40	B	N	P
7440-22-4	Silver	0.79	B		P
7440-23-5	Sodium	1060			P
7440-28-0	Thallium	0.23	U		P
7440-62-2	Vanadium	52.2			P
7440-66-6	Zinc	50.5		NE	P
57-12-5	Cyanide	0.54	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGSSS34(0.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534809

Level (low/med): LOW Date Received: 07/18/03

% Solids: 78.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26400			P
7440-36-0	Antimony	0.38	U	N	P
7440-38-2	Arsenic	3.4			P
7440-39-3	Barium	187		*	P
7440-41-7	Beryllium	0.72		E	P
7440-43-9	Cadmium	0.35	B		P
7440-70-2	Calcium	1130		E*	P
7440-47-3	Chromium	5.7			P
7440-48-4	Cobalt	5.5			P
7440-50-8	Copper	8.9			P
7439-89-6	Iron	10800			P
7439-92-1	Lead	3.8		E*	P
7439-95-4	Magnesium	880		E*	P
7439-96-5	Manganese	429			P
7439-97-6	Mercury	0.032	B	*	CV
7440-02-0	Nickel	5.2			P
7440-09-7	Potassium	848		E	P
7782-49-2	Selenium	0.61		N	P
7440-22-4	Silver	0.28	B		P
7440-23-5	Sodium	1220			P
7440-28-0	Thallium	0.28	U		P
7440-62-2	Vanadium	24.9			P
7440-66-6	Zinc	50.2		NE	P
57-12-5	Cyanide	0.63	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGSSS35(0.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534811

Level (low/med): LOW Date Received: 07/18/03

% Solids: 73.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31200			P
7440-36-0	Antimony	0.40	U	N	P
7440-38-2	Arsenic	5.5			P
7440-39-3	Barium	268		*	P
7440-41-7	Beryllium	1.0		E	P
7440-43-9	Cadmium	0.54			P
7440-70-2	Calcium	2110		E*	P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	6.7			P
7440-50-8	Copper	15.4			P
7439-89-6	Iron	12400			P
7439-92-1	Lead	5.9		E*	P
7439-95-4	Magnesium	1560		E*	P
7439-96-5	Manganese	156			P
7439-97-6	Mercury	0.035	B	*	CV
7440-02-0	Nickel	5.6			P
7440-09-7	Potassium	1140		E	P
7782-49-2	Selenium	0.42	B	N	P
7440-22-4	Silver	0.62	B		P
7440-23-5	Sodium	1450			P
7440-28-0	Thallium	0.29	U		P
7440-62-2	Vanadium	26.5			P
7440-66-6	Zinc	43.2		NE	P
57-12-5	Cyanide	0.68	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGSSS36(0.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534813

Level (low/med): LOW Date Received: 07/18/03

% Solids: 91.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19400			P
7440-36-0	Antimony	0.33	U	N	P
7440-38-2	Arsenic	11.4			P
7440-39-3	Barium	319		*	P
7440-41-7	Beryllium	0.55		E	P
7440-43-9	Cadmium	0.026	U		P
7440-70-2	Calcium	2080		E*	P
7440-47-3	Chromium	27.4			P
7440-48-4	Cobalt	10.2			P
7440-50-8	Copper	11.0			P
7439-89-6	Iron	17700			P
7439-92-1	Lead	6.3		E*	P
7439-95-4	Magnesium	4930		E*	P
7439-96-5	Manganese	610			P
7439-97-6	Mercury	0.027	B	*	CV
7440-02-0	Nickel	23.4			P
7440-09-7	Potassium	3920		E	P
7782-49-2	Selenium	0.24	B	N	P
7440-22-4	Silver	0.48	B		P
7440-23-5	Sodium	1180			P
7440-28-0	Thallium	0.24	U		P
7440-62-2	Vanadium	47.2			P
7440-66-6	Zinc	61.3		NE	P
57-12-5	Cyanide	0.55	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
LUCABGSSS19(0.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535446

Level (low/med): LOW Date Received: 07/22/03

% Solids: 92.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24400			P
7440-36-0	Antimony	0.84	B	N	P
7440-38-2	Arsenic	4.5			P
7440-39-3	Barium	288		*	P
7440-41-7	Beryllium	1.2		E	P
7440-43-9	Cadmium	0.43	B		P
7440-70-2	Calcium	1830		E*	P
7440-47-3	Chromium	31.3			P
7440-48-4	Cobalt	11.3			P
7440-50-8	Copper	30.7			P
7439-89-6	Iron	24600			P
7439-92-1	Lead	8.4		E*	P
7439-95-4	Magnesium	2630		E*	P
7439-96-5	Manganese	837			P
7439-97-6	Mercury	0.14		*	CV
7440-02-0	Nickel	23.4			P
7440-09-7	Potassium	1570		E	P
7782-49-2	Selenium	0.76		N	P
7440-22-4	Silver	0.26	B		P
7440-23-5	Sodium	806			P
7440-28-0	Thallium	0.97			P
7440-62-2	Vanadium	47.8			P
7440-66-6	Zinc	105		NE	P
57-12-5	Cyanide	0.54	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNPDSSS12(0.3)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535449

Level (low/med): LOW Date Received: 07/22/03

% Solids: 31.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14000			P
7440-36-0	Antimony	17.1		N	P
7440-38-2	Arsenic	3730			P
7440-39-3	Barium	273		*	P
7440-41-7	Beryllium	3.4		E	P
7440-43-9	Cadmium	16.9			P
7440-70-2	Calcium	19200		E*	P
7440-47-3	Chromium	22.0			P
7440-48-4	Cobalt	301			P
7440-50-8	Copper	310			P
7439-89-6	Iron	139000			P
7439-92-1	Lead	151		E*	P
7439-95-4	Magnesium	4540		E*	P
7439-96-5	Manganese	34300			P
7439-97-6	Mercury	9.0		*	CV
7440-02-0	Nickel	888			P
7440-09-7	Potassium	3180		E	P
7782-49-2	Selenium	11.6		N	P
7440-22-4	Silver	12.1			P
7440-23-5	Sodium	54.2	U		P
7440-28-0	Thallium	36.3			P
7440-62-2	Vanadium	34.2			P
7440-66-6	Zinc	1620		NE	P
57-12-5	Cyanide	4.9			AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNTASSS15(0.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535442

Level (low/med): LOW Date Received: 07/22/03

% Solids: 93.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3300			P
7440-36-0	Antimony	17.6		N	P
7440-38-2	Arsenic	828			P
7440-39-3	Barium	72.5		*	P
7440-41-7	Beryllium	0.18	B	E	P
7440-43-9	Cadmium	0.56			P
7440-70-2	Calcium	821		E*	P
7440-47-3	Chromium	5.0			P
7440-48-4	Cobalt	3.6	B		P
7440-50-8	Copper	35.4			P
7439-89-6	Iron	24700			P
7439-92-1	Lead	524		E*	P
7439-95-4	Magnesium	1060		E*	P
7439-96-5	Manganese	130			P
7439-97-6	Mercury	9.4		*	CV
7440-02-0	Nickel	6.7			P
7440-09-7	Potassium	2280		E	P
7782-49-2	Selenium	3.7		N	P
7440-22-4	Silver	37.2			P
7440-23-5	Sodium	152	B		P
7440-28-0	Thallium	1.9			P
7440-62-2	Vanadium	30.5			P
7440-66-6	Zinc	73.0		NE	P
57-12-5	Cyanide	0.53	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNTASSS15(0.5)(100)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535444

Level (low/med): LOW Date Received: 07/22/03

% Solids: 93.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4690			P
7440-36-0	Antimony	41.6		N	P
7440-38-2	Arsenic	1130			P
7440-39-3	Barium	197		*	P
7440-41-7	Beryllium	0.14	B	E	P
7440-43-9	Cadmium	0.16	B		P
7440-70-2	Calcium	864		E*	P
7440-47-3	Chromium	12.1			P
7440-48-4	Cobalt	4.8			P
7440-50-8	Copper	43.7			P
7439-89-6	Iron	36000			P
7439-92-1	Lead	846		E*	P
7439-95-4	Magnesium	1800		E*	P
7439-96-5	Manganese	195			P
7439-97-6	Mercury	8.6		*	CV
7440-02-0	Nickel	8.6			P
7440-09-7	Potassium	3940		E	P
7782-49-2	Selenium	5.5		N	P
7440-22-4	Silver	34.1			P
7440-23-5	Sodium	277	B		P
7440-28-0	Thallium	3.0			P
7440-62-2	Vanadium	41.0			P
7440-66-6	Zinc	73.1		NE	P
57-12-5	Cyanide	0.47	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNTASUS18(1.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535448

Level (low/med): LOW Date Received: 07/22/03

% Solids: 92.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23200			P
7440-36-0	Antimony	0.97	B	N	P
7440-38-2	Arsenic	32.6			P
7440-39-3	Barium	328		*	P
7440-41-7	Beryllium	1.1		E	P
7440-43-9	Cadmium	0.025	U		P
7440-70-2	Calcium	1040		E*	P
7440-47-3	Chromium	24.4			P
7440-48-4	Cobalt	14.1			P
7440-50-8	Copper	40.2			P
7439-89-6	Iron	26800			P
7439-92-1	Lead	9.8		E*	P
7439-95-4	Magnesium	4570		E*	P
7439-96-5	Manganese	614			P
7439-97-6	Mercury	0.12		*	CV
7440-02-0	Nickel	18.8			P
7440-09-7	Potassium	5260		E	P
7782-49-2	Selenium	0.67		N	P
7440-22-4	Silver	0.48	B		P
7440-23-5	Sodium	869			P
7440-28-0	Thallium	0.96			P
7440-62-2	Vanadium	72.8			P
7440-66-6	Zinc	91.4		NE	P
57-12-5	Cyanide	0.49	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPSSS16(0.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535450

Level (low/med): LOW Date Received: 07/22/03

% Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6740			P
7440-36-0	Antimony	5.7		N	P
7440-38-2	Arsenic	317			P
7440-39-3	Barium	70.0		*	P
7440-41-7	Beryllium	0.42	B	E	P
7440-43-9	Cadmium	0.028	U		P
7440-70-2	Calcium	2330		E*	P
7440-47-3	Chromium	11.2			P
7440-48-4	Cobalt	5.8			P
7440-50-8	Copper	50.2			P
7439-89-6	Iron	30500			P
7439-92-1	Lead	17.0		E*	P
7439-95-4	Magnesium	1140		E*	P
7439-96-5	Manganese	193			P
7439-97-6	Mercury	0.88		*	CV
7440-02-0	Nickel	13.0			P
7440-09-7	Potassium	2610		E	P
7782-49-2	Selenium	1.6		N	P
7440-22-4	Silver	2.2			P
7440-23-5	Sodium	173	B		P
7440-28-0	Thallium	1.2			P
7440-62-2	Vanadium	43.3			P
7440-66-6	Zinc	56.2		NE	P
57-12-5	Cyanide	0.53	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPSUS14(3.0)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535454

Level (low/med): LOW Date Received: 07/22/03

% Solids: 88.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7290			P
7440-36-0	Antimony	10.6		N	P
7440-38-2	Arsenic	1220			P
7440-39-3	Barium	131		*	P
7440-41-7	Beryllium	1.2		E	P
7440-43-9	Cadmium	0.027	U		P
7440-70-2	Calcium	11900		E*	P
7440-47-3	Chromium	10.8			P
7440-48-4	Cobalt	18.0			P
7440-50-8	Copper	61.2			P
7439-89-6	Iron	75700			P
7439-92-1	Lead	31.7		E*	P
7439-95-4	Magnesium	3400		E*	P
7439-96-5	Manganese	2350			P
7439-97-6	Mercury	1.8		*	CV
7440-02-0	Nickel	17.1			P
7440-09-7	Potassium	2750		E	P
7782-49-2	Selenium	2.4		N	P
7440-22-4	Silver	4.0			P
7440-23-5	Sodium	168	B		P
7440-28-0	Thallium	4.9			P
7440-62-2	Vanadium	36.1			P
7440-66-6	Zinc	181		NE	P
57-12-5	Cyanide	0.55	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPSUS17(2.0)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 535456

Level (low/med): LOW Date Received: 07/22/03

% Solids: 95.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1940			P
7440-36-0	Antimony	5.7		N	P
7440-38-2	Arsenic	286			P
7440-39-3	Barium	74.0		*	P
7440-41-7	Beryllium	0.49		E	P
7440-43-9	Cadmium	0.57			P
7440-70-2	Calcium	7580		E*	P
7440-47-3	Chromium	14.3			P
7440-48-4	Cobalt	12.0			P
7440-50-8	Copper	90.5			P
7439-89-6	Iron	30100			P
7439-92-1	Lead	18.9		E*	P
7439-95-4	Magnesium	3380		E*	P
7439-96-5	Manganese	631			P
7439-97-6	Mercury	3.2		*	CV
7440-02-0	Nickel	32.9			P
7440-09-7	Potassium	1340		E	P
7782-49-2	Selenium	3.1		N	P
7440-22-4	Silver	1.8			P
7440-23-5	Sodium	20.4	U		P
7440-28-0	Thallium	2.3			P
7440-62-2	Vanadium	27.6			P
7440-66-6	Zinc	138		NE	P
57-12-5	Cyanide	0.52	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
SHERTASUS25(1.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534806

Level (low/med): LOW Date Received: 07/18/03

% Solids: 93.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17500			P
7440-36-0	Antimony	0.94	B	N	P
7440-38-2	Arsenic	26.0			P
7440-39-3	Barium	269		*	P
7440-41-7	Beryllium	0.55		E	P
7440-43-9	Cadmium	0.027	U		P
7440-70-2	Calcium	1930		E*	P
7440-47-3	Chromium	8.6			P
7440-48-4	Cobalt	10.5			P
7440-50-8	Copper	10.2			P
7439-89-6	Iron	20600			P
7439-92-1	Lead	10.4		E*	P
7439-95-4	Magnesium	6310		E*	P
7439-96-5	Manganese	444			P
7439-97-6	Mercury	0.048		*	CV
7440-02-0	Nickel	5.3			P
7440-09-7	Potassium	4900		E	P
7782-49-2	Selenium	0.24	B	N	P
7440-22-4	Silver	1.4			P
7440-23-5	Sodium	1330			P
7440-28-0	Thallium	0.26	U		P
7440-62-2	Vanadium	58.5			P
7440-66-6	Zinc	66.9		NE	P
57-12-5	Cyanide	0.52	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
SHERWPSUS23(3.5)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Lab Sample ID: 534799

Level (low/med): LOW Date Received: 07/18/03

% Solids: 93.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11900			P
7440-36-0	Antimony	6.0		N	P
7440-38-2	Arsenic	81.8			P
7440-39-3	Barium	188		*	P
7440-41-7	Beryllium	0.48		E	P
7440-43-9	Cadmium	0.63			P
7440-70-2	Calcium	2920		E*	P
7440-47-3	Chromium	6.7			P
7440-48-4	Cobalt	8.6			P
7440-50-8	Copper	30.5			P
7439-89-6	Iron	20100			P
7439-92-1	Lead	15.6		E*	P
7439-95-4	Magnesium	5200		E*	P
7439-96-5	Manganese	782			P
7439-97-6	Mercury	0.36		*	CV
7440-02-0	Nickel	5.2			P
7440-09-7	Potassium	3320		E	P
7782-49-2	Selenium	0.48		N	P
7440-22-4	Silver	32.5			P
7440-23-5	Sodium	676			P
7440-28-0	Thallium	0.76	B		P
7440-62-2	Vanadium	50.8			P
7440-66-6	Zinc	87.8		NE	P
57-12-5	Cyanide	0.53	U		AS

Color Before: brown Clarity Before: Texture: medium

Color After: yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Copper	500.0	515.80	103.2	200.0	195.90	98.0	202.10	101.0	P
Iron	25500.0	26240.00	102.9	30200.0	28580.00	94.6	29290.00	97.0	P
Lead	1000.0	987.60	98.8	400.0	372.60	93.2	392.60	98.2	P
Manganese	500.0	498.70	99.7	200.0	189.40	94.7	201.10	100.6	P
Mercury	3.0	3.06	102.0	5.0	5.05	101.0	4.68	93.6	CV
Nickel	500.0	501.60	100.3	200.0	189.30	94.6	196.90	98.4	P
Silver	500.0	501.50	100.3	100.0	98.50	98.5	101.70	101.7	P
Zinc	500.0	493.80	98.8	200.0	186.90	93.4	197.00	98.5	P
Cyanide	120.0	123.61	103.0	150.0	148.70	99.1	149.67	99.8	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Copper				200.0	207.90	104.0	206.00	103.0	P
Iron				30200.0	28620.00	94.8	27970.00	92.6	P
Lead				400.0	396.00	99.0	384.90	96.2	P
Manganese				200.0	202.40	101.2	198.70	99.4	P
Mercury				5.0	4.92	98.4	4.82	96.4	CV
Nickel				200.0	197.90	99.0	194.40	97.2	P
Silver				100.0	104.70	104.7	103.50	103.5	P
Zinc				200.0	194.90	97.4	188.30	94.2	P
Cyanide				150.0	151.64	101.1			AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Copper				200.0	202.60	101.3			P
Iron				30200.0	27600.00	91.4			P
Lead				400.0	382.50	95.6			P
Manganese				200.0	195.50	97.8			P
Nickel				200.0	192.20	96.1			P
Silver				100.0	103.00	103.0			P
Zinc				200.0	187.10	93.6			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26250.00	101.0	30200.0	29990.00	99.3	31300.00	103.6	P
Antimony	250.0	256.50	102.6	300.0	310.00	103.3	322.80	107.6	P
Arsenic	250.0	258.30	103.3	100.0	101.40	101.4	109.50	109.5	P
Barium	500.0	513.70	102.7	200.0	204.20	102.1	212.50	106.2	P
Beryllium	500.0	521.60	104.3	100.0	101.70	101.7	105.80	105.8	P
Cadmium	500.0	511.50	102.3	100.0	100.40	100.4	104.60	104.6	P
Calcium	25000.0	25520.00	102.1	30200.0	29950.00	99.2	31230.00	103.4	P
Chromium	500.0	518.40	103.7	200.0	201.60	100.8	210.60	105.3	P
Cobalt	500.0	510.30	102.1	200.0	203.60	101.8	212.00	106.0	P
Magnesium	25000.0	25090.00	100.4	30200.0	29760.00	98.5	30920.00	102.4	P
Manganese	500.0	512.50	102.5	200.0	202.90	101.4	221.50	110.8	P
Mercury	3.0	2.82	94.0	5.0	4.90	98.0	4.71	94.2	CV
Potassium	25000.0	27060.00	108.2	30200.0	31700.00	105.0	32850.00	108.8	P
Selenium	250.0	253.00	101.2	100.0	102.80	102.8	107.60	107.6	P
Sodium	25000.0	24600.00	98.4	30200.0	29270.00	96.9	30520.00	101.1	P
Thallium	250.0	250.10	100.0	100.0	104.00	104.0	107.10	107.1	P
Vanadium	500.0	512.00	102.4	200.0	200.90	100.4	209.80	104.9	P
Cyanide	120.0	122.17	101.8	150.0	148.25	98.8	153.71	102.5	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	30200.00	100.0	29990.00	99.3	P
Antimony				300.0	308.30	102.8	311.20	103.7	P
Arsenic				100.0	105.20	105.2	102.50	102.5	P
Barium				200.0	205.20	102.6	203.90	102.0	P
Beryllium				100.0	103.00	103.0	102.50	102.5	P
Cadmium				100.0	101.20	101.2	100.60	100.6	P
Calcium				30200.0	30250.00	100.2	30070.00	99.6	P
Chromium				200.0	203.40	101.7	202.30	101.2	P
Cobalt				200.0	205.10	102.6	203.70	101.8	P
Magnesium				30200.0	29890.00	99.0	29710.00	98.4	P
Manganese				200.0	210.50	105.2	207.80	103.9	P
Mercury				5.0	4.61	92.2	5.15	103.0	CV
Potassium				30200.0	31740.00	105.1	31560.00	104.5	P
Selenium				100.0	101.60	101.6	102.50	102.5	P
Sodium				30200.0	29440.00	97.5	29340.00	97.2	P
Thallium				100.0	104.50	104.5	105.60	105.6	P
Vanadium				200.0	201.20	100.6	200.00	100.0	P
Cyanide				150.0	153.34	102.2			AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	30090.00	99.6	30420.00	100.7	P
Antimony				300.0	310.10	103.4	313.40	104.5	P
Arsenic				100.0	102.20	102.2	104.20	104.2	P
Barium				200.0	205.70	102.8	207.10	103.6	P
Beryllium				100.0	102.10	102.1	103.40	103.4	P
Cadmium				100.0	100.30	100.3	101.90	101.9	P
Calcium				30200.0	29960.00	99.2	30520.00	101.1	P
Chromium				200.0	202.00	101.0	204.70	102.4	P
Cobalt				200.0	203.90	102.0	206.00	103.0	P
Magnesium				30200.0	29660.00	98.2	30180.00	99.9	P
Manganese				200.0	208.30	104.2	210.30	105.2	P
Mercury				5.0	4.78	95.6	4.68	93.6	CV
Potassium				30200.0	31880.00	105.6	32050.00	106.1	P
Selenium				100.0	104.00	104.0	104.90	104.9	P
Sodium				30200.0	29360.00	97.2	29660.00	98.2	P
Thallium				100.0	102.10	102.1	103.60	103.6	P
Vanadium				200.0	201.80	100.9	204.20	102.1	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Manganese	500.0	510.80	102.2	200.0	203.00	101.5	201.00	100.5	P
Mercury	3.0	2.76	92.0	5.0	5.06	101.2	4.90	98.0	CV
Selenium	250.0	241.20	96.5	100.0	97.03	97.0	96.37	96.4	P
Cyanide	120.0	122.31	101.9	150.0	147.29	98.2	149.35	99.6	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Manganese				200.0	202.90	101.4			P
Mercury				5.0	5.00	100.0			CV
Selenium				100.0	97.98	98.0			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Cyanide	120.0	113.10	94.2	150.0	145.09	96.7	144.62	96.4	AS

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

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Copper				50.0	47.49	95.0	47.16	94.3
Iron				200.0	250.60	125.3	231.40	115.7
Lead				6.0	3.39	56.5	3.46	57.7
Manganese				30.0	28.56	95.2	28.88	96.3
Mercury	0.2	0.17	85.0					
Nickel				80.0	77.53	96.9	77.01	96.3
Silver				20.0	18.57	92.8	19.87	99.4
Zinc				40.0	38.17	95.4	37.75	94.4

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	616.80	154.2	773.60	193.4
Antimony				120.0	126.30	105.2	128.10	106.8
Arsenic				20.0	18.81	94.0	20.18	100.9
Barium				400.0	409.70	102.4	406.90	101.7
Beryllium				10.0	10.67	106.7	11.06	110.6
Cadmium				10.0	10.62	106.2	10.89	108.9
Calcium				10000.0	10620.00	106.2	10990.00	109.9
Chromium				20.0	21.67	108.4	22.90	114.5
Cobalt				100.0	99.81	99.8	102.10	102.1
Magnesium				10000.0	10320.00	103.2	10580.00	105.8
Manganese				30.0	30.76	102.5	31.74	105.8
Mercury	0.2	0.22	110.0					
Potassium				10000.0	12070.00	120.7	11930.00	119.3
Selenium				10.0	10.57	105.7	10.81	108.1
Sodium				10000.0	9755.00	97.6	9930.00	99.3
Thallium				20.0	22.26	111.3	24.82	124.1
Vanadium				100.0	101.70	101.7	103.10	103.1

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Manganese				30.0	33.23	110.8	33.37	111.2
Mercury	0.2	0.26	130.0					
Selenium				10.0	7.49	74.9	8.28	82.8

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum									1.839	B	P
Antimony									0.934	B	P
Arsenic									0.240	U	P
Barium									0.730	U	P
Beryllium									-0.057	B	P
Cadmium									0.030	U	P
Calcium									22.320	U	P
Chromium									0.101	B	P
Cobalt									0.180	U	P
Copper	1.4	U	-1.5	B	-2.0	B	-2.0	B	0.140	U	P
Iron	16.8	U	-31.7	B	16.8	U	18.3	B	-3.435	B	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	0.150	U	P
Magnesium									18.170	U	P
Manganese	0.7	U	0.7	U	1.0	B	0.7	U	0.070	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV
Nickel	2.0	U	2.0	U	2.0	U	2.0	U	-0.338	B	P
Potassium									25.000	U	P
Selenium									0.170	U	P
Silver	0.9	U	-1.2	B	0.9	U	0.9	U	-0.175	B	P
Sodium									31.190	B	P
Thallium									-0.701	B	P
Vanadium									0.220	U	P
Zinc	5.7	U	5.7	U	5.7	U	5.7	U	0.570	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.500	U	AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum									1.830	U	P
Antimony									0.762	B	P
Arsenic									0.393	B	P
Barium									0.730	U	P
Beryllium									0.020	U	P
Cadmium									0.030	U	P
Calcium									22.320	U	P
Chromium									0.129	B	P
Cobalt									0.180	U	P
Copper			-2.8	B	-1.8	B			0.140	U	P
Iron			16.8	U	22.2	B			4.716	B	P
Lead			1.5	U	1.5	U			0.204	B	P
Magnesium									18.170	U	P
Manganese			0.7	U	0.7	U			0.145	B	P
Mercury			0.1	U							CV
Nickel			2.0	U	2.0	U			-0.383	B	P
Potassium									25.000	U	P
Selenium									0.300	B	P
Silver			0.9	U	0.9	U			0.090	U	P
Sodium									27.910	B	P
Thallium									-0.899	B	P
Vanadium									0.220	U	P
Zinc			5.7	U	5.7	U			1.093	B	P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.463	U	AS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	18.3	U	19.3	B	18.3	U	18.3	U			P
Antimony	3.8	U	3.8	U	3.8	U	3.8	U			P
Arsenic	2.4	U	2.4	U	2.4	U	2.4	U			P
Barium	7.3	U	7.3	U	7.3	U	7.3	U			P
Beryllium	0.6	B	0.2	U	0.5	B	0.5	B			P
Cadmium	0.3	U	0.3	U	0.3	U	0.3	U			P
Calcium	223.2	U	223.2	U	223.2	U	223.2	U			P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U			P
Cobalt	1.8	U	1.8	U	1.8	U	1.8	U			P
Magnesium	181.7	U	181.7	U	181.7	U	181.7	U			P
Manganese	0.7	U	0.7	U	2.0	B	1.1	B			P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV
Potassium	250.0	U	250.0	U	250.0	U	250.0	U			P
Selenium	1.7	U	1.7	U	1.7	U	2.1	B			P
Sodium	218.8	U	218.8	U	218.8	U	218.8	U			P
Thallium	5.7	B	2.8	U	2.8	U	2.9	B			P
Vanadium	2.2	U	2.2	U	2.2	U	2.2	U			P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			18.3	U	23.5	B	29.3	B			P
Antimony			3.8	U	3.8	U	3.8	U			P
Arsenic			2.4	U	2.4	U	2.4	U			P
Barium			7.3	U	7.3	U	7.3	U			P
Beryllium			0.9	B	0.5	B	0.3	B			P
Cadmium			0.3	U	0.3	U	0.3	U			P
Calcium			223.2	U	223.2	U	223.2	U			P
Chromium			0.6	U	0.6	U	0.6	U			P
Cobalt			1.8	U	1.8	U	1.8	U			P
Magnesium			181.7	U	181.7	U	181.7	U			P
Manganese			0.9	B	1.3	B	0.8	B			P
Mercury			0.1	B	0.1	U	0.1	U			CV
Potassium			250.0	U	250.0	U	250.0	U			P
Selenium			1.7	U	2.3	B	1.7	U			P
Sodium			218.8	U	218.8	U	218.8	U			P
Thallium			2.9	B	2.8	U	2.8	U			P
Vanadium			2.2	U	2.2	U	2.2	U			P

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P
Mercury	0.1	B	0.1	U	0.1	U	0.1	U			CV
Selenium	3.4	U	3.4	U	-3.5	B	3.4	U			P
Cyanide	10.0	U	10.0	U	10.0	U					AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U			0.476	U	AS

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Copper	0	473	1	510.2	107.9	0	519.0	109.7
Iron	200000	172540	196300	190400.0	110.4	186200	180100.0	104.4
Lead	0	44	5	46.3	105.2	5	50.2	114.1
Manganese	0	428	0	457.1	106.8	0	461.5	107.8
Nickel	0	877	11	930.0	106.0	10	928.9	105.9
Silver	0	196	-1	208.1	106.2	0	213.9	109.1
Zinc	0	841	5	912.6	108.5	3	898.1	106.8

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	452460	479600	477000.0	105.4	480800	477100.0	105.4
Antimony	0	572	8	661.3	115.6	3	656.5	114.8
Arsenic	0	94	1	110.0	117.0	3	106.1	112.9
Barium	0	466	2	525.7	112.8	2	525.3	112.7
Beryllium	0	446	-1	504.6	113.1	-1	503.5	112.9
Cadmium	0	874	8	999.8	114.4	8	992.7	113.6
Calcium	500000	421280	468900	472900.0	112.3	475200	472400.0	112.1
Chromium	0	436	4	500.1	114.7	5	498.1	114.2
Cobalt	0	435	8	493.7	113.5	8	493.2	113.4
Magnesium	500000	498160	542200	548300.0	110.1	545600	545600.0	109.5
Manganese	0	428	1	493.5	115.3	1	497.0	116.1
Potassium	0	0	191	257.4		212	183.7	
Selenium	0	48	-2	49.6	103.3	-3	50.2	104.6
Sodium	0	0	-52	-371.8		-173	-421.6	
Thallium	0	95	4	100.2	105.5	1	104.2	109.7
Vanadium	0	417	-2	477.2	114.4	-2	477.4	114.5

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Manganese	0	474	2	486.6	102.7	2	480.8	101.4
Selenium	0	47	3	48.3	102.8	0	52.4	111.5

USEPA-CLP FORMS

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

MAGNWPSUS14(3.0)S

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 88.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		9563.9648		7290.9072		186.98	1215.7		P
Antimony	75 - 125	20.9323		10.5733		46.74	22.2	N	P
Arsenic		1549.1190		1215.1510		3.74	8929.6		P
Barium	75 - 125	337.6837		130.5466		186.98	110.8		P
Beryllium	75 - 125	5.6468		1.1996		4.67	95.2		P
Cadmium	75 - 125	3.9191		0.0274	U	4.67	83.9		P
Chromium	75 - 125	30.4308		10.7648		18.70	105.2		P
Cobalt	75 - 125	64.4329		18.0174		46.74	99.3		P
Copper	75 - 125	85.1408		61.1590		23.37	102.6		P
Iron		63161.4414		75728.0000		93.49	-13441.		P
Lead		23.0077		31.7107		1.87	-465.4		P
Manganese		2541.0420		2350.0220		46.74	408.7		P
Mercury		3.0225		1.7776		0.18	691.6		CV
Nickel	75 - 125	56.3180		17.0687		46.74	84.0		P
Selenium	75 - 125	2.9786		2.4048		0.93	61.7	N	P
Silver	75 - 125	8.0345		4.0012		4.67	86.4		P
Thallium	75 - 125	9.2732		4.8871		4.67	93.9		P
Vanadium	75 - 125	85.9448		36.0805		46.74	106.7		P
Zinc	75 - 125	191.9337		181.2692		46.74	22.8	N	P
Cyanide	75 - 125	4.2192		0.5491	U	5.14	82.1		AS

Comments:

USEPA-CLP FORMS

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

MAGNWPSUS14(3.0)A

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS _____ SDG No.: GCS002

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		81820.00		79920.00		2000.0	95.0		P
Antimony		640.50		115.90		500.0	104.9		P
Arsenic		13650.00		13320.00		40.0	825.0		P
Barium		3508.00		1431.00		2000.0	103.8		P
Beryllium		65.81		13.15		50.0	105.3		P
Cadmium		43.30		0.30	U	50.0	86.6		P
Chromium		328.40		118.00		200.0	105.2		P
Cobalt		702.10		197.50		500.0	100.9		P
Copper		963.60		670.40		250.0	117.3		P
Iron		794500.00		830100.00		1000.0	-3560.		P
Lead		360.70		347.60		20.0	65.5		P
Manganese		31350.00		25760.00		500.0	1118.0		P
Nickel		708.90		187.10		500.0	104.4		P
Selenium		36.52		26.36		10.0	101.6		P
Silver		102.00		43.86		50.0	116.3		P
Thallium		102.00		53.57		50.0	96.9		P
Vanadium		925.10		395.50		500.0	105.9		P
Zinc		2410.00		1987.00		500.0	84.6		P
Cyanide		20.98		10.00	U	20.0	104.9		AS

Comments: _____

6

DUPLICATES

SAMPLE NO.

MAGNWPSUS14(3.0)D

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 88.4 % Solids for Duplicate: 89.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		7290.9072		7918.5508		8.3		P
Antimony	5.5	10.5733		9.5965		9.7		P
Arsenic		1215.1510		1072.7750		12.4		P
Barium		130.5466		273.2843		70.7	*	P
Beryllium	0.5	1.1996		1.0690		11.5		P
Cadmium		0.0274	U	0.0283	U			P
Calcium		11886.9502		14903.8496		22.5	*	P
Chromium		10.7648		12.9431		18.4		P
Cobalt	4.6	18.0174		18.8726		4.6		P
Copper		61.1590		59.6248		2.5		P
Iron		75728.0000		75933.2500		0.3		P
Lead		31.7107		25.6599		21.1	*	P
Magnesium		3400.0510		4880.2788		35.8	*	P
Manganese		2350.0220		2535.8220		7.6		P
Mercury		1.7776		3.1848		56.7	*	CV
Nickel	3.6	17.0687		16.7515		1.9		P
Potassium		2745.0371		2911.0100		5.9		P
Selenium	0.5	2.4048		1.9862		19.1		P
Silver	0.9	4.0012		3.8490		3.9		P
Sodium		168.1324	B	172.3228	B	2.5		P
Thallium		4.8871		5.4223		10.4		P
Vanadium		36.0805		39.9321		10.1		P
Zinc		181.2692		151.9608		17.6		P
Cyanide		0.5491	U	0.5096	U			AS

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum				200.0	211.1		160.0	240.0	105.6
Antimony				50.0	52.8		40.0	60.0	105.6
Arsenic				24.0	24.3		19.2	28.8	101.2
Barium				200.0	205.8		160.0	240.0	102.9
Beryllium				5.0	5.2		4.0	6.0	104.0
Cadmium				25.0	25.9		20.0	30.0	103.6
Calcium				2000.0	2057.0		1600.0	2400.0	102.8
Chromium				20.0	21.3		16.0	24.0	106.5
Cobalt				50.0	50.9		40.0	60.0	101.8
Copper				25.0	25.6		20.0	30.0	102.4
Iron				100.0	99.8		80.0	120.0	99.8
Lead				22.0	21.0		17.6	26.4	95.5
Magnesium				2000.0	1951.0		1600.0	2400.0	97.6
Manganese				50.0	49.1		40.0	60.0	98.2
Mercury				0.1	0.1		0.1	0.1	100.0
Nickel				50.0	48.2		40.0	60.0	96.4
Potassium				2000.0	2138.0		1600.0	2400.0	106.9
Selenium				21.0	20.4		16.8	25.2	97.1
Silver				25.0	24.7		20.0	30.0	98.8
Sodium				2000.0	1979.0		1600.0	2400.0	99.0
Thallium				25.0	24.5		20.0	30.0	98.0
Vanadium				50.0	52.6		40.0	60.0	105.2
Zinc				50.0	48.8		40.0	60.0	97.6
Cyanide				6.0	6.0		5.4	6.6	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				200.0	216.3		160.0 240.0	108.2
Antimony				50.0	53.2		40.0 60.0	106.4
Arsenic				24.0	24.8		19.2 28.8	103.3
Barium				200.0	209.0		160.0 240.0	104.5
Beryllium				5.0	5.3		4.0 6.0	106.0
Cadmium				25.0	26.0		20.0 30.0	104.0
Calcium				2000.0	2079.0		1600.0 2400.0	104.0
Chromium				20.0	21.4		16.0 24.0	107.0
Cobalt				50.0	51.2		40.0 60.0	102.4
Copper				25.0	26.9		20.0 30.0	107.6
Iron				100.0	97.5		80.0 120.0	97.5
Lead				22.0	21.7		17.6 26.4	98.6
Magnesium				2000.0	1970.0		1600.0 2400.0	98.5
Manganese				50.0	50.8		40.0 60.0	101.6
Nickel				50.0	48.8		40.0 60.0	97.6
Potassium				2000.0	2158.0		1600.0 2400.0	107.9
Selenium				21.0	20.7		16.8 25.2	98.6
Silver				25.0	25.7		20.0 30.0	102.8
Sodium				2000.0	1993.0		1600.0 2400.0	99.6
Thallium				25.0	24.2		20.0 30.0	96.8
Vanadium				50.0	53.2		40.0 60.0	106.4
Zinc				50.0	48.6		40.0 60.0	97.2

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 - 0.1	100.0
Cyanide				6.0	6.1		5.4 - 6.6	101.7

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	5.7		5.4 6.6	95.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Solid LCS Source: Environmental Express

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	5.8		5.4 6.6	96.7

9
ICP SERIAL DILUTIONS

SAMPLE NO.

MAGNWPSUS14(3.0)L

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	79920.00		87830.00		9.9		P
Antimony	115.90		134.10	B	15.7		P
Arsenic	13320.00		14270.00		7.1		P
Barium	1431.00		1504.00		5.1		P
Beryllium	13.15		15.46	B	17.6	E	P
Cadmium	0.30	U	1.50	U			P
Calcium	130300.00		146400.00		12.4	E	P
Chromium	118.00		129.40		9.7		P
Cobalt	197.50		216.80	B	9.8		P
Copper	670.40		697.40		4.0		P
Iron	830100.00		898400.00		8.2		P
Lead	347.60		396.20		14.0	E	P
Magnesium	37270.00		41930.00		12.5	E	P
Manganese	25760.00		27710.00		7.6		P
Nickel	187.10		204.90		9.5		P
Potassium	30090.00		36090.00		19.9	E	P
Selenium	26.36		30.21		14.6		P
Silver	43.86		42.99	B	2.0		P
Sodium	1843.00	B	1410.00	B	23.5		P
Thallium	53.57		74.70		39.4		P
Vanadium	395.50		422.00		6.7		P
Zinc	1987.00		2248.00		13.1	E	P

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: Date: 07/01/03

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	10.0	AS

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: Date: 07/01/03

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Manganese	257.610		15	0.7	P
Selenium	196.026		5	3.4	P

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	18.3	P
Antimony	206.838		60	3.8	P
Arsenic	189.042		10	2.4	P
Barium	493.409		200	7.3	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.3	P
Calcium	317.933		5000	223.2	P
Chromium	267.716		10	0.6	P
Cobalt	228.616		50	1.8	P
Magnesium	279.079		5000	181.7	P
Manganese	257.610		15	0.7	P
Potassium	766.491		5000	250.0	P
Selenium	196.026		5	1.7	P
Sodium	330.232		5000	218.8	P
Thallium	190.864		10	2.8	P
Vanadium	292.402		50	2.2	P

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Copper	324.754		25	1.4	P
Iron	271.441		100	16.8	P
Lead	220.353		3	1.5	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.0	P
Silver	328.068		10	0.9	P
Zinc	206.200		20	5.7	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ag
Aluminum	308.215	0.0000000	0.0000000	-0.0002180	0.0000000	0.0000000
Antimony	206.838	0.0000080	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000170	0.0000000	-0.0000590	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Cadmium	226.502	0.0000010	0.0000000	0.0000590	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000100	0.0000000	-0.0000200	0.0000060	0.0000000
Cobalt	228.616	0.0000000	0.0000000	-0.0000400	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0001740	0.0000000	0.0000000	-0.001587	0.0000000
Lead	220.353	-0.0000300	0.0000000	0.0000550	-0.000006	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000520	0.0000000	0.0000000
Phosphorus	178.287	0.0000070	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	-0.0007500	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000240	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000080	0.0000000	-0.0001100	0.0000000	0.0000000
Tin	189.989	0.0000090	0.0000000	-0.0000750	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000140	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000030	0.0000040	0.0000000
Zinc	206.200	0.0000300	0.0000000	-0.0000600	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		As	B	Be	Cd	Co
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	-0.0082960
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001900
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0002350
Tin	189.989	0.0000000	0.0000000	-0.0004370	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Na	Ni
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0078510	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	-0.0002840	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001750
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0008900	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000800
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	-0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0044570	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Pb	Sb	Se	Si	Tl
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0003500	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0003900	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.215	0.0173200	0.0000000			
Antimony	206.838	-0.0012700	0.0000000			
Arsenic	189.042	-0.0002800	0.0000000			
Barium	493.409	0.0000000	0.0000000			
Beryllium	313.042	0.0004800	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000000	0.0000000			
Calcium	317.933	0.0000000	0.0000000			
Chromium	267.716	-0.0003600	0.0000000			
Cobalt	228.616	0.0000000	0.0000000			
Copper	324.754	0.0000000	0.0000000			
Iron	271.441	0.0081200	0.0000000			
Lead	220.353	-0.0000850	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Manganese	257.610	0.0000000	0.0000000			
Molybdenum	202.030	0.0000000	0.0000000			
Nickel	231.604	0.0000000	0.0000000			
Phosphorus	178.287	0.0000000	0.0164830			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.026	0.0000000	0.0000000			
Silver	328.068	-0.0003350	0.0000000			
Sodium	330.232	-0.1479730	0.6581000			
Strontium	421.552	0.0000000	0.0000000			
Thallium	190.864	0.0014900	0.0000000			
Tin	189.989	0.0000000	0.0000000			
Titanium	334.941	0.0000000	0.0000000			
Vanadium	292.402	0.0000000	0.0000000			
Zinc	206.200	-0.0004730	0.0000000			

Comments: _____

USEPA-CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Manganese	10.00	10000.0	P
Selenium	10.00	5000.0	P

Comments: _____

USEPA-CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Magnesium	10.00	600000.0	P
Manganese	10.00	10000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P

Comments: _____

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Copper	10.00	100000.0	P
Iron	10.00	1000000.0	P
Lead	10.00	50000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	50000.0	P
Silver	10.00	2000.0	P
Zinc	10.00	10000.0	P

Comments:

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CAPMTASUS22(1.5)	07/24/03	1.04	50.0
CAPMWPSUS20(4.0)	07/24/03	1.02	50.0
CAPMWPSUS21(2.5)	07/24/03	1.00	50.0
CAPMWPSUS39(2.0)	07/24/03	1.01	50.0
GRANBGSSS34(0.5)	07/24/03	1.02	50.0
GRANBGSSS35(0.5)	07/24/03	1.00	50.0
GRANBGSSS36(0.5)	07/24/03	1.00	50.0
ICV	07/24/03	50.0	50.0
LCSS0724B	07/24/03	1.00	50.0
PBS0724B	07/24/03	1.00	50.0
SHERTASUS25(1.5)	07/24/03	1.03	50.0
SHERWPSUS23(3.5)	07/24/03	1.01	50.0

USEPA-CLP FORMS

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
AJAXWPSUS08(1.2)	07/29/03	1.33	50.0
AJAXWPSUS09(1.0)	07/29/03	1.06	50.0
AJAXWPSUS10(2.0)	07/29/03	1.04	50.0
ICV	07/29/03	50.0	50.0
LCSS0729C	07/29/03	1.00	50.0
LUCABGSSS19(0.5)	07/29/03	1.01	50.0
MAGNTASSS15(0.5)	07/29/03	1.00	50.0
MAGNTASSS15(0.5)(100	07/29/03	1.13	50.0
MAGNTASUS18(1.5)	07/29/03	1.11	50.0
MAGNWPSSS16(0.5)	07/29/03	1.03	50.0
MAGNWPSUS14(3.0)	07/29/03	1.03	50.0
MAGNWPSUS14(3.0)D	07/29/03	1.11	50.0
MAGNWPSUS14(3.0)S	07/29/03	1.10	50.0
MAGNWPSUS17(2.0)	07/29/03	1.01	50.0
PBS0729C	07/29/03	1.08	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: AS

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
ICV	07/31/03	50.0	50.0
LCSDS0731B	07/31/03	1.00	50.0
LCSS0731B	07/31/03	1.00	50.0
MAGNPDSSS12(0.3)	07/31/03	1.07	50.0
PBS0731B	07/31/03	1.05	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CAPMTASUS22(1.5)	07/31/03	0.66	100.0
CAPMWPSUS20(4.0)	07/31/03	0.64	100.0
CAPMWPSUS21(2.5)	07/31/03	0.66	100.0
CAPMWPSUS39(2.0)	07/31/03	0.63	100.0
GRANBGSSS34(0.5)	07/31/03	0.63	100.0
GRANBGSSS35(0.5)	07/31/03	0.67	100.0
GRANBGSSS36(0.5)	07/31/03	0.60	100.0
LCSS0731A	07/31/03	1.00	100.0
PBS0731A	07/31/03	0.60	100.0
SHERTASUS25(1.5)	07/31/03	0.66	100.0
SHERWPSUS23(3.5)	07/31/03	0.67	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
AJAXWPSUS08(1.2)	08/08/03	0.65	100.0
AJAXWPSUS09(1.0)	08/08/03	0.62	100.0
AJAXWPSUS10(2.0)	08/08/03	0.68	100.0
LCSS0808C	08/08/03	1.00	100.0
LUCABGSSS19(0.5)	08/08/03	0.64	100.0
MAGNPDSSS12(0.3)	08/08/03	0.63	100.0
MAGNTASSS15(0.5)	08/08/03	0.64	100.0
MAGNTASSS15(0.5)(100	08/08/03	0.61	100.0
MAGNTASUS18(1.5)	08/08/03	0.65	100.0
MAGNWPSSS16(0.5)	08/08/03	0.66	100.0
MAGNWPSUS14(3.0)	08/08/03	0.63	100.0
MAGNWPSUS14(3.0)D	08/08/03	0.65	100.0
MAGNWPSUS14(3.0)S	08/08/03	0.64	100.0
MAGNWPSUS17(2.0)	08/08/03	0.65	100.0
PBS0808C	08/08/03	0.60	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CAPMTASUS22(1.5)	08/07/03	1.14	100.0
CAPMWPSUS20(4.0)	08/07/03	1.21	100.0
CAPMWPSUS21(2.5)	08/07/03	1.20	100.0
CAPMWPSUS39(2.0)	08/07/03	1.32	100.0
GRANBGSSS34(0.5)	08/07/03	1.27	100.0
GRANBGSSS35(0.5)	08/07/03	1.30	100.0
GRANBGSSS36(0.5)	08/07/03	1.27	100.0
LCSS0807I	08/07/03	1.00	100.0
PBS0807I	08/07/03	1.00	100.0
SHERTASUS25(1.5)	08/07/03	1.18	100.0
SHERWPSUS23(3.5)	08/07/03	1.35	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
AJAXWPSUS08(1.2)	08/17/03	1.13	100.0
AJAXWPSUS09(1.0)	08/17/03	1.28	100.0
AJAXWPSUS10(2.0)	08/17/03	1.28	100.0
LCSS0817A	08/17/03	1.00	100.0
LUCABGSSS19(0.5)	08/17/03	1.25	100.0
MAGNPDSSS12(0.3)	08/17/03	1.29	100.0
MAGNTASSS15(0.5)	08/17/03	1.18	100.0
MAGNTASSS15(0.5)(100	08/17/03	1.36	100.0
MAGNTASUS18(1.5)	08/17/03	1.32	100.0
MAGNWPSSS16(0.5)	08/17/03	1.17	100.0
MAGNWPSUS14(3.0)	08/17/03	1.24	100.0
MAGNWPSUS14(3.0)D	08/17/03	1.20	100.0
MAGNWPSUS14(3.0)S	08/17/03	1.21	100.0
MAGNWPSUS17(2.0)	08/17/03	1.13	100.0
PBS0817A	08/17/03	1.00	100.0

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/25/03 End Date: 07/25/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1050																								X
S10	1.00	1051																								X
S30	1.00	1052																								X
S50	1.00	1053																								X
S100	1.00	1054																								X
S200	1.00	1054																								X
S300	1.00	1055																								X
ICV	1.00	1057																								X
ICB	1.00	1058																								X
LRS	1.00	1059																								X
LRS	1.00	1100																								X
CCV	1.00	1101																								X
CCB	1.00	1102																								X
ZZZZZZ	1.00	1103																								
LCSS0724B	1.00	1104																								X
PBS0724B	1.00	1105																								X
SHERWPSUS23(3.5)	1.00	1106																								X
CAPMWPSUS20(4.0)	1.00	1107																								X
CAPMWPSUS21(2.5)	1.00	1108																								X
CAPMTASUS22(1.5)	1.00	1109																								X
SHERTASUS25(1.5)	1.00	1110																								X
CAPMWPSUS39(2.0)	1.00	1111																								X
GRANBGSSS34(0.5)	1.00	1112																								X
CCV	1.00	1113																								X
CCB	1.00	1114																								X
GRANBGSSS35(0.5)	1.00	1115																								X
GRANBGSSS36(0.5)	1.00	1116																								X
ZZZZZZ	1.00	1117																								
ZZZZZZ	1.00	1118																								
ZZZZZZ	1.00	1119																								
ZZZZZZ	1.00	1120																								
ZZZZZZ	1.00	1121																								
ZZZZZZ	1.00	1122																								
ZZZZZZ	1.00	1123																								
ZZZZZZ	1.00	1123																								
CCV	1.00	1124																								X
CCB	1.00	1125																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/29/03 End Date: 07/29/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2152																								X
S10	1.00	2153																								X
S30	1.00	2154																								X
S50	1.00	2155																								X
S100	1.00	2156																								X
S200	1.00	2157																								X
S300	1.00	2157																								X
ICV	1.00	2159																								X
ICB	1.00	2200																								X
LRS	1.00	2201																								X
LRS	1.00	2202																								X
CCV	1.00	2203																								X
CCB	1.00	2204																								X
PBS0729C	1.00	2205																								X
LCSS0729C	1.00	2206																								X
ZZZZZZ	1.00	2207																								
ZZZZZZ	1.00	2208																								
ZZZZZZ	1.00	2209																								
ZZZZZZ	1.00	2210																								
ZZZZZZ	1.00	2211																								
ZZZZZZ	1.00	2212																								
ZZZZZZ	1.00	2213																								
ZZZZZZ	1.00	2214																								
CCV	1.00	2215																								X
CCB	1.00	2216																								X
AJAXWPSUS08(1.2)	1.00	2217																								X
AJAXWPSUS09(1.0)	1.00	2218																								X
MAGNTASSS15(0.5)	1.00	2219																								X
MAGNTASSS15(0.5)(100	1.00	2220																								X
LUCABGSSS19(0.5)	1.00	2221																								X
MAGNTASUS18(1.5)	1.00	2222																								X
MAGNWPSSS16(0.5)	1.00	2223																								X
AJAXWPSUS10(2.0)	1.00	2224																								X
MAGNWPSUS14(3.0)	1.00	2225																								X
MAGNWPSUS14(3.0)D	1.00	2226																								X
CCV	1.00	2226																								X
CCB	1.00	2227																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/29/03 End Date: 07/29/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2243																								X
S10	1.00	2244																								X
S30	1.00	2245																								X
S50	1.00	2246																								X
S100	1.00	2247																								X
S200	1.00	2248																								X
S300	1.00	2249																								X
ICV	1.00	2251																								X
ICB	1.00	2252																								X
LRS	1.00	2253																								X
LRS	1.00	2254																								X
CCV	1.00	2254																								X
CCB	1.00	2255																								X
MAGNWPSUS14(3.0)S	1.00	2256																								X
MAGNWPSUS17(2.0)	1.00	2257																								X
MAGNWPSUS14(3.0)A	1.00	2258																								X
CCV	1.00	2259																								X
CCB	1.00	2300																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/31/03 End Date: 07/31/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1336																								X
S10	1.00	1337																								X
S30	1.00	1338																								X
S50	1.00	1339																								X
S100	1.00	1340																								X
S200	1.00	1341																								X
S300	1.00	1342																								X
ICV	1.00	1343																								X
ICB	1.00	1344																								X
LRS	1.00	1345																								X
LRS	1.00	1346																								X
CCV	1.00	1347																								X
CCB	1.00	1348																								X
ZZZZZZ	1.00	1349																								
PBS0731B	1.00	1350																								X
LCSS0731B	1.00	1351																								X
MAGNPDSSS12(0.3)	1.00	1352																								X
LCSDS0731B	1.00	1353																								X
ZZZZZZ	1.00	1354																								
ZZZZZZ	1.00	1355																								
ZZZZZZ	1.00	1356																								
ZZZZZZ	1.00	1357																								
ZZZZZZ	1.00	1358																								
CCV	1.00	1359																								X
CCB	1.00	1400																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/21/03 End Date: 08/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	1334											X	X	X		X		X			X				X				
S	1.00	1338												X																
S	1.00	1342													X															
S	1.00	1346											X				X		X			X				X				
LRS	1.00	1350											X	X	X		X		X			X				X				
LRS	1.00	1354											X	X	X		X		X			X				X				
LRS	1.00	1358											X	X	X		X		X			X				X				
ICV	1.00	1403											X	X	X		X		X			X				X				
ICB	1.00	1407											X	X	X		X		X			X				X				
ICSA	1.00	1411											X	X	X		X		X			X				X				
ICSAB	1.00	1415											X	X	X		X		X			X				X				
CRI	1.00	1419											X	X	X		X		X			X				X				
CCV	1.00	1423											X	X	X		X		X			X				X				
CCB	1.00	1427											X	X	X		X		X			X				X				
PBS0817A	1.00	1432											X	X	X		X		X			X				X				
LCSS0817A	1.00	1436											X	X	X		X		X			X				X				
AJAXWPSUS08(1.2)	1.00	1440											X	X	X				X			X				X				
AJAXWPSUS09(1.0)	1.00	1444											X	X	X				X			X				X				
MAGNTASSS15(0.5)	1.00	1448											X	X	X		X		X			X				X				
MAGNTASSS15(0.5)(100	1.00	1452											X	X	X		X		X			X				X				
LUCABGSSS19(0.5)	1.00	1456											X	X	X		X		X			X				X				
MAGNTASUS18(1.5)	1.00	1500											X	X	X		X		X			X				X				
MAGNPDSSS12(0.3)	1.00	1504											X	X	X				X			X				X				
MAGNWPSSS16(0.5)	1.00	1508											X	X	X		X		X			X				X				
CCV	1.00	1512											X	X	X		X		X			X				X				
CCB	1.00	1516											X	X	X		X		X			X				X				
AJAXWPSUS10(2.0)	1.00	1520											X	X	X		X		X			X				X				
MAGNWPSUS14(3.0)	1.00	1524											X	X	X				X			X				X				
MAGNWPSUS14(3.0)L	5.00	1529											X	X	X				X			X				X				
MAGNWPSUS14(3.0)A	1.00	1533											X	X	X				X			X				X				
MAGNWPSUS14(3.0)D	1.00	1537											X	X	X				X			X				X				
MAGNWPSUS14(3.0)S	1.00	1541											X	X	X				X			X				X				
MAGNWPSUS17(2.0)	1.00	1545											X	X	X		X		X			X				X				
PBS0807I	1.00	1549											X	X	X		X		X			X				X				
LCSS0807I	1.00	1553											X	X	X		X		X			X				X				
SHERWPSUS23(3.5)	1.00	1557											X	X	X		X		X			X				X				
CCV	1.00	1601											X	X	X		X		X			X				X				
CCB	1.00	1605											X	X	X		X		X			X				X				

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/21/03 End Date: 08/21/03

EPA Sample No.	D/F	Time	% R	Analytes																												
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN					
CAPMWPSUS20(4.0)	1.00	1609											X	X	X		X		X			X				X						
CAPMWPSUS21(2.5)	1.00	1613											X	X	X		X		X			X				X						
CAPMTASUS22(1.5)	1.00	1617											X	X	X		X		X			X				X						
CAPMWPSUS39(2.0)	1.00	1621											X	X	X		X		X			X				X						
GRANBGSSS34(0.5)	1.00	1625											X	X	X		X		X			X				X						
GRANBGSSS35(0.5)	1.00	1630											X	X	X		X		X			X				X						
GRANBGSSS36(0.5)	1.00	1634											X	X	X		X		X			X				X						
SHERTASUS25(1.5)	1.00	1638											X	X	X		X		X			X				X						
CCV	1.00	1642											X	X	X		X		X			X				X						
CCB	1.00	1646											X	X	X		X		X			X				X						
ICSA	1.00	1650											X	X	X		X		X			X				X						
ICSAB	1.00	1654											X	X	X		X		X			X				X						
CRI	1.00	1658											X	X	X		X		X			X				X						
CCV	1.00	1702											X	X	X		X		X			X				X						
CCB	1.00	1707											X	X	X		X		X			X				X						

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/27/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	2147		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
S	1.00	2151		X						X						X				X			X							
S	1.00	2154			X	X															X			X						
S	1.00	2158					X	X	X		X	X					X								X					
LRS	1.00	2203		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
LRS	1.00	2207		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
LRS	1.00	2211		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
ICV	1.00	2215		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
ICB	1.00	2219		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
ICSA	1.00	2223		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
ICSAB	1.00	2228		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
CRI	1.00	2232		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
CCV	1.00	2236		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
CCB	1.00	2240		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
PBS0817A	1.00	2244		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
LCSS0817A	1.00	2248		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
AJAXWPSUS08(1.2)	1.00	2252		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
AJAXWPSUS09(1.0)	1.00	2256		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
MAGNTASSS15(0.5)	1.00	2300		X	X		X	X	X	X	X	X				X				X	X		X	X	X					
MAGNTASSS15(0.5)(100	1.00	2304		X	X		X	X	X	X	X	X				X				X	X		X	X	X					
LUCABGSSS19(0.5)	1.00	2308		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
MAGNTASUS18(1.5)	1.00	2312		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
MAGNPDSSS12(0.3)	1.00	2317		X	X		X	X	X	X	X	X				X				X	X		X	X	X					
MAGNWPSSS16(0.5)	1.00	2321		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
CCV	1.00	2325		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
CCB	1.00	2329		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
AJAXWPSUS10(2.0)	1.00	2333		X	X	X	X	X	X	X	X	X				X				X			X	X	X					
MAGNWPSUS14(3.0)	1.00	2337		X	X		X	X	X	X	X	X				X				X	X		X	X	X					
MAGNWPSUS14(3.0)L	5.00	2341		X	X		X	X	X	X	X	X				X				X	X		X	X	X					
MAGNWPSUS14(3.0)A	1.00	2345		X	X		X	X	X		X	X									X			X	X					
MAGNWPSUS14(3.0)D	1.00	2349		X	X		X	X	X	X	X	X				X				X	X		X	X	X					
MAGNWPSUS14(3.0)S	1.00	2353		X	X		X	X	X		X	X									X			X	X					
MAGNWPSUS17(2.0)	1.00	2357		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
PBS0807I	1.00	0001		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
LCSS0807I	1.00	0005		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
SHERWPSUS23(3.5)	1.00	0009		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X					
CCV	1.00	0013		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					
CCB	1.00	0018		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X					

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/27/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAPMWPSUS20(4.0)	1.00	0022		X	X	X	X	X	X	X	X	X				X				X			X	X	X		
CAPMWPSUS21(2.5)	1.00	0026		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
CAPMTASUS22(1.5)	1.00	0030		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
CAPMWPSUS39(2.0)	1.00	0034		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
GRANBGSSS34(0.5)	1.00	0038		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
GRANBGSSS35(0.5)	1.00	0042		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
GRANBGSSS36(0.5)	1.00	0046		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
SHERTASUS25(1.5)	1.00	0050		X	X	X	X	X	X	X	X	X				X				X	X		X	X	X		
AJAXWPSUS08(1.2)	10.00	0054															X										
AJAXWPSUS09(1.0)	10.00	0058															X										
CCV	1.00	0102		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
CCB	1.00	0106		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
MAGNTASSS15(0.5)	10.00	0111				X																					
MAGNTASSS15(0.5)(100	10.00	0115				X																					
MAGNPDSSS12(0.3)	10.00	0119				X																					
MAGNWPSUS14(3.0)	10.00	0123				X											X										
MAGNWPSUS14(3.0)L	50.00	0127				X											X										
MAGNWPSUS14(3.0)A	10.00	0131				X											X										
MAGNWPSUS14(3.0)D	10.00	0135				X											X										
MAGNWPSUS14(3.0)S	10.00	0139				X											X										
CCV	1.00	0143		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
CCB	1.00	0147		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
ICSA	1.00	0151		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
ICSAB	1.00	0155		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
CRI	1.00	0200		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
CCV	1.00	0204		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		
CCB	1.00	0208		X	X	X	X	X	X	X	X	X				X	X			X	X		X	X	X		

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 08/28/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	1001															X				X									
S	1.00	1006																												
S	1.00	1010																			X									
S	1.00	1014															X													
LRS	1.00	1020															X				X									
LRS	1.00	1025															X				X									
LRS	1.00	1030															X				X									
ICV	1.00	1035															X				X									
ICB	1.00	1040															X				X									
ICSA	1.00	1045															X				X									
ICSAB	1.00	1050															X				X									
CRI	1.00	1055															X				X									
CCV	1.00	1101															X				X									
CCB	1.00	1106															X				X									
ZZZZZZ	1.00	1111																												
AJAXWPSUS10(2.0)	1.00	1116																			X									
ZZZZZZ	1.00	1121																												
ZZZZZZ	5.00	1126																												
ZZZZZZ	1.00	1131																												
ZZZZZZ	1.00	1136																												
ZZZZZZ	1.00	1141																												
MAGNPDSSS12(0.3)	100.00	1146															X													
ZZZZZZ	1.00	1151																												
CAPMWPSUS20(4.0)	1.00	1156																			X									
CCV	1.00	1201															X				X									
CCB	1.00	1206															X				X									
ZZZZZZ	1.00	1211																												
ICSA	1.00	1216															X				X									
ICSAB	1.00	1222															X				X									
CRI	1.00	1227															X				X									
CCV	1.00	1232															X				X									
CCB	1.00	1237															X				X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/04/03 End Date: 08/04/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1112																X									
S0.2	1.00	1114																X									
S0.5	1.00	1116																X									
S1	1.00	1117																X									
S5	1.00	1119																X									
S10	1.00	1121																X									
ICV	1.00	1123																X									
ICB	1.00	1125																X									
CRA	1.00	1126																X									
CCV	1.00	1128																X									
CCB	1.00	1130																X									
PBS0731A	1.00	1133																X									
LCSS0731A	1.00	1134																X									
ZZZZZZ	1.00	1136																									
ZZZZZZ	1.00	1138																									
ZZZZZZ	1.00	1140																									
ZZZZZZ	1.00	1142																									
ZZZZZZ	1.00	1144																									
ZZZZZZ	1.00	1146																									
ZZZZZZ	1.00	1148																									
CCV	1.00	1150																X									
CCB	1.00	1152																X									
ZZZZZZ	1.00	1153																									
ZZZZZZ	1.00	1155																									
ZZZZZZ	1.00	1157																									
ZZZZZZ	1.00	1159																									
ZZZZZZ	1.00	1201																									
ZZZZZZ	1.00	1203																									
SHERWPSUS23(3.5)	1.00	1205																X									
CAPMWPSUS20(4.0)	1.00	1207																X									
CAPMWPSUS21(2.5)	1.00	1208																X									
CCV	1.00	1210																X									
CCB	1.00	1212																X									
CAPMTASUS22(1.5)	1.00	1214																X									
SHERTASUS25(1.5)	1.00	1216																X									
CAPMWPSUS39(2.0)	1.00	1218																X									
GRANBGSSS34(0.5)	1.00	1220																X									
GRANBGSSS35(0.5)	1.00	1222																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/04/03 End Date: 08/04/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
GRANBGSSS36(0.5)	1.00	1224																X									
ZZZZZZ	1.00	1226																									
ZZZZZZ	1.00	1228																									
ZZZZZZ	1.00	1230																									
CCV	1.00	1232																X									
CCB	1.00	1234																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1016																X									
S0.2	1.00	1018																X									
S0.5	1.00	1019																X									
S1	1.00	1021																X									
S5	1.00	1023																X									
S10	1.00	1025																X									
ICV	1.00	1027																X									
ICB	1.00	1029																X									
CRA	1.00	1031																X									
CCV	1.00	1033																X									
CCB	1.00	1035																X									
ZZZZZZ	1.00	1036																									
ZZZZZZ	1.00	1038																									
ZZZZZZ	1.00	1040																									
ZZZZZZ	1.00	1042																									
ZZZZZZ	1.00	1044																									
ZZZZZZ	1.00	1046																									
ZZZZZZ	1.00	1048																									
ZZZZZZ	1.00	1049																									
ZZZZZZ	1.00	1051																									
CCV	1.00	1053																X									
CCB	1.00	1055																X									
ZZZZZZ	1.00	1057																									
ZZZZZZ	1.00	1058																									
ZZZZZZ	1.00	1100																									
ZZZZZZ	1.00	1102																									
ZZZZZZ	1.00	1104																									
ZZZZZZ	1.00	1105																									
ZZZZZZ	1.00	1107																									
ZZZZZZ	1.00	1109																									
ZZZZZZ	1.00	1111																									
CCV	1.00	1113																X									
CCB	1.00	1115																X									
ZZZZZZ	1.00	1116																									
ZZZZZZ	1.00	1118																									
ZZZZZZ	1.00	1120																									
ZZZZZZ	1.00	1122																									
ZZZZZZ	1.00	1124																									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1.00	1126																												
ZZZZZZ	1.00	1128																												
ZZZZZZ	1.00	1130																												
PBS0808C	1.00	1131																X												
CCV	1.00	1133																X												
CCB	1.00	1135																X												
LCSS0808C	1.00	1137																X												
AJAXWPSUS08(1.2)	1.00	1139																X												
ZZZZZZ	1.00	1141																												
ZZZZZZ	1.00	1143																												
ZZZZZZ	1.00	1144																												
LUCABGSSS19(0.5)	1.00	1146																X												
MAGNTASUS18(1.5)	1.00	1148																X												
MAGNPDSSS12(0.3)	1.00	1150																X												
MAGNWPSSS16(0.5)	1.00	1152																X												
CCV	1.00	1154																X												
CCB	1.00	1156																X												
AJAXWPSUS10(2.0)	1.00	1157																X												
MAGNWPSUS14(3.0)	1.00	1159																X												
MAGNWPSUS14(3.0)D	1.00	1201																X												
MAGNWPSUS14(3.0)S	1.00	1203																X												
ZZZZZZ	1.00	1205																												
ZZZZZZ	1.00	1206																												
ZZZZZZ	1.00	1208																												
ZZZZZZ	1.00	1210																												
ZZZZZZ	1.00	1212																												
CCV	1.00	1213																X												
CCB	1.00	1215																X												

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1257																X									
S0.2	1.00	1259																X									
S0.5	1.00	1301																X									
S1	1.00	1302																X									
S5	1.00	1304																X									
S10	1.00	1306																X									
ICV	1.00	1308																X									
ICB	1.00	1309																X									
CRA	1.00	1311																X									
CCV	1.00	1313																X									
CCB	1.00	1314																X									
ZZZZZZ	10.00	1316																									
ZZZZZZ	10.00	1318																									
ZZZZZZ	10.00	1319																									
ZZZZZZ	10.00	1321																									
AJAXWPSUS09(1.0)	10.00	1323																X									
MAGNTASSS15(0.5)	10.00	1325																X									
MAGNTASSS15(0.5)(100	10.00	1326																X									
ZZZZZZ	10.00	1328																									
ZZZZZZ	10.00	1330																									
CCV	1.00	1332																X									
CCB	1.00	1334																X									
ZZZZZZ	10.00	1335																									
MAGNWPSUS17(2.0)	10.00	1337																X									
ZZZZZZ	10.00	1339																									
CCV	1.00	1341																X									
CCB	1.00	1343																X									

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
AJAXWPSUS08(1.2)SPLP	535439
AJAXWPSUS09(1.0)SPLP	535441
AJAXWPSUS10(2.0)SPLP	535453
CAPMWPSUS20(4.0)SPLP	534802
CAPMWPSUS21(2.5)SPLP	534804
CAPMWPSUS39(2.0)SPLP	534808
GRANBGSSS34(0.5)SPLP	534810
GRANBGSSS35(0.5)SPLP	534812
GRANBGSSS36(0.5)SPLP	534814
LUCABGSSS19(0.5)SPLP	535447
MAGNTASSS15(0.5)SPLP	535443
MAGNTASSS150.5100SPLP	535445
MAGNWPSSS16(0.5)SPLP	535451
MAGNWPSUS14(3.0)SPLP	535455
MAGNWPSUS143.0SPLPD	535455DP
MAGNWPSUS143.0SPLPS	535455MS
MAGNWPSUS17(2.0)SPLP	535457
SHERWPSUS23(3.5)SPLP	534800

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPSUS08(1.2)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535439

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	46.4	B		P
7440-36-0	Antimony	4.3	B		P
7440-38-2	Arsenic	5.9	B		P
7440-39-3	Barium	11.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.38	B		P
7440-70-2	Calcium	12100			P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	3.0	B		P
7439-89-6	Iron	66.7	U		P
7439-92-1	Lead	2.1	B		P
7439-95-4	Magnesium	3800	B		P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	1420	B		P
7782-49-2	Selenium	2.2	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	1220	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	6.8	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPSUS09(1.0)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535441

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18.3	U		P
7440-36-0	Antimony	4.0	B		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	7.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	10900			P
7440-47-3	Chromium	0.99	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	3.0	B		P
7439-89-6	Iron	66.7	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	2960	B		P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	706	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	12000			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPSUS10(2.0)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535453

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	284			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	107	B		P
7440-41-7	Beryllium	0.23	B		P
7440-43-9	Cadmium	0.94	B		P
7440-70-2	Calcium	1980	B		P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	25.3			P
7439-89-6	Iron	66.7	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	924	B		P
7439-96-5	Manganese	495			P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	11.2	B		P
7440-09-7	Potassium	3190	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5600			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	45.2			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPSUS20(4.0)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534802

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7060			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	4.7	B		P
7440-39-3	Barium	53.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	1270	B		P
7440-47-3	Chromium	2.7	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	6.1	B		P
7439-89-6	Iron	5440			P
7439-92-1	Lead	2.2	B		P
7439-95-4	Magnesium	834	B		P
7439-96-5	Manganese	54.7			P
7439-97-6	Mercury	16.5	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	794	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6250			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	14.4	B		P
7440-66-6	Zinc	22.3			P

Color Before: pale yellow Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPSUS21(2.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534804

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	126	B		P
7440-36-0	Antimony	6.3	B		P
7440-38-2	Arsenic	21.2			P
7440-39-3	Barium	16.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	11200			P
7440-47-3	Chromium	0.96	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	8.7	B		P
7439-89-6	Iron	255			P
7439-92-1	Lead	2.3	B		P
7439-95-4	Magnesium	1190	B		P
7439-96-5	Manganese	5.0	B		P
7439-97-6	Mercury	20.2			CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2990	B		P
7782-49-2	Selenium	3.3	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5610			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	36.3			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPSUS39(2.0)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534808

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3200			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.7	B		P
7440-39-3	Barium	32.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	766	B		P
7440-47-3	Chromium	1.9	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	6.0	B		P
7439-89-6	Iron	2170			P
7439-92-1	Lead	2.1	B		P
7439-95-4	Magnesium	320	B		P
7439-96-5	Manganese	51.0			P
7439-97-6	Mercury	17.1	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	479	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	16100			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	4.3	B		P
7440-66-6	Zinc	17.1	B		P

Color Before: pale yellow Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGSSS34(0.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534810

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1010			P
7440-36-0	Antimony	4.1	B		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	11.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	777	B		P
7440-47-3	Chromium	0.99	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	4.7	B		P
7439-89-6	Iron	405			P
7439-92-1	Lead	3.0	B		P
7439-95-4	Magnesium	293	U		P
7439-96-5	Manganese	19.9			P
7439-97-6	Mercury	20.0			CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	651	B		P
7782-49-2	Selenium	3.0	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	17400			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	13.2	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGSSS35(0.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534812

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1380			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	13.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	1200	B		P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	362			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	293	U		P
7439-96-5	Manganese	6.8	B		P
7439-97-6	Mercury	14.4	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	475	B		P
7782-49-2	Selenium	2.3	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	15500			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	7.8	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGSSS36(0.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534814

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10100			P
7440-36-0	Antimony	3.9	B		P
7440-38-2	Arsenic	6.5	B		P
7440-39-3	Barium	165	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	2040	B		P
7440-47-3	Chromium	4.9	B		P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	8.5	B		P
7439-89-6	Iron	5070			P
7439-92-1	Lead	3.3			P
7439-95-4	Magnesium	930	B		P
7439-96-5	Manganese	211			P
7439-97-6	Mercury	21.0			CV
7440-02-0	Nickel	5.0	B		P
7440-09-7	Potassium	1770	B		P
7782-49-2	Selenium	3.7	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	18900			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	10.2	B		P
7440-66-6	Zinc	25.2			P

Color Before: pale yellow Clarity Before: clear Texture:

Color After: pale yellow Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
LUCABGSSS19(0.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535447

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	534			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	9.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.33	B		P
7440-70-2	Calcium	1440	B		P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	3.9	B		P
7439-89-6	Iron	266			P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	347	B		P
7439-96-5	Manganese	31.4			P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	711	B		P
7782-49-2	Selenium	2.0	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5140			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNTASSS15(0.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535443

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	54.5	B		P
7440-36-0	Antimopy	7.5	B		P
7440-38-2	Arsenic	18.1			P
7440-39-3	Barium	10.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	1950	B		P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	6.9	B		P
7439-89-6	Iron	392			P
7439-92-1	Lead	17.9			P
7439-95-4	Magnesium	802	B		P
7439-96-5	Manganese	4.0	B		P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	743	B		P
7782-49-2	Selenium	2.7	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6950			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	12.0	B		P

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNTASSS150.5100SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535445

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.0	B		P
7440-36-0	Antimony	7.5	B		P
7440-38-2	Arsenic	18.8			P
7440-39-3	Barium	10.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	1750	B		P
7440-47-3	Chromium	0.93	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	3.8	B		P
7439-89-6	Iron	294			P
7439-92-1	Lead	16.4			P
7439-95-4	Magnesium	630	B		P
7439-96-5	Manganese	3.6	B		P
7439-97-6	Mercury	12.2	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	384	B		P
7782-49-2	Selenium	3.6	B		P
7440-22-4	Silver	0.96	B		P
7440-23-5	Sodium	17000			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPSSS16(0.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535451

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1840			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	6.1	B		P
7440-39-3	Barium	54.2	B		P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	1.4	B		P
7440-70-2	Calcium	60900			P
7440-47-3	Chromium	5.2	B		P
7440-48-4	Cobalt	19.5	B		P
7440-50-8	Copper	97.7			P
7439-89-6	Iron	3880			P
7439-92-1	Lead	72.6			P
7439-95-4	Magnesium	1940	B		P
7439-96-5	Manganese	1050			P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	17.1	B		P
7440-09-7	Potassium	1120	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	3630	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	122			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPSUS14(3.0)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535455

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18.3	U		P
7440-36-0	Antimony	5.3	B		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	29.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	2.5	B		P
7440-70-2	Calcium	359000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron	66.7	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	31200			P
7439-96-5	Manganese	5740			P
7439-97-6	Mercury	10.0	U		CV
7440-02-0	Nickel	29.8	B		P
7440-09-7	Potassium	3030	B		P
7782-49-2	Selenium	4.7	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6330			P
7440-28-0	Thallium	4.7	B		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPSUS17(2.0)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 535457

Level (low/med): LOW Date Received: 07/22/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18.3	U		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	11.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	13800			P
7440-47-3	Chromium	0.89	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.9	B		P
7439-89-6	Iron	66.7	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	2710	B		P
7439-96-5	Manganese	1.3	B		P
7439-97-6	Mercury	12.4	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	933	B		P
7782-49-2	Selenium	2.6	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5280			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SHERWPSUS23(3.5)SPLP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Lab Sample ID: 534800

Level (low/med): LOW Date Received: 07/18/03

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	737			P
7440-36-0	Antimony	5.7	B		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	7.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	453	B		P
7440-47-3	Chromium	1.3	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	6.3	B		P
7439-89-6	Iron	427			P
7439-92-1	Lead	19.2			P
7439-95-4	Magnesium	293	U		P
7439-96-5	Manganese	12.3	B		P
7439-97-6	Mercury	11.2	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	1080	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.2	B		P
7440-23-5	Sodium	1300	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	13.7	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	25810.00	99.3	30200.0	31060.00	102.8	30110.00	99.7	P
Antimony	250.0	242.00	96.8	300.0	306.70	102.2	298.40	99.5	P
Arsenic	250.0	243.70	97.5	100.0	103.00	103.0	97.80	97.8	P
Barium	500.0	495.80	99.2	200.0	207.50	103.8	201.30	100.6	P
Beryllium	500.0	502.10	100.4	100.0	102.20	102.2	100.40	100.4	P
Cadmium	500.0	491.20	98.2	100.0	100.80	100.8	98.51	98.5	P
Calcium	25000.0	25380.00	101.5	30200.0	31100.00	103.0	30330.00	100.4	P
Chromium	500.0	498.20	99.6	200.0	201.50	100.8	197.90	99.0	P
Cobalt	500.0	490.30	98.1	200.0	204.20	102.1	197.80	98.9	P
Copper	500.0	503.70	100.7	200.0	211.30	105.6	205.30	102.6	P
Lead	1000.0	977.30	97.7	400.0	396.90	99.2	387.90	97.0	P
Manganese	500.0	493.20	98.6	200.0	204.00	102.0	198.90	99.4	P
Mercury	3.0	2.78	92.7	5.0	4.72	94.4	4.57	91.4	CV
Nickel	500.0	496.50	99.3	200.0	203.90	102.0	198.70	99.4	P
Potassium	25000.0	26620.00	106.5	30200.0	32600.00	107.9	31630.00	104.7	P
Selenium	250.0	240.50	96.2	100.0	104.70	104.7	102.30	102.3	P
Silver	500.0	497.10	99.4	100.0	104.10	104.1	101.60	101.6	P
Sodium	25000.0	24260.00	97.0	30200.0	30470.00	100.9	29520.00	97.7	P
Thallium	250.0	234.70	93.9	100.0	96.56	96.6	98.34	98.3	P
Vanadium	500.0	493.70	98.7	200.0	202.40	101.2	197.00	98.5	P
Zinc	500.0	494.00	98.8	200.0	203.30	101.6	200.70	100.4	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	30670.00	101.6	30630.00	101.4	P
Antimony				300.0	303.30	101.1	305.20	101.7	P
Arsenic				100.0	101.40	101.4	99.89	99.9	P
Barium				200.0	204.40	102.2	205.10	102.6	P
Beryllium				100.0	103.30	103.3	103.00	103.0	P
Cadmium				100.0	101.70	101.7	101.20	101.2	P
Calcium				30200.0	31320.00	103.7	31290.00	103.6	P
Chromium				200.0	203.00	101.5	203.00	101.5	P
Cobalt				200.0	203.60	101.8	203.80	101.9	P
Copper				200.0	208.40	104.2	209.20	104.6	P
Lead				400.0	399.30	99.8	398.70	99.7	P
Manganese				200.0	204.40	102.2	204.30	102.2	P
Mercury				5.0	4.68	93.6			CV
Nickel				200.0	204.40	102.2	205.40	102.7	P
Potassium				30200.0	31850.00	105.5	31910.00	105.7	P
Selenium				100.0	103.80	103.8	103.90	103.9	P
Silver				100.0	103.00	103.0	103.40	103.4	P
Sodium				30200.0	29880.00	98.9	29880.00	98.9	P
Thallium				100.0	100.20	100.2	99.88	99.9	P
Vanadium				200.0	202.10	101.0	201.60	100.8	P
Zinc				200.0	207.60	103.8	206.30	103.2	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	30970.00	102.5			P
Antimony				300.0	309.30	103.1			P
Arsenic				100.0	101.30	101.3			P
Barium				200.0	206.80	103.4			P
Beryllium				100.0	103.60	103.6			P
Cadmium				100.0	102.60	102.6			P
Calcium				30200.0	31570.00	104.5			P
Chromium				200.0	204.00	102.0			P
Cobalt				200.0	204.90	102.4			P
Copper				200.0	211.50	105.8			P
Lead				400.0	398.00	99.5			P
Manganese				200.0	205.30	102.6			P
Nickel				200.0	206.70	103.4			P
Potassium				30200.0	32050.00	106.1			P
Selenium				100.0	102.50	102.5			P
Silver				100.0	103.80	103.8			P
Sodium				30200.0	30040.00	99.5			P
Thallium				100.0	102.10	102.1			P
Vanadium				200.0	204.00	102.0			P
Zinc				200.0	207.60	103.8			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Iron	25500.0	26200.00	102.7	30200.0	30130.00	99.8	30260.00	100.2	P
Magnesium	25000.0	25430.00	101.7	30200.0	29900.00	99.0	30060.00	99.5	P
Mercury	3.0	2.94	98.0	5.0	4.96	99.2	4.88	97.6	CV

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Iron				30200.0	30400.00	100.7	30490.00	101.0	P
Magnesium				30200.0	30210.00	100.0	30310.00	100.4	P
Mercury				5.0	4.87	97.4	4.65	93.0	CV

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Iron				30200.0	30410.00	100.7			P
Magnesium				30200.0	30160.00	99.9			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	25380.00	97.6	30200.0	29750.00	98.5	29710.00	98.4	P
Antimony	250.0	251.70	100.7	300.0	304.60	101.5	305.70	101.9	P
Arsenic	250.0	243.50	97.4	100.0	100.60	100.6	102.50	102.5	P
Barium	500.0	490.00	98.0	200.0	199.10	99.6	199.10	99.6	P
Beryllium	500.0	502.20	100.4	100.0	100.00	100.0	100.90	100.9	P
Cadmium	500.0	488.40	97.7	100.0	97.70	97.7	98.65	98.6	P
Calcium	25000.0	24700.00	98.8	30200.0	30050.00	99.5	30230.00	100.1	P
Chromium	500.0	496.40	99.3	200.0	196.70	98.4	198.70	99.4	P
Cobalt	500.0	488.10	97.6	200.0	197.30	98.6	198.70	99.4	P
Copper	500.0	501.10	100.2	200.0	203.00	101.5	202.40	101.2	P
Iron	25500.0	25560.00	100.2	30200.0	29940.00	99.1	30240.00	100.1	P
Magnesium	25000.0	24850.00	99.4	30200.0	29840.00	98.8	30260.00	100.2	P
Manganese	500.0	488.60	97.7	200.0	197.20	98.6	198.70	99.4	P
Nickel	500.0	493.70	98.7	200.0	196.40	98.2	197.40	98.7	P
Potassium	25000.0	26940.00	107.8	30200.0	31330.00	103.7	31430.00	104.1	P
Selenium	250.0	243.50	97.4	100.0	102.50	102.5	97.77	97.8	P
Silver	500.0	494.00	98.8	100.0	99.92	99.9	98.99	99.0	P
Sodium	25000.0	24260.00	97.0	30200.0	29150.00	96.5	28700.00	95.0	P
Thallium	250.0	237.90	95.2	100.0	98.50	98.5	98.88	98.9	P
Vanadium	500.0	491.00	98.2	200.0	196.90	98.4	199.10	99.6	P
Zinc	500.0	494.40	98.9	200.0	197.70	98.8	198.80	99.4	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	29550.00	97.8	29570.00	97.9	P
Antimony				300.0	302.40	100.8	302.20	100.7	P
Arsenic				100.0	100.30	100.3	100.50	100.5	P
Barium				200.0	197.40	98.7	195.60	97.8	P
Beryllium				100.0	100.40	100.4	101.00	101.0	P
Cadmium				100.0	98.10	98.1	99.82	99.8	P
Calcium				30200.0	30180.00	99.9	30650.00	101.5	P
Chromium				200.0	198.50	99.2	201.20	100.6	P
Cobalt				200.0	199.00	99.5	202.20	101.1	P
Copper				200.0	200.00	100.0	197.80	98.9	P
Iron				30200.0	30140.00	99.8	30520.00	101.1	P
Magnesium				30200.0	30270.00	100.2	31090.00	102.9	P
Manganese				200.0	197.90	99.0	199.70	99.8	P
Nickel				200.0	196.20	98.1	201.00	100.5	P
Potassium				30200.0	31400.00	104.0	31780.00	105.2	P
Selenium				100.0	96.98	97.0	95.00	95.0	P
Silver				100.0	97.84	97.8	98.27	98.3	P
Sodium				30200.0	28710.00	95.1	29190.00	96.7	P
Thallium				100.0	99.05	99.0	101.80	101.8	P
Vanadium				200.0	198.60	99.3	201.10	100.6	P
Zinc				200.0	197.10	98.6	196.80	98.4	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	29500.00	97.7			P
Antimony				300.0	302.00	100.7			P
Arsenic				100.0	100.60	100.6			P
Barium				200.0	194.90	97.4			P
Beryllium				100.0	100.60	100.6			P
Cadmium				100.0	99.85	99.8			P
Calcium				30200.0	30630.00	101.4			P
Chromium				200.0	201.40	100.7			P
Cobalt				200.0	202.00	101.0			P
Copper				200.0	199.70	99.8			P
Iron				30200.0	30410.00	100.7			P
Magnesium				30200.0	30920.00	102.4			P
Manganese				200.0	198.40	99.2			P
Nickel				200.0	201.40	100.7			P
Potassium				30200.0	31400.00	104.0			P
Selenium				100.0	97.99	98.0			P
Silver				100.0	101.20	101.2			P
Sodium				30200.0	29140.00	96.5			P
Thallium				100.0	102.80	102.8			P
Vanadium				200.0	201.00	100.5			P
Zinc				200.0	196.80	98.4			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	998.00	99.8	400.0	394.50	98.6	394.10	98.5	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead				400.0	388.50	97.1	388.10	97.0	P

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

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				400.0	678.70	169.7	766.40	191.6
Antimony				120.0	118.00	98.3	117.30	97.8
Arsenic				20.0	19.22	96.1	20.67	103.4
Barium				400.0	387.90	97.0	397.00	99.2
Beryllium				10.0	10.21	102.1	10.50	105.0
Cadmium				10.0	10.47	104.7	10.57	105.7
Calcium				10000.0	10570.00	105.7	11010.00	110.1
Chromium				20.0	21.46	107.3	22.34	111.7
Cobalt				100.0	95.84	95.8	97.76	97.8
Copper				50.0	49.27	98.5	51.33	102.7
Lead				6.0	5.16	86.0	4.87	81.2
Manganese				30.0	29.37	97.9	30.22	100.7
Mercury	0.2	0.30	150.0					
Nickel				80.0	78.54	98.2	81.44	101.8
Potassium				10000.0	11610.00	116.1	11720.00	117.2
Selenium				10.0	10.88	108.8	10.67	106.7
Silver				20.0	19.80	99.0	19.81	99.0
Sodium				10000.0	9563.00	95.6	9670.00	96.7
Thallium				20.0	19.29	96.4	16.49	82.4
Vanadium				100.0	97.66	97.7	99.26	99.3
Zinc				40.0	39.99	100.0	41.74	104.4

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Iron				200.0	300.70	150.4	267.20	133.6
Magnesium				10000.0	10340.00	103.4	10320.00	103.2
Mercury	0.2	0.20	100.0					

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Found	%R	Final Found	%R
Aluminum				400.0	562.40	140.6	603.50	150.9
Antimony				120.0	123.20	102.7	124.10	103.4
Arsenic				20.0	21.31	106.6	24.06	120.3
Barium				400.0	392.20	98.0	387.60	96.9
Beryllium				10.0	10.36	103.6	10.62	106.2
Cadmium				10.0	10.16	101.6	10.43	104.3
Calcium				10000.0	10360.00	103.6	10640.00	106.4
Chromium				20.0	20.76	103.8	22.36	111.8
Cobalt				100.0	97.18	97.2	99.30	99.3
Copper				50.0	50.95	101.9	49.33	98.7
Iron				200.0	280.80	140.4	324.70	162.4
Magnesium				10000.0	10210.00	102.1	10610.00	106.1
Manganese				30.0	29.70	99.0	30.11	100.4
Nickel				80.0	79.42	99.3	82.68	103.4
Potassium				10000.0	11110.00	111.1	11380.00	113.8
Selenium				10.0	13.44	134.4	7.03	70.3
Silver				20.0	19.68	98.4	19.18	95.9
Sodium				10000.0	9707.00	97.1	9879.00	98.8
Thallium				20.0	20.21	101.0	19.99	100.0
Vanadium				100.0	99.17	99.2	98.34	98.3
Zinc				40.0	38.31	95.8	38.50	96.2

Control Limits: no limits have been established by EPA at this time

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead				6.0	6.24	104.0	7.14	119.0

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank Method Blank	C	M
Aluminum	18.3	U	18.3	U	18.3	U	18.3	U	20.700	B	P
Antimony	3.8	U	3.8	U	3.8	U	3.8	U	4.069	B	P
Arsenic	2.4	U	2.4	U	2.4	U	2.4	U	2.400	U	P
Barium	7.3	U	7.3	U	7.3	U	7.3	U	7.300	U	P
Beryllium	0.4	B	0.2	U	0.2	U	0.3	B	-0.688	B	P
Cadmium	0.3	U	0.3	U	0.3	B	0.3	B	0.300	U	P
Calcium	223.2	U	223.2	U	223.2	U	223.2	U	223.200	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Cobalt	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Copper	1.4	U	1.4	U	1.4	B	1.8	B	1.646	B	P
Iron									66.700	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium									292.800	U	P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.150	B	CV
Nickel	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Potassium	250.0	U	250.0	U	250.0	U	250.0	U	250.000	U	P
Selenium	1.7	U	2.6	B	1.7	U	2.6	B	1.700	U	P
Silver	0.9	U	0.9	U	0.9	U	0.9	U	0.900	U	P
Sodium	218.8	U	218.8	U	218.8	U	218.8	U	218.800	U	P
Thallium	2.8	U	2.8	U	2.8	U	2.8	U	-3.000	B	P
Vanadium	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Zinc	5.7	U	5.7	U	5.7	U	5.7	U	5.700	U	P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank methodBlank	C	M
Aluminum			18.3	U	18.3	U			18.300	U	P
Antimony			3.8	U	3.8	U			3.800	U	P
Arsenic			2.4	U	2.4	U			2.400	U	P
Barium			7.3	U	7.3	U			7.300	U	P
Beryllium			0.2	U	0.2	U			0.200	U	P
Cadmium			0.3	U	0.3	U			0.300	U	P
Calcium			223.2	U	223.2	U			223.200	U	P
Chromium			0.6	U	0.6	U			1.199	B	P
Cobalt			1.8	U	1.8	U			1.800	U	P
Copper			1.4	U	1.4	U			1.686	B	P
Lead			1.5	U	-1.9	B			1.504	B	P
Manganese			0.7	U	0.7	U			0.700	U	P
Nickel			2.0	U	2.0	U			2.000	U	P
Potassium			250.0	U	250.0	U			250.000	U	P
Selenium			3.0	B	1.9	B			1.700	U	P
Silver			0.9	U	0.9	U			0.900	U	P
Sodium			218.8	U	218.8	U			218.800	U	P
Thallium			2.8	U	2.8	U			2.800	U	P
Vanadium			2.2	U	2.2	U			2.200	U	P
Zinc			5.7	U	5.7	U			9.452	B	P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank EB1KP8	C	M
Aluminum									18.300	U	P
Antimony									3.800	U	P
Arsenic									2.400	U	P
Barium									7.300	U	P
Beryllium									-0.393	B	P
Cadmium									0.300	U	P
Calcium									426.400	B	P
Chromium									0.863	B	P
Cobalt									1.800	U	P
Copper									2.916	B	P
Iron									66.700	U	P
Lead									1.500	U	P
Magnesium									292.800	U	P
Manganese									0.700	U	P
Mercury									10.000	U	CV
Nickel									2.000	U	P
Potassium									250.000	U	P
Selenium									3.755	B	P
Silver									0.900	U	P
Sodium									5927.000		P
Thallium									2.800	U	P
Vanadium									2.200	U	P
Zinc									5.700	U	P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank Method Blank	C	M
Iron	66.7	U	66.7	U	66.7	U	66.7	U	66.700	U	P
Magnesium	292.8	U	292.8	U	292.8	U	292.8	U	292.800	U	P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Iron			66.7	U	66.7	U					P
Magnesium			292.8	U	292.8	U					P
Mercury	0.1	U	0.1	U	0.1	U	-0.2	B	0.100	U	CV

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank EBLKN9	C	M
Aluminum									70.500	B	P
Antimony									4.700	U	P
Arsenic									4.800	U	P
Barium									16.060	B	P
Beryllium									0.200	U	P
Cadmium									0.600	U	P
Calcium									752.900	B	P
Chromium									1.400	U	P
Cobalt									2.000	U	P
Copper									5.834	B	P
Iron									33.300	U	P
Lead									39.990		P
Magnesium									226.600	B	P
Manganese									0.704	B	P
Mercury			0.1	U					10.000	U	CV
Nickel									2.100	U	P
Potassium									393.000	U	P
Selenium									3.400	U	P
Silver									2.200	U	P
Sodium									5031.000		P
Thallium									5.700	U	P
Vanadium									2.000	U	P
Zinc									22.690		P

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	23.6	U	-43.7	B			P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U			P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U			P
Barium	5.9	U	5.9	U	5.9	U	5.9	U			P
Beryllium	0.2	U	0.2	U	0.2	U	0.2	U			P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U			P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U			P
Chromium	1.4	U	1.4	U	1.4	U	-1.5	B			P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			P
Copper	2.4	U	2.4	U	2.4	U	-3.0	B			P
Iron	71.7	B	33.3	U	33.3	U	-38.4	B			P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U			P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P
Nickel	2.1	U	2.1	U	2.1	U	2.1	U			P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U			P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U			P
Silver	2.2	U	2.2	U	2.2	U	-3.6	B			P
Sodium	472.7	U	472.7	U	472.7	U	-606.8	B			P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U			P
Vanadium	2.0	U	2.0	U	2.0	U	-2.4	B			P
Zinc	-1.8	B	-2.2	B	-2.3	B	-2.6	B			P

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			-36.3	B	-38.0	B					P
Antimony			4.7	U	4.7	U					P
Arsenic			4.8	U	4.8	U					P
Barium			5.9	U	5.9	U					P
Beryllium			0.2	B	0.3	B					P
Cadmium			0.6	U	0.6	U					P
Calcium			182.1	U	182.1	U					P
Chromium			1.4	U	1.4	U					P
Cobalt			2.0	U	2.0	U					P
Copper			2.4	U	2.4	U					P
Iron			33.3	U	33.3	U					P
Magnesium			178.3	U	178.3	U					P
Manganese			0.7	U	0.7	U					P
Nickel			2.1	U	2.1	U					P
Potassium			472.4	B	429.2	B					P
Selenium			3.4	U	3.4	U					P
Silver			2.2	U	2.2	U					P
Sodium			479.6	B	472.7	U					P
Thallium			5.7	U	5.7	U					P
Vanadium			2.0	U	2.0	U					P
Zinc			-2.2	B	-2.3	B					P

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead	1.9	B	1.5	U	1.5	U	1.5	U			P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead			1.5	U							P

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	452460	477800	467400.0	103.3	471600	481600.0	106.4
Antimony	0	572	3	622.1	108.8	5	640.4	112.0
Arsenic	0	94	1	101.0	107.4	-1	103.9	110.5
Barium	0	466	2	506.8	108.8	2	522.9	112.2
Beryllium	0	446	-1	484.3	108.6	-1	501.9	112.5
Cadmium	0	874	8	955.3	109.3	8	986.0	112.8
Calcium	500000	421280	481200	468100.0	111.1	474000	484200.0	114.9
Chromium	0	436	5	478.4	109.7	4	491.6	112.8
Cobalt	0	435	9	472.8	108.7	8	484.6	111.4
Copper	0	473	4	530.9	112.2	4	545.0	115.2
Lead	0	44	-4	43.8	99.5	-2	45.4	103.2
Manganese	0	428	0	472.3	110.4	0	486.6	113.7
Nickel	0	877	12	965.9	110.1	11	995.8	113.5
Potassium	0	0	349	218.0		228	276.7	
Selenium	0	48	-1	50.7	105.6	4	54.7	114.0
Silver	0	196	1	218.4	111.4	0	222.6	113.6
Sodium	0	0	-37	-250.1		-80	-380.2	
Thallium	0	95	5	100.9	106.2	3	104.3	109.8
Vanadium	0	417	-2	458.3	109.9	-3	471.1	113.0
Zinc	0	841	9	966.6	114.9	9	1002.0	119.1

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Iron	200000	179960	198200	196000.0	108.9	199400	195300.0	108.5
Magnesium	500000	480220	516400	516700.0	107.6	519100	515700.0	107.4

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	477680	501800	499900.0	104.7	500700	504200.0	105.6
Antimony	0	575	0	611.8	106.4	1	616.7	107.3
Arsenic	0	97	3	97.0	100.0	4	103.3	106.5
Barium	0	464	2	496.0	106.9	2	495.4	106.8
Beryllium	0	444	0	478.8	107.8	0	489.6	110.3
Cadmium	0	874	-3	927.9	106.2	-2	957.4	109.5
Calcium	500000	476380	498900	502800.0	105.5	511900	521100.0	109.4
Chromium	0	451	3	480.1	106.5	4	493.1	109.3
Cobalt	0	434	-1	455.5	105.0	0	468.2	107.9
Copper	0	482	4	507.0	105.2	5	504.3	104.6
Iron	200000	192500	201900	198200.0	103.0	205700	204000.0	106.0
Magnesium	500000	524140	532400	535100.0	102.1	550100	557000.0	106.3
Manganese	0	451	1	479.0	106.2	2	489.0	108.4
Nickel	0	876	0	920.0	105.0	1	946.1	108.0
Potassium	0	0	-162	-198.6		204	119.1	
Selenium	0	41	-10	37.2	90.7	-15	34.1	83.2
Silver	0	198	0	209.6	105.9	0	210.5	106.3
Sodium	0	0	-253	-378.0		-216	-377.5	
Thallium	0	83	-2	90.7	109.3	-1	87.8	105.8
Vanadium	0	464	5	499.0	107.5	5	507.2	109.3
Zinc	0	951	-2	987.2	103.8	-3	1000.0	105.2

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	44	1	46.5	105.7	-2	44.0	100.0

USEPA-CLP FORMS

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

MAGNWPSUS143.0SPLPS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	981.8000		2.4000	U	1000.00	98.2		P
Barium	75 - 125	2099.0000		29.9300	B	2000.00	103.5		P
Cadmium	75 - 125	51.5900		2.5100	B	50.00	98.2		P
Chromium	75 - 125	201.1000		0.6000	U	200.00	100.6		P
Copper	75 - 125	270.2000		3.2310	B	250.00	106.8		P
Lead	75 - 125	492.7000		1.5000	U	500.00	98.5		P
Mercury	75 - 125	101.0000		10.0000	U	100.00	101.0		CV
Nickel	75 - 125	526.5000		29.8500	B	500.00	99.3		P
Selenium	75 - 125	1993.0000		4.6650	B	2000.00	99.4		P
Silver	75 - 125	526.2000		0.9000	U	500.00	105.2		P
Zinc	75 - 125	502.0000		5.7000	U	500.00	100.4		P

Comments:

USEPA-CLP FORMS

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

MAGNWPSUS14(3.0)SPLPA

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS _____ SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		2204.00		18.30	U	2000.0	110.2		P
Antimony		528.20		5.26	B	500.0	104.6		P
Arsenic		37.13		2.40	U	40.0	92.8		P
Barium		2111.00		29.93	B	2000.0	104.1		P
Beryllium		51.65		0.20	U	50.0	103.3		P
Cadmium		53.52		2.51	B	50.0	102.0		P
Chromium		209.40		0.60	U	200.0	104.7		P
Cobalt		508.50		3.01	B	500.0	101.1		P
Copper		278.30		3.23	B	250.0	110.0		P
Iron		1149.00		66.70	U	1000.0	114.9		P
Lead		20.80		1.50	U	20.0	104.0		P
Manganese		6126.00		5739.00		500.0	77.4		P
Nickel		541.10		29.85	B	500.0	102.2		P
Selenium		14.02		4.66	B	10.0	93.6		P
Silver		55.23		0.90	U	50.0	110.5		P
Thallium		55.16		4.75	B	50.0	100.8		P
Vanadium		526.00		2.20	U	500.0	105.2		P
Zinc		522.30		5.70	U	500.0	104.5		P

Comments: _____

6
DUPLICATES

SAMPLE NO.

MAGNWPSUS143.0SPLPD

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		18.3000	U	18.3000	U			P
Antimony		5.2650	B	4.2270	B	21.9		P
Arsenic		2.4000	U	2.4000	U			P
Barium		29.9300	B	30.4500	B	1.7		P
Beryllium		0.2000	U	0.2000	U			P
Cadmium		2.5100	B	2.1760	B	14.3		P
Calcium		358800.0000		359800.0000		0.3		P
Chromium		0.6000	U	0.6000	U			P
Cobalt		3.0110	B	2.8280	B	6.3		P
Copper		3.2310	B	4.3470	B	29.5		P
Iron		66.7000	U	66.7000	U			P
Lead		1.5000	U	1.5000	U			P
Magnesium		31170.0000		31740.0000		1.8		P
Manganese		5739.0000		5781.0000		0.7		P
Mercury		10.0000	U	10.2000	B	200.0		CV
Nickel		29.8500	B	30.4000	B	1.8		P
Potassium		3034.0000	B	3063.0000	B	1.0		P
Selenium	5.0	4.6650	B	6.0690		26.2		P
Silver		0.9000	U	0.9000	U			P
Sodium	5000.0	6328.0000		6387.0000		0.9		P
Thallium		4.7480	B	3.2260	B	38.2		P
Vanadium		2.2000	U	2.2000	U			P
Zinc		5.7000	U	5.7000	U			P

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	51000.0	52480.00	102.9					
Antimony	2000.0	2033.00	101.6					
Arsenic	1050.0	1043.00	99.3					
Barium	500.0	511.90	102.4					
Beryllium	500.0	501.80	100.4					
Cadmium	525.0	514.70	98.0					
Calcium	50000.0	50880.00	101.8					
Chromium	500.0	501.70	100.3					
Cobalt	500.0	492.50	98.5					
Copper	500.0	530.90	106.2					
Iron	50500.0	52920.00	104.8					
Lead	1015.0	981.80	96.7					
Magnesium	50000.0	51860.00	103.7					
Manganese	500.0	498.20	99.6					
Mercury	1.0	0.94	94.0					
Nickel	500.0	495.00	99.0					
Potassium	50000.0	51510.00	103.0					
Selenium	525.0	507.90	96.7					
Silver	500.0	456.30	91.3					
Sodium	50000.0	51930.00	103.9					
Thallium	550.0	521.70	94.9					
Vanadium	500.0	499.40	99.9					
Zinc	500.0	494.30	98.9					

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	50370.00	98.8						
Antimony	2000.0	1943.00	97.2						
Arsenic	1050.0	991.50	94.4						
Barium	500.0	490.80	98.2						
Beryllium	500.0	483.90	96.8						
Cadmium	525.0	494.90	94.3						
Calcium	50000.0	49060.00	98.1						
Chromium	500.0	482.90	96.6						
Cobalt	500.0	472.10	94.4						
Copper	500.0	506.90	101.4						
Lead	1015.0	942.00	92.8						
Manganese	500.0	479.20	95.8						
Nickel	500.0	478.10	95.6						
Potassium	50000.0	49430.00	98.9						
Selenium	525.0	483.30	92.1						
Silver	500.0	410.60	82.1						
Sodium	50000.0	49550.00	99.1						
Thallium	550.0	499.30	90.8						
Vanadium	500.0	480.70	96.1						
Zinc	500.0	478.60	95.7						

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Iron	50500.0	50680.00	100.4					
Magnesium	50000.0	49710.00	99.4					
Mercury	1.0	0.92	92.0					

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	51180.00	100.4						
Antimony	2000.0	1985.00	99.2						
Arsenic	1050.0	1017.00	96.9						
Barium	500.0	498.00	99.6						
Beryllium	500.0	495.70	99.1						
Cadmium	525.0	508.60	96.9						
Calcium	50000.0	50400.00	100.8						
Chromium	500.0	494.80	99.0						
Cobalt	500.0	484.30	96.9						
Copper	500.0	514.90	103.0						
Lead	1015.0	961.70	94.7						
Manganese	500.0	490.60	98.1						
Nickel	500.0	489.60	97.9						
Potassium	50000.0	49870.00	99.7						
Selenium	525.0	494.20	94.1						
Silver	500.0	419.40	83.9						
Sodium	50000.0	50310.00	100.6						
Thallium	550.0	513.60	93.4						
Vanadium	500.0	491.30	98.3						
Zinc	500.0	494.30	98.9						

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Iron	50500.0	50780.00	100.6					
Magnesium	50000.0	49820.00	99.6					

9
ICP SERIAL DILUTIONS

SAMPLE NO.

SHERWPSUS23(3.5)SPLPL

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	736.70		663.50	B	9.9		P
Antimony	5.67	B	19.00	U	100.0		P
Arsenic	2.40	U	12.00	U			P
Barium	7.91	B	36.50	U	100.0		P
Beryllium	0.20	U	1.00	U			P
Cadmium	0.30	U	1.50	U			P
Calcium	452.60	B	1116.00	U	100.0		P
Chromium	1.30	B	3.00	U	100.0		P
Cobalt	1.80	U	9.00	U			P
Copper	6.26	B	9.91	B	58.3		P
Iron	427.10		397.90	B	6.8		P
Lead	19.16		15.19		20.7		P
Magnesium	292.80	U	1464.00	U			P
Manganese	12.33	B	12.85	B	4.2		P
Nickel	2.00	U	10.00	U			P
Potassium	1084.00	B	1250.00	U	100.0		P
Selenium	1.70	U	8.50	U			P
Silver	1.15	B	4.50	U	100.0		P
Sodium	1296.00	B	1204.00	B	7.1		P
Thallium	2.80	U	14.00	U			P
Vanadium	2.20	U	11.00	U			P
Zinc	13.72	B	28.50	U	100.0		P

9
ICP SERIAL DILUTIONS

SAMPLE NO.

MAGNWPSUS14(3.0)SPLPL

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	18.30	U	91.50	U			P
Antimony	5.26	B	19.00	U	100.0		P
Arsenic	2.40	U	12.00	U			P
Barium	29.93	B	36.50	U	100.0		P
Beryllium	0.20	U	1.00	U			P
Cadmium	2.51	B	3.27	B	30.3		P
Calcium	358800.00		378100.00		5.4		P
Chromium	0.60	U	3.00	U			P
Cobalt	3.01	B	9.00	U	100.0		P
Copper	3.23	B	7.00	U	100.0		P
Iron	66.70	U	333.50	U			P
Lead	1.50	U	7.50	U			P
Magnesium	31170.00		32300.00		3.6		P
Manganese	5739.00		5800.00		1.1		P
Nickel	29.85	B	32.95	B	10.4		P
Potassium	3034.00	B	2966.00	B	2.2		P
Selenium	4.66	B	19.94	B	327.9		P
Silver	0.90	U	4.50	U			P
Sodium	6328.00		6332.00	B	0.1		P
Thallium	4.75	B	14.00	U	100.0		P
Vanadium	2.20	U	11.00	U			P
Zinc	5.70	U	28.50	U			P

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: _____ Date: 07/01/03

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments: _____

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	23.6	P
Antimony	206.838		60	4.7	P
Arsenic	189.042		10	4.8	P
Barium	493.409		200	5.9	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.6	P
Calcium	317.933		5000	182.1	P
Chromium	267.716		10	1.4	P
Cobalt	228.616		50	2.0	P
Copper	324.754		25	2.4	P
Iron	271.441		100	33.3	P
Magnesium	279.078		5000	178.3	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.1	P
Potassium	766.491		5000	393.0	P
Selenium	196.026		5	3.4	P
Silver	328.068		10	2.2	P
Sodium	330.232		5000	472.7	P
Thallium	190.864		10	5.7	P
Vanadium	292.402		50	2.0	P
Zinc	213.856		20	1.0	P

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 07/01/03

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Iron	271.441		100	66.7	P
Magnesium	279.079		5000	292.8	P

Comments: _____

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	18.3	P
Antimony	206.838		60	3.8	P
Arsenic	189.042		10	2.4	P
Barium	493.409		200	7.3	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.3	P
Calcium	317.933		5000	223.2	P
Chromium	267.716		10	0.6	P
Cobalt	228.616		50	1.8	P
Copper	324.754		25	1.4	P
Lead	220.353		3	1.5	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.0	P
Potassium	766.491		5000	250.0	P
Selenium	196.026		5	1.7	P
Silver	328.068		10	0.9	P
Sodium	330.232		5000	218.8	P
Thallium	190.864		10	2.8	P
Vanadium	292.402		50	2.2	P
Zinc	206.200		20	5.7	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 10/02/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ag
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000050	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000070	0.0000000	0.0000830	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000290	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000060	0.0000000	0.0000000
Iron	271.44	0.0001300	0.0000000	0.0000000	-0.000400	0.0000000
Lead	220.35	0.0008600	0.0000000	0.0000920	-0.000008	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	294.92	0.0000000	0.0000000	0.0006580	0.0000180	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000260	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.29	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000100	0.0000000	-0.0001300	-0.000010	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.55	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	-0.0000090	0.0000000	-0.0004350	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0003250	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000800	0.0000390	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 10/02/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: As	B	Be	Cd	Co
Aluminum	308.22	0.0026340	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0002400	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000840
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000610
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0840960
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	-0.0026440
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	294.92	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0022990
Phosphorus	178.29	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.55	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0018110
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002200
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 10/02/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Na	Ni
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0087280	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	-0.0088830	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0001070
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0000530	-0.0000340	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	294.92	-0.0015990	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0004700	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.29	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	-0.0000990	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.55	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0002810	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0002200	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	-0.0020840	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 10/02/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Pb	Sb	Se	Si	Tl
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	-0.0001650	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	294.92	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0005120
Phosphorus	178.29	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000650
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.55	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 10/02/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.22	-0.0084630	0.0000000			
Antimony	206.84	-0.0060220	0.0000000			
Arsenic	189.04	0.0000000	0.0000000			
Barium	493.41	0.0000000	0.0000000			
Beryllium	313.04	0.0009440	0.0000000			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	317.93	0.0000000	0.0000000			
Chromium	267.72	-0.0001950	0.0000000			
Cobalt	228.61	0.0000000	0.0000000			
Copper	324.75	0.0000000	0.0000000			
Iron	271.44	0.0124990	0.0000000			
Lead	220.35	0.0000000	0.0000000			
Magnesium	279.08	0.0000000	0.0000000			
Manganese	294.92	0.0078880	0.0000000			
Molybdenum	202.03	-0.0000010	0.0000000			
Nickel	231.60	0.0000000	0.0000000			
Phosphorus	178.29	0.0000000	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.03	0.0000920	0.0000000			
Silver	328.07	0.0000910	0.0000000			
Sodium	330.23	0.0000000	0.0593250			
Strontium	421.55	0.0000000	0.0000000			
Thallium	190.86	-0.0011100	0.0000000			
Titanium	334.94	0.0000000	0.0000000			
Vanadium	292.40	0.0000000	0.0000000			
Zinc	213.85	-0.0000350	0.0000000			

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ag
Aluminum	308.215	0.0000000	0.0000000	-0.0002180	0.0000000	0.0000000
Antimony	206.838	0.0000080	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000170	0.0000000	-0.0000590	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Cadmium	226.502	0.0000010	0.0000000	0.0000590	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000100	0.0000000	-0.0000200	0.0000060	0.0000000
Cobalt	228.616	0.0000000	0.0000000	-0.0000400	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0001740	0.0000000	0.0000000	-0.001587	0.0000000
Lead	220.353	-0.0000300	0.0000000	0.0000550	-0.000006	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000520	0.0000000	0.0000000
Phosphorus	178.287	0.0000070	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	-0.0007500	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000240	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000080	0.0000000	-0.0001100	0.0000000	0.0000000
Tin	189.989	0.0000090	0.0000000	-0.0000750	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000140	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000030	0.0000040	0.0000000
Zinc	206.200	0.0000300	0.0000000	-0.0000600	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		As	B	Be	Cd	Co
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	-0.0082960
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001900
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0002350
Tin	189.989	0.0000000	0.0000000	-0.0004370	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Cr	Cu	Mn	Na	Ni
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0078510	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	-0.0002840	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001750
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0008900	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000800
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	-0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0044570	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Pb	Sb	Se	Si	Tl
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0003500	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0003900	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.215	0.0173200	0.0000000			
Antimony	206.838	-0.0012700	0.0000000			
Arsenic	189.042	-0.0002800	0.0000000			
Barium	493.409	0.0000000	0.0000000			
Beryllium	313.042	0.0004800	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000000	0.0000000			
Calcium	317.933	0.0000000	0.0000000			
Chromium	267.716	-0.0003600	0.0000000			
Cobalt	228.616	0.0000000	0.0000000			
Copper	324.754	0.0000000	0.0000000			
Iron	271.441	0.0081200	0.0000000			
Lead	220.353	-0.0000850	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Manganese	257.610	0.0000000	0.0000000			
Molybdenum	202.030	0.0000000	0.0000000			
Nickel	231.604	0.0000000	0.0000000			
Phosphorus	178.287	0.0000000	0.0164830			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.026	0.0000000	0.0000000			
Silver	328.068	-0.0003350	0.0000000			
Sodium	330.232	-0.1479730	0.6581000			
Strontium	421.552	0.0000000	0.0000000			
Thallium	190.864	0.0014900	0.0000000			
Tin	189.989	0.0000000	0.0000000			
Titanium	334.941	0.0000000	0.0000000			
Vanadium	292.402	0.0000000	0.0000000			
Zinc	206.200	-0.0004730	0.0000000			

Comments: _____

USEPA-CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	10000.0	P
Iron	10.00	1000000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	10000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	5000.0	P

Comments: _____

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 5 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Iron	10.00	1000000.0	P
Magnesium	10.00	600000.0	P

Comments: _____

USEPA-CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCS002-SPLP

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	100000.0	P
Lead	10.00	50000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	10000.0	P

Comments:

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
CAPMWPSUS20(4.0)SPLP	07/28/03	1.0	100.0
CAPMWPSUS21(2.5)SPLP	07/28/03	1.0	100.0
CAPMWPSUS39(2.0)SPLP	07/28/03	1.0	100.0
GRANBGSSS34(0.5)SPLP	07/28/03	1.0	100.0
GRANBGSSS35(0.5)SPLP	07/28/03	1.0	100.0
GRANBGSSS36(0.5)SPLP	07/28/03	1.0	100.0
LCSW0728B	07/28/03	100.0	100.0
PBW0728B	07/28/03	100.0	100.0
SHERWPSUS23(3.5)SPLP	07/28/03	1.0	100.0

USEPA-CLP FORMS

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXWPSUS08(1.2)SPLP	08/09/03	1.0	100.0
AJAXWPSUS09(1.0)SPLP	08/09/03	1.0	100.0
AJAXWPSUS10(2.0)SPLP	08/09/03	1.0	100.0
EBLKN9	08/08/03	1.0	100.0
EBLKP8	08/08/03	1.0	100.0
LCSW0809A	08/09/03	100.0	100.0
LUCABGSSS19(0.5)SPLP	08/09/03	1.0	100.0
MAGNTASSS15(0.5)SPLP	08/09/03	1.0	100.0
MAGNTASSS150.5100SPL	08/09/03	1.0	100.0
MAGNWPSSS16(0.5)SPLP	08/09/03	1.0	100.0
MAGNWPSUS14(3.0)SPLP	08/09/03	1.0	100.0
MAGNWPSUS143.0SPLPD	08/09/03	1.0	100.0
MAGNWPSUS143.0SPLPS	08/09/03	1.0	100.0
MAGNWPSUS17(2.0)SPLP	08/09/03	1.0	100.0
PBW0809A	08/09/03	100.0	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
CAPMWPSUS20(4.0)SPLP	07/31/03	100.0	100.0
CAPMWPSUS21(2.5)SPLP	07/31/03	100.0	100.0
CAPMWPSUS39(2.0)SPLP	07/31/03	100.0	100.0
GRANBGSSS34(0.5)SPLP	07/31/03	100.0	100.0
GRANBGSSS35(0.5)SPLP	07/31/03	100.0	100.0
GRANBGSSS36(0.5)SPLP	07/31/03	100.0	100.0
LCSW0731D	07/31/03	100.0	100.0
PBW0731D	07/31/03	100.0	100.0
SHERWPSUS23(3.5)SPLP	07/31/03	100.0	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXWPSUS08(1.2)SPLP	08/07/03	100.0	100.0
AJAXWPSUS09(1.0)SPLP	08/07/03	100.0	100.0
AJAXWPSUS10(2.0)SPLP	08/07/03	100.0	100.0
EBLKN9	08/07/03	100.0	100.0
EBLKP8	08/07/03	100.0	100.0
LCSDW0807H	08/07/03	100.0	100.0
LCSW0807H	08/07/03	100.0	100.0
LUCABGSSS19(0.5)SPLP	08/07/03	100.0	100.0
MAGNTASSS15(0.5)SPLP	08/07/03	100.0	100.0
MAGNTASSS150.5100SPL	08/07/03	100.0	100.0
MAGNWPSSS16(0.5)SPLP	08/07/03	100.0	100.0
MAGNWPSUS14(3.0)SPLP	08/07/03	100.0	100.0
MAGNWPSUS143.0SPLPD	08/07/03	100.0	100.0
MAGNWPSUS143.0SPLPS	08/07/03	100.0	100.0
MAGNWPSUS17(2.0)SPLP	08/07/03	100.0	100.0
PBW0807H	08/07/03	100.0	100.0

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
SO	1.00	2017																												
S	1.00	2021																												
S	1.00	2024													X															
S	1.00	2028																												
LRS	1.00	2033													X															
LRS	1.00	2037													X															
LRS	1.00	2041													X															
ICV	1.00	2045													X															
ICB	1.00	2049													X															
ICSA	1.00	2053													X															
ICSAB	1.00	2058													X															
CRI	1.00	2102													X															
CCV	1.00	2106													X															
CCB	1.00	2110													X															
ZZZZZZ	1.00	2114																												
ZZZZZZ	1.00	2118																												
ZZZZZZ	1.00	2122																												
ZZZZZZ	5.00	2126																												
ZZZZZZ	1.00	2130																												
ZZZZZZ	1.00	2134																												
ZZZZZZ	1.00	2138																												
ZZZZZZ	1.00	2143																												
ZZZZZZ	1.00	2147																												
ZZZZZZ	1.00	2151																												
CCV	1.00	2155													X															
CCB	1.00	2159													X															
ZZZZZZ	1.00	2203																												
ZZZZZZ	1.00	2207																												
ZZZZZZ	1.00	2211																												
ZZZZZZ	1.00	2215																												
ZZZZZZ	5.00	2219																												
ZZZZZZ	1.00	2223																												
ZZZZZZ	1.00	2227																												
ZZZZZZ	1.00	2231																												
EBLKN9	1.00	2235													X															
CCV	1.00	2239													X															
CCB	1.00	2244													X															
ICSA	1.00	2248													X															

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ICSAB	1.00	2252													X															
CRI	1.00	2256													X															
CCV	1.00	2300													X															
CCB	1.00	2304													X															

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/28/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	0213		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
S	1.00	0217		X						X										X			X							
S	1.00	0220			X	X									X						X			X						
S	1.00	0224					X	X	X		X	X	X				X		X			X			X	X				
LRS	1.00	0229		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
LRS	1.00	0233		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
LRS	1.00	0237		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
ICV	1.00	0241		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
ICB	1.00	0245		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
ICSA	1.00	0249		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
ICSAB	1.00	0254		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CRI	1.00	0258		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CCV	1.00	0302		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CCB	1.00	0306		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
PBW0731D	1.00	0310		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
LCSW0731D	1.00	0314		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
SHERWPSUS23(3.5)SPLP	1.00	0318		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
SHERWPSUS23(3.5)SPLP	5.00	0322		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
ZZZZZZ	1.00	0326																												
CAPMWPSUS20(4.0)SPLP	1.00	0331		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CAPMWPSUS21(2.5)SPLP	1.00	0335		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CAPMWPSUS39(2.0)SPLP	1.00	0339		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
GRANBGSSS34(0.5)SPLP	1.00	0343		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
GRANBGSSS35(0.5)SPLP	1.00	0347		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CCV	1.00	0351		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CCB	1.00	0355		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
GRANBGSSS36(0.5)SPLP	1.00	0359		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
PBW0807H	1.00	0403		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
LCSW0807H	1.00	0407		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
LCSDW0807H	1.00	0412		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
AJAXWPSUS08(1.2)SPLP	1.00	0416		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
AJAXWPSUS09(1.0)SPLP	1.00	0420		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
MAGNTASSS15(0.5)SPLP	1.00	0424		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
MAGNTASSS150.5100SPL	1.00	0428		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
LUCABGSSS19(0.5)SPLP	1.00	0432		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
MAGNWPSSS16(0.5)SPLP	1.00	0436		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CCV	1.00	0440		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				
CCB	1.00	0444		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X				

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/28/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																												
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN					
AJAXWPSUS10(2.0)SPLP	1.00	0448		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
MAGNWPSUS14(3.0)SPLP	1.00	0453		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
MAGNWPSUS14(3.0)SPLP	5.00	0457		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
MAGNWPSUS14(3.0)SPLP	1.00	0501		X	X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X					
MAGNWPSUS143.0SPLPD	1.00	0505		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
MAGNWPSUS143.0SPLPS	1.00	0509				X	X		X		X		X		X				X		X	X				X					
MAGNWPSUS17(2.0)SPLP	1.00	0513		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
EBLKP8	1.00	0517		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
CCV	1.00	0521		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
CCB	1.00	0525		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
ICSA	1.00	0529		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
ICSAB	1.00	0534		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
CRI	1.00	0538		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
CCV	1.00	0542		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					
CCB	1.00	0546		X	X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X					

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 5 Method: P

Start Date: 08/28/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1042	..											X		X											
S	1.00	1049												X		X											
S	1.00	1054																									
S	1.00	1058																									
LRS	1.00	1105												X		X											
LRS	1.00	1111												X		X											
LRS	1.00	1117												X		X											
ICV	1.00	1124												X		X											
ICB	1.00	1130												X		X											
ICSA	1.00	1136												X		X											
ICSAB	1.00	1143												X		X											
CRI	1.00	1149												X		X											
CCV	1.00	1155												X		X											
CCB	1.00	1202												X		X											
PBW0731D	1.00	1208												X		X											
LCSW0731D	1.00	1214												X		X											
SHERWPSUS23(3.5)SPLP	1.00	1220												X		X											
SHERWPSUS23(3.5)SPLP	5.00	1227												X		X											
ZZZZZZ	1.00	1233																									
CAPMWPSUS20(4.0)SPLP	1.00	1239												X		X											
CAPMWPSUS21(2.5)SPLP	1.00	1246												X		X											
CAPMWPSUS39(2.0)SPLP	1.00	1252												X		X											
GRANBGSSS34(0.5)SPLP	1.00	1258												X		X											
GRANBGSSS35(0.5)SPLP	1.00	1304												X		X											
CCV	1.00	1311												X		X											
CCB	1.00	1317												X		X											
GRANBGSSS36(0.5)SPLP	1.00	1323												X		X											
PBW0807H	1.00	1329												X		X											
LCSW0807H	1.00	1336												X		X											
LCSDW0807H	1.00	1342												X		X											
AJAXWPSUS08(1.2)SPLP	1.00	1348												X		X											
AJAXWPSUS09(1.0)SPLP	1.00	1355												X		X											
MAGNTASSS15(0.5)SPLP	1.00	1401												X		X											
MAGNTASSS150.5100SPL	1.00	1407												X		X											
LUCABGSSS19(0.5)SPLP	1.00	1413												X		X											
MAGNWPSSS16(0.5)SPLP	1.00	1419												X		X											
CCV	1.00	1426												X		X											
CCB	1.00	1432												X		X											

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 5 Method: P

Start Date: 08/28/03 End Date: 08/28/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
AJAXWPSUS10(2.0)SPLP	1.00	1438												X		X											
MAGNWPSUS14(3.0)SPLP	1.00	1444												X		X											
MAGNWPSUS14(3.0)SPLP	5.00	1451												X		X											
MAGNWPSUS14(3.0)SPLP	1.00	1457												X													
MAGNWPSUS143.0SPLPD	1.00	1503												X		X											
MAGNWPSUS143.0SPLPS	1.00	1509																									
MAGNWPSUS17(2.0)SPLP	1.00	1516												X		X											
EBLKP8	1.00	1522												X		X											
CCV	1.00	1528												X		X											
CCB	1.00	1534												X		X											
ICSA	1.00	1541												X		X											
ICSAB	1.00	1547												X		X											
CRI	1.00	1553												X		X											
CCV	1.00	1600												X		X											
CCB	1.00	1606												X		X											

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/21/03 End Date: 09/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	1458		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
S	1.00	1503		X						X				X		X				X			X						
S	1.00	1506			X	X															X			X					
S	1.00	1510					X	X	X		X	X	X				X		X			X			X	X			
LRS	1.00	1515		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
LRS	1.00	1520		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
LRS	1.00	1525		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICV	1.00	1529		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICB	1.00	1534		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICSA	1.00	1539		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ICSAB	1.00	1543		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CRI	1.00	1548		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCV	1.00	1553		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCB	1.00	1558		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
EBLKN9	1.00	1602		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1607																												
ZZZZZZ	1.00	1612																												
ZZZZZZ	10.00	1616																												
ZZZZZZ	10.00	1621																												
ZZZZZZ	10.00	1625																												
ZZZZZZ	10.00	1630																												
ZZZZZZ	10.00	1635																												
ZZZZZZ	10.00	1639																												
ZZZZZZ	10.00	1644																												
CCV	1.00	1649		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCB	1.00	1653		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	10.00	1658																												
ZZZZZZ	10.00	1703																												
ZZZZZZ	10.00	1707																												
ZZZZZZ	10.00	1712																												
ZZZZZZ	10.00	1717																												
ZZZZZZ	10.00	1721																												
ZZZZZZ	10.00	1726																												
ZZZZZZ	10.00	1730																												
ZZZZZZ	10.00	1735																												
ZZZZZZ	10.00	1740																												
CCV	1.00	1744		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
CCB	1.00	1749		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/21/03 End Date: 09/21/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
ZZZZZZ	10.00	1754												..														
ZZZZZZ	50.00	1758																										
ZZZZZZ	10.00	1803																										
ZZZZZZ	10.00	1808																										
ZZZZZZ	10.00	1812																										
ZZZZZZ	10.00	1817																										
ZZZZZZ	50.00	1822																										
ZZZZZZ	10.00	1826																										
ZZZZZZ	10.00	1831																										
CCV	1.00	1835		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CCB	1.00	1840		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
ICSA	1.00	1845		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
ICSAB	1.00	1850		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CRI	1.00	1854		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CCV	1.00	1859		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		
CCB	1.00	1904		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/01/03 End Date: 08/01/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0942																X									
S0	1.00	0946																X									
S0.2	1.00	0948																X									
S0.5	1.00	0949																X									
S1	1.00	0951																X									
S5	1.00	0954																X									
S10	1.00	0955																X									
ICV	1.00	0957																X									
ICB	1.00	0959																X									
CRA	1.00	1001																X									
CCV	1.00	1002																X									
CCB	1.00	1004																X									
PBW0728B	1.00	1006																X									
LCSW0728B	1.00	1008																X									
ZZZZZZ	1.00	1009																									
ZZZZZZ	1.00	1012																									
SHERWPSUS23(3.5)SPLP	1.00	1013																X									
CAPMWPSUS20(4.0)SPLP	1.00	1015																X									
CAPMWPSUS21(2.5)SPLP	1.00	1017																X									
CAPMWPSUS39(2.0)SPLP	1.00	1019																X									
GRANBGSSS34(0.5)SPLP	1.00	1021																X									
CCV	1.00	1022																X									
CCB	1.00	1024																X									
GRANBGSSS35(0.5)SPLP	1.00	1026																X									
GRANBGSSS36(0.5)SPLP	1.00	1028																X									
ZZZZZZ	1.00	1030																									
ZZZZZZ	1.00	1031																									
ZZZZZZ	1.00	1033																									
ZZZZZZ	1.00	1035																									
ZZZZZZ	1.00	1037																									
ZZZZZZ	1.00	1039																									
ZZZZZZ	1.00	1040																									
CCV	1.00	1043																X									
CCB	1.00	1045																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/10/03 End Date: 08/10/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0600																X				..					
S0.2	1.00	0602																X									
S0.5	1.00	0604																X									
S1	1.00	0606																X									
S5	1.00	0608																X									
S10	1.00	0609																X									
ICV	1.00	0611																X									
ICB	1.00	0613																X									
CRA	1.00	0615																X									
CCV	1.00	0616																X									
CCB	1.00	0618																X									
PBW0809A	1.00	0620																X									
LCSW0809A	1.00	0622																X									
ZZZZZZ	1.00	0623																									
ZZZZZZ	1.00	0625																									
ZZZZZZ	1.00	0627																									
ZZZZZZ	1.00	0629																									
ZZZZZZ	1.00	0631																									
ZZZZZZ	1.00	0633																									
AJAXWPSUS08(1.2)SPLP	1.00	0635																X									
CCV	1.00	0637																X									
CCB	1.00	0639																X									
AJAXWPSUS09(1.0)SPLP	1.00	0641																X									
MAGNTASSS15(0.5)SPLP	1.00	0643																X									
MAGNTASSS150.5100SPL	1.00	0645																X									
LUCABGSSS19(0.5)SPLP	1.00	0647																X									
MAGNWPSSS16(0.5)SPLP	1.00	0649																X									
AJAXWPSUS10(2.0)SPLP	1.00	0650																X									
MAGNWPSUS14(3.0)SPLP	1.00	0652																X									
MAGNWPSUS143.0SPLPS	1.00	0654																X									
MAGNWPSUS143.0SPLPD	1.00	0656																X									
CCV	1.00	0658																X									
CCB	1.00	0700																X									
MAGNWPSUS17(2.0)SPLP	1.00	0702																X									
ZZZZZZ	1.00	0704																									
ZZZZZZ	1.00	0706																									
ZZZZZZ	1.00	0708																									
ZZZZZZ	1.00	0710																									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCS002-SPLP

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/10/03 End Date: 08/10/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	0712																										
ZZZZZZ	1.00	0713																										
EBLKN9	1.00	0715																X										
EBLKP8	1.00	0717																X										
CCV	1.00	0719																X										
CCB	1.00	0721																X										

STL Burlington
Colchester, Vermont

Sample Data Summary
Package

SDG: GCV001

SEVERN TRENT STL

September 17, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCV001

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 12, 15, 18, 22 and 24, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/12/03	ETR No: 94699	
533808	MONU-WP-PLT-15	07/09/03	Solid
533809	MONU-WP-PLT-14	07/10/03	Solid
533810	EBLK		Water
	Received: 07/15/03	ETR No: 94720	
533933	CENT-WP-PLT-31	07/11/03	Solid
533934	TILL-WP-PLT-27	07/12/03	Solid
	Received: 07/18/03	ETR No: 94839	
534697	SHERWPPLT23	07/14/03	Solid
534698	SHERWPPLT23(100)	07/14/03	Solid
534699	CAPMWPPLT20	07/15/03	Solid
534700	GRANBGPLT35	07/15/03	Solid
534701	GRANBGPLT34	07/15/03	Solid
534702	GRANBGPLT36	07/15/03	Solid
534702MS	GRANBGPLT36MS	07/15/03	Solid
534702DP	GRANBGPLT36REP	07/15/03	Solid

0001-A

Severn Trent Laboratories, Inc.
STL Burlington • 208 South Park Drive, Suite 1, Colchester, VT 05446
Tel 802 655 1203 Fax 802 655 1248 • *www.stl-inc.com*

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/22/03 ETR No: 94942		
535357	AJAXWPPLT08	07/17/03	Solid
535358	AJAXPDPLT06	07/17/03	Solid
535359	MAGNWPPLT14	07/18/03	Solid
535360	MAGNPDPLT11	07/18/03	Solid
535361	LUCABGPLT19	07/19/03	Solid
535362	MAGNWPPLT17	07/19/03	Solid
	Received: 07/24/03 ETR No: 94998		
535819	BLUEWPPLT20	07/21/03	Solid
535820	BLUEWPPLT24	07/21/03	Solid
535859	EBLK		Water

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample log-in is included in the Sample Handling section of this submittal.

The plant samples were homogenized for analysis by the lab and after homogenization the tissue was maintained in frozen storage at -20 °C.

The results for the tissue samples are reported on a dry weight basis. In preparing the tissues, an equipment bank was generated in order to characterize the homogenization process. This blank, identified as "EBLK", was carried through each of the analytical processes, using weighed amounts similar to the tissue amounts that were analyzed. The results have been reported on the same weight/weight basis as the tissue samples.

Metals by ICP / CVAA

The percent differences between the original determination and the serial dilution determination for potassium and zinc in sample GRANBGPLT36 were 24.0 and 19.8 percent, respectively. These recoveries are above the control criteria of ±10 percent. Matrix interference is suspected and results have been flagged with an "E" accordingly.

The recovery of cyanide from the laboratory fortified aliquot of sample GRANBGPLT36 was 47.5 percent which is below the control limit of 75-100 percent. Corresponding sample results

have been qualified with an "N" to denote this anomaly. Recovery from the post digestate spike proved acceptable as did recovery from the laboratory control sample.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0532.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtw/jmm

0001-C Last Alpha

1 of 1

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: EA Engineering	Company: same
Address: 12011 Bel-Red Rd Suite 200 Bellevue, WA 98005	Address:
Contact: Jen Kindred	Contact:
Phone: 425-451-7400	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: ~~James Gatherer~~ Don Norman

Sampler's Signature: Don Norman

Proj. No.: 13890.13.16

Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TAL metals	Cyanide	Lab/Sample ID (Lab Use Only)
V	7/9/03	1700		X	monu-WP-PLT-15				1	X	X	
V	7/10/03	1100		X	monu-WP-PLT-14				1	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	7-11-03	0800	[signature]	07.12.03	1100
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil

[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other ziplock bag

1 veg V = Vegetation Tissue

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

1 of 1

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7480
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°):
1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Dan Norman
Sampler's Signature: Dan Norman

Proj. No.: 13890.13
Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TAL Metals	Cyanide	Lab/Sample ID (Lab Use Only)
V	7/11/03	1030		X	Cent-WP-PLT-31				1	X	X	
V	7/12/03	1400		X	TILL-WP-PLT-27				1	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time	Remarks
	7/14/03	0700		7/15/03	1020	
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time	Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other Ziplock bag
V = Vegetation Tissue

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7400
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Don Norman
Sampler's Signature: Don Norman

Proj. No.: 13890.13
Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TAL metals	Cyanide	Lab/Sample ID (Lab Use Only)
V	7/14/03	1340		X	SHER-WP-PLT-23				1	X	X	
V	7/14/03	1340		X	SHER-WP-PLT-23(100)				1	X	X	
V	7/15/03	1130		X	CAPM-WP-PLT-20				1	X	X	
V	7/15/03	1625		X	GRAN-BG-PLT-35				1	X	X	
V	7/15/03	1600		X	GRAN-BG-PLT-34				1	X	X	
V	7/15/03	1800		X	GRAN-BG-PLT-36 MS				2	X	X	MS

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
	7/16/03	1500		7/18/03	1000
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other Ziplock bag
V = vegetation tissue

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

p 1 of 1

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel Red Rd Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7400
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Don Norman
Sampler's Signature: Don Norman

Proj. No.: 13890.13
Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2]: VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED: TAL Metals	CN	Lab/Sample ID (Lab Use Only)
V	7/17/03	1320		X	AJAX-WP-PLT-08				1	X	X	
V	7/17/03	1300		X	AJAX-PD-PLT-06				1	X	X	
V	7/18/03	1700		X	MAGN-WP-PLT-14				1	X	X	
V	7/16/03	1430		X	MAGN-PD-PLT-11				1	X	X	
V	7/19/03	1400		X	LUCA-BG-PLT-19				1	X	X	
V	7/19/03	1245		X	MAGN-WP-PLT-17				1	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
[signature]	7-21-03	0900	[signature]	7/22/03	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other Ziplock bag
V = Vegetation Tissue

STL cannot accept verbal changes.
Please Fax written changes to
(802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd Suite 200 Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7400
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: same
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Don Norman
Sampler's Signature: Don Norman

Proj. No.: 13890.16
Project Name: Granite Cr. Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2]: VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED: TAL Metals	CN	Lab/Sample ID (Lab Use Only)
V	7/21/03	1330		X	BLUE-WP-PLT-20				1	X	X	
V	7/24/03	1300		X	BLUE-WP-PLT-24				1	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
[signature]	7/23/03	0900	[signature]	7/24/03	0930
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other Ziplock bag

V = Vegetation tissue

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MONU-WP-PLT-15

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 533808

Matrix: SOLID | Client: EASEAT | Date Received: 07/12/03

% Solids: 35.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/15/03	N/A	%	1.0		35.2	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MONU-WP-PLT-14

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCV001

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 533809

Matrix: SOLID
Client: EASEAT
Date Received: 07/12/03

% Solids: 31.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/15/03	N/A	%	1.0		31.5	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
EBLK

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 533810

Matrix: WATER | Client: EASEAT | Date Received: 07/12/03

% Solids: 0.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/15/03	N/A	%	1.0		0.0	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
CENT-WP-PLT-31

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 533933

Matrix: SOLID | Client: EASEAT | Date Received: 07/15/03

% Solids: 33.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		33.1	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
TILL-WP-PLT-27

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCV001

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 533934

Matrix: SOLID
Client: EASEAT
Date Received: 07/15/03

% Solids: 36.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/05/03	N/A	%	1.0		36.1	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
SHERWPPLT23

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534697

Matrix: SOLID | Client: EASEAT | Date Received: 07/18/03

% Solids: 31.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/31/03	N/A	%	1.0		31.0	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
SHERWPPLT23(100)

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCV001

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 534698

Matrix: SOLID
Client: EASEAT
Date Received: 07/18/03

% Solids: 30.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/31/03	N/A	%	1.0		30.5	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
CAPMWPPLT20

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534699

Matrix: SOLID | Client: EASEAT | Date Received: 07/18/03

% Solids: 31.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/31/03	N/A	%	1.0		31.9	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANBGPLT35

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534700

Matrix: SOLID | Client: EASEAT | Date Received: 07/18/03

% Solids: 29.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/31/03	N/A	%	1.0		29.5	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANBGPLT34

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 534701

Matrix: SOLID | Client: EASEAT | Date Received: 07/18/03

% Solids: 32.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/31/03	N/A	%	1.0		32.5	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANBGPLT36

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCV001

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 534702

Matrix: SOLID
Client: EASEAT
Date Received: 07/18/03

% Solids: 35.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/31/03	N/A	%	1.0		35.6	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.
GRANBGPLT36REP

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCV001

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 534702DP

Matrix: SOLID
Client: EASEAT
Date Received: 07/18/03

% Solids: 36.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD*
IN623	Solids, Percent	07/31/03	N/A	%	35.6		36.3		2

** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXWPPLT08

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535357

Matrix: SOLID | Client: EASEAT | Date Received: 07/22/03

% Solids: 34.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		34.2	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXPDPLT06

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535358

Matrix: SOLID | Client: EASEAT | Date Received: 07/22/03

% Solids: 31.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		31.1	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNWPPLT14

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535359

Matrix: SOLID | Client: EASEAT | Date Received: 07/22/03

% Solids: 34.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		34.9	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNPDPLT11

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535360

Matrix: SOLID | Client: EASEAT | Date Received: 07/22/03

% Solids: 32.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		32.5	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
LUCABGPLT19

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535361

Matrix: SOLID | Client: EASEAT | Date Received: 07/22/03

% Solids: 32.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		32.5	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNWPPLT17

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535362

Matrix: SOLID | Client: EASEAT | Date Received: 07/22/03

% Solids: 34.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		34.2	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUEWPPLT20

Lab Name: STL BURLINGTON
Contract:
SDG No.: GCV001

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535819

Matrix: SOLID
Client: EASEAT
Date Received: 07/24/03

% Solids: 39.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		39.9	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUEWPPLT24

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535820

Matrix: SOLID | Client: EASEAT | Date Received: 07/24/03

% Solids: 29.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		29.8	

Printed on: 09/10/03 11:37 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
EBLK

Lab Name: STL BURLINGTON | Contract: | SDG No.: GCV001

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535859

Matrix: WATER | Client: EASEAT | Date Received: 07/24/03

% Solids: 0.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	07/29/03	N/A	%	1.0		0.0	

Printed on: 09/10/03 11:37 AM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
AJAXPDPLT06	535358
AJAXWPPLT08	535357
BLUEWPPLT20	535819
BLUEWPPLT24	535820
CAPMWPPLT20	534699
CENT-WP-PLT-31	533933
EBLK1	533810
EBLK2	535859
GRANBGPLT34	534701
GRANBGPLT35	534700
GRANBGPLT36	534702
GRANBGPLT36D	534702DP
GRANBGPLT36S	534702MS
LUCABGPLT19	535361
MAGNPDPLT11	535360
MAGNWPPLT14	535359
MAGNWPPLT17	535362
MONU-WP-PLT-14	533809
MONU-WP-PLT-15	533808
SHERWPPLT23	534697
SHERWPPLT23(100)	534698
TILL-WP-PLT-27	533934

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA-CLP FORMS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXPDPLT06

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535358

Level (low/med): LOW Date Received: 07/22/03

% Solids: 31.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	161			P
7440-36-0	Antimony	1.4	U		P
7440-38-2	Arsenic	4.1			P
7440-39-3	Barium	34.2	B		P
7440-41-7	Beryllium	0.088	B		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	14800			P
7440-47-3	Chromium	0.41	U		P
7440-48-4	Cobalt	0.61	B		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	718			P
7439-92-1	Lead	1.7			P
7439-95-4	Magnesium	6560			P
7439-96-5	Manganese	208			P
7439-97-6	Mercury	0.058	B		CV
7440-02-0	Nickel	0.62	U		P
7440-09-7	Potassium	16200		E	P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.65	U		P
7440-23-5	Sodium	595	B		P
7440-28-0	Thallium	1.7	U		P
7440-62-2	Vanadium	1.1	B		P
7440-66-6	Zinc	20.6		E	P
57-12-5	Cyanide	1.6	U	N	AS

Color Before: green Clarity Before: Texture: medium

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXWPPLT08

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535357

Level (low/med): LOW Date Received: 07/22/03

% Solids: 34.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	218			P
7440-36-0	Antimony	1.4	U		P
7440-38-2	Arsenic	20.4			P
7440-39-3	Barium	37.5	B		P
7440-41-7	Beryllium	0.098	B		P
7440-43-9	Cadmium	0.17	U		P
7440-70-2	Calcium	16000			P
7440-47-3	Chromium	0.41	U		P
7440-48-4	Cobalt	0.58	U		P
7440-50-8	Copper	6.5	B		P
7439-89-6	Iron	1080			P
7439-92-1	Lead	1.2			P
7439-95-4	Magnesium	7170			P
7439-96-5	Manganese	154			P
7439-97-6	Mercury	0.048	U		CV
7440-02-0	Nickel	0.61	U		P
7440-09-7	Potassium	17300		E	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.64	U		P
7440-23-5	Sodium	422	B		P
7440-28-0	Thallium	1.7	U		P
7440-62-2	Vanadium	1.2	B		P
7440-66-6	Zinc	19.5		E	P
57-12-5	Cyanide	1.3	U	N	AS

Color Before: green Clarity Before: Texture: medium

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLUEWPPLT20

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535819

Level (low/med): LOW Date Received: 07/24/03

% Solids: 39.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	256			P
7440-36-0	Antimony	0.98	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	308			P
7440-41-7	Beryllium	0.080	B		P
7440-43-9	Cadmium	0.14	B		P
7440-70-2	Calcium	14300			P
7440-47-3	Chromium	0.29	U		P
7440-48-4	Cobalt	0.42	U		P
7440-50-8	Copper	4.5	B		P
7439-89-6	Iron	325			P
7439-92-1	Lead	0.31	U		P
7439-95-4	Magnesium	4320			P
7439-96-5	Manganese	195			P
7439-97-6	Mercury	0.083			CV
7440-02-0	Nickel	0.44	U		P
7440-09-7	Potassium	14000		E	P
7782-49-2	Selenium	0.99	B		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	235	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	0.81	B		P
7440-66-6	Zinc	17.3		E	P
57-12-5	Cyanide	1.2	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLUEWPPLT24

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535820

Level (low/med): LOW Date Received: 07/24/03

% Solids: 29.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	273			P
7440-36-0	Antimony	1.4	U		P
7440-38-2	Arsenic	1.5	U		P
7440-39-3	Barium	72.3			P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.62	U		P
7440-50-8	Copper	5.3	B		P
7439-89-6	Iron	431			P
7439-92-1	Lead	0.99			P
7439-95-4	Magnesium	5180			P
7439-96-5	Manganese	75.9			P
7439-97-6	Mercury	0.056	U		CV
7440-02-0	Nickel	4.4	B		P
7440-09-7	Potassium	15000		E	P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.68	U		P
7440-23-5	Sodium	321	B		P
7440-28-0	Thallium	1.8	U		P
7440-62-2	Vanadium	1.2	B		P
7440-66-6	Zinc	39.1		E	P
57-12-5	Cyanide	1.7	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CAPMWPPLT20

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 534699

Level (low/med): LOW Date Received: 07/18/03

% Solids: 31.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	257			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	231			P
7440-41-7	Beryllium	0.096	B		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	12700			P
7440-47-3	Chromium	0.36	U		P
7440-48-4	Cobalt	0.51	U		P
7440-50-8	Copper	4.6	B		P
7439-89-6	Iron	262			P
7439-92-1	Lead	0.50	B		P
7439-95-4	Magnesium	4030			P
7439-96-5	Manganese	162			P
7439-97-6	Mercury	0.063	B		CV
7440-02-0	Nickel	0.54	U		P
7440-09-7	Potassium	15900		E	P
7782-49-2	Selenium	0.87	U		P
7440-22-4	Silver	0.56	U		P
7440-23-5	Sodium	289	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	0.76	B		P
7440-66-6	Zinc	16.7		E	P
57-12-5	Cyanide	1.6	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
CENT-WP-PLT-31

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 533933

Level (low/med): LOW Date Received: 07/15/03

% Solids: 33.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	251			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	1.4	U		P
7440-39-3	Barium	290			P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.85	B		P
7440-70-2	Calcium	17800			P
7440-47-3	Chromium	1.7	B		P
7440-48-4	Cobalt	0.57	U		P
7440-50-8	Copper	6.1	B		P
7439-89-6	Iron	409			P
7439-92-1	Lead	2.1			P
7439-95-4	Magnesium	5310			P
7439-96-5	Manganese	191			P
7439-97-6	Mercury	0.092	B		CV
7440-02-0	Nickel	0.60	U		P
7440-09-7	Potassium	15100		E	P
7782-49-2	Selenium	0.97	U		P
7440-22-4	Silver	0.63	U		P
7440-23-5	Sodium	338	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	0.97	B		P
7440-66-6	Zinc	43.7		E	P
57-12-5	Cyanide	1.6	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
EBLK1

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 533810

Level (low/med): LOW Date Received: 07/12/03

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2.4	U		P
7440-36-0	Antimony	0.47	U		P
7440-38-2	Arsenic	0.48	U		P
7440-39-3	Barium	0.59	U		P
7440-41-7	Beryllium	0.044	B		P
7440-43-9	Cadmium	0.060	U		P
7440-70-2	Calcium	18.2	U		P
7440-47-3	Chromium	0.14	U		P
7440-48-4	Cobalt	0.20	U		P
7440-50-8	Copper	0.24	U		P
7439-89-6	Iron	3.3	U		P
7439-92-1	Lead	0.19	B		P
7439-95-4	Magnesium	17.8	U		P
7439-96-5	Manganese	0.070	U		P
7439-97-6	Mercury	0.017	U		CV
7440-02-0	Nickel	0.21	U		P
7440-09-7	Potassium	39.3	U	E	P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	124	B		P
7440-28-0	Thallium	0.57	U		P
7440-62-2	Vanadium	0.20	U		P
7440-66-6	Zinc	0.21	B	E	P

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
EBLK2

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535859

Level (low/med): LOW Date Received: 07/24/03

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2.4	U		P
7440-36-0	Antimony	0.47	U		P
7440-38-2	Arsenic	0.48	U		P
7440-39-3	Barium	0.59	U		P
7440-41-7	Beryllium	0.045	B		P
7440-43-9	Cadmium	0.060	U		P
7440-70-2	Calcium	18.2	U		P
7440-47-3	Chromium	0.14	U		P
7440-48-4	Cobalt	0.20	U		P
7440-50-8	Copper	0.24	U		P
7439-89-6	Iron	3.3	U		P
7439-92-1	Lead	0.38			P
7439-95-4	Magnesium	17.8	U		P
7439-96-5	Manganese	0.070	U		P
7439-97-6	Mercury	0.016	U		CV
7440-02-0	Nickel	0.21	U		P
7440-09-7	Potassium	39.3	U	E	P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	115	B		P
7440-28-0	Thallium	0.57	U		P
7440-62-2	Vanadium	0.20	U		P
7440-66-6	Zinc	0.12	B	E	P
57-12-5	Cyanide	0.49	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANBGPLT34

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 534701

Level (low/med): LOW Date Received: 07/18/03

% Solids: 32.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	143			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	341			P
7440-41-7	Beryllium	0.071	B		P
7440-43-9	Cadmium	0.37	B		P
7440-70-2	Calcium	13300			P
7440-47-3	Chromium	0.36	U		P
7440-48-4	Cobalt	0.51	U		P
7440-50-8	Copper	4.3	B		P
7439-89-6	Iron	181			P
7439-92-1	Lead	1.1			P
7439-95-4	Magnesium	4280			P
7439-96-5	Manganese	262			P
7439-97-6	Mercury	0.045	U		CV
7440-02-0	Nickel	0.53	U		P
7440-09-7	Potassium	16800		E	P
7782-49-2	Selenium	0.86	U		P
7440-22-4	Silver	0.56	U		P
7440-23-5	Sodium	311	B		P
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium	0.51	U		P
7440-66-6	Zinc	18.1		E	P
57-12-5	Cyanide	1.4	U	N	AS

Color Before: green Clarity Before: _____ Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGPLT35

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 534700

Level (low/med): LOW Date Received: 07/18/03

% Solids: 29.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	312			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	368			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	0.16	U		P
7440-70-2	Calcium	10400			P
7440-47-3	Chromium	0.37	U		P
7440-48-4	Cobalt	0.53	U		P
7440-50-8	Copper	4.6	B		P
7439-89-6	Iron	315			P
7439-92-1	Lead	0.91			P
7439-95-4	Magnesium	4290			P
7439-96-5	Manganese	202			P
7439-97-6	Mercury	0.052	U		CV
7440-02-0	Nickel	0.56	U		P
7440-09-7	Potassium	19600		E	P
7782-49-2	Selenium	1.2	B		P
7440-22-4	Silver	0.59	U		P
7440-23-5	Sodium	340	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	0.94	B		P
7440-66-6	Zinc	14.2		E	P
57-12-5	Cyanide	1.6	U	N	AS

Color Before: green Clarity Before: _____ Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
GRANBGPLT36

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 534702

Level (low/med): LOW Date Received: 07/18/03

% Solids: 35.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	213			P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	1.1	U		P
7440-39-3	Barium	505			P
7440-41-7	Beryllium	0.054	B		P
7440-43-9	Cadmium	0.13	U		P
7440-70-2	Calcium	17300			P
7440-47-3	Chromium	0.31	U		P
7440-48-4	Cobalt	0.44	U		P
7440-50-8	Copper	4.8	B		P
7439-89-6	Iron	247			P
7439-92-1	Lead	0.38	B		P
7439-95-4	Magnesium	4570			P
7439-96-5	Manganese	324			P
7439-97-6	Mercury	0.045	U		CV
7440-02-0	Nickel	0.46	U		P
7440-09-7	Potassium	16200		E	P
7782-49-2	Selenium	0.95	B		P
7440-22-4	Silver	0.49	U		P
7440-23-5	Sodium	285	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	0.60	B		P
7440-66-6	Zinc	13.4		E	P
57-12-5	Cyanide	1.4	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
LUCABGPLT19

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535361

Level (low/med): LOW Date Received: 07/22/03

% Solids: 32.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	72.7			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	252			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	0.16	U		P
7440-70-2	Calcium	12400			P
7440-47-3	Chromium	0.37	U		P
7440-48-4	Cobalt	0.52	U		P
7440-50-8	Copper	5.7	B		P
7439-89-6	Iron	132			P
7439-92-1	Lead	1.1			P
7439-95-4	Magnesium	4330			P
7439-96-5	Manganese	238			P
7439-97-6	Mercury	0.051	U		CV
7440-02-0	Nickel	0.55	U		P
7440-09-7	Potassium	16500		E	P
7782-49-2	Selenium	1.4			P
7440-22-4	Silver	0.57	U		P
7440-23-5	Sodium	330	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	0.52	U		P
7440-66-6	Zinc	21.4		E	P
57-12-5	Cyanide	1.5	U	N	AS

Color Before: green Clarity Before: Texture: medium

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNPDPLT11

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535360

Level (low/med): LOW Date Received: 07/22/03

% Solids: 32.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	290			P
7440-36-0	Antimony	1.4	U		P
7440-38-2	Arsenic	8.1			P
7440-39-3	Barium	86.7			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	14000			P
7440-47-3	Chromium	0.43	U		P
7440-48-4	Cobalt	0.62	U		P
7440-50-8	Copper	5.8	B		P
7439-89-6	Iron	679			P
7439-92-1	Lead	1.7			P
7439-95-4	Magnesium	5200			P
7439-96-5	Manganese	95.3			P
7439-97-6	Mercury	0.064	B		CV
7440-02-0	Nickel	0.65	U		P
7440-09-7	Potassium	16200		E	P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.68	U		P
7440-23-5	Sodium	342	B		P
7440-28-0	Thallium	1.8	U		P
7440-62-2	Vanadium	1.3	B		P
7440-66-6	Zinc	27.0		E	P
57-12-5	Cyanide	1.5	U	N	AS

Color Before: green Clarity Before: Texture: medium

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPPLT14

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535359

Level (low/med): LOW Date Received: 07/22/03

% Solids: 34.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	157			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	123			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	0.17	U		P
7440-70-2	Calcium	15200			P
7440-47-3	Chromium	0.39	U		P
7440-48-4	Cobalt	0.55	U		P
7440-50-8	Copper	6.8	B		P
7439-89-6	Iron	338			P
7439-92-1	Lead	0.91			P
7439-95-4	Magnesium	6130			P
7439-96-5	Manganese	113			P
7439-97-6	Mercury	0.047	U		CV
7440-02-0	Nickel	0.58	U		P
7440-09-7	Potassium	14600		E	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.61	U		P
7440-23-5	Sodium	292	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	0.65	B		P
7440-66-6	Zinc	22.3		E	P
57-12-5	Cyanide	1.4	U	N	AS

Color Before: green Clarity Before: Texture: medium

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNWPPLT17

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 535362

Level (low/med): LOW Date Received: 07/22/03

% Solids: 34.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	409			P
7440-36-0	Antimony	1.3	B		P
7440-38-2	Arsenic	2.9			P
7440-39-3	Barium	277			P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.30	B		P
7440-70-2	Calcium	15000			P
7440-47-3	Chromium	0.39	U		P
7440-48-4	Cobalt	0.56	U		P
7440-50-8	Copper	6.1	B		P
7439-89-6	Iron	692			P
7439-92-1	Lead	1.1			P
7439-95-4	Magnesium	6250			P
7439-96-5	Manganese	212			P
7439-97-6	Mercury	0.047	U		CV
7440-02-0	Nickel	0.59	U		P
7440-09-7	Potassium	14000		E	P
7782-49-2	Selenium	1.4			P
7440-22-4	Silver	0.62	U		P
7440-23-5	Sodium	317	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	1.6	B		P
7440-66-6	Zinc	20.9		E	P
57-12-5	Cyanide	1.4	U	N	AS

Color Before: green Clarity Before: Texture: medium

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MONU-WP-PLT-14

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 533809

Level (low/med): LOW Date Received: 07/12/03

% Solids: 31.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	220			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	10.6			P
7440-39-3	Barium	86.3			P
7440-41-7	Beryllium	0.16	B		P
7440-43-9	Cadmium	1.0	B		P
7440-70-2	Calcium	12000			P
7440-47-3	Chromium	0.38	U		P
7440-48-4	Cobalt	0.54	U		P
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	642			P
7439-92-1	Lead	2.7			P
7439-95-4	Magnesium	4640			P
7439-96-5	Manganese	118			P
7439-97-6	Mercury	0.052	U		CV
7440-02-0	Nickel	0.57	U		P
7440-09-7	Potassium	15900		E	P
7782-49-2	Selenium	0.92	U		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	381	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	1.2	B		P
7440-66-6	Zinc	53.6		E	P
57-12-5	Cyanide	1.5	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MONU-WP-PLT-15

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 533808

Level (low/med): LOW Date Received: 07/12/03

% Solids: 35.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	206			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	6.1			P
7440-39-3	Barium	51.9	B		P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.78	B		P
7440-70-2	Calcium	9750			P
7440-47-3	Chromium	0.38	U		P
7440-48-4	Cobalt	0.55	U		P
7440-50-8	Copper	5.1	B		P
7439-89-6	Iron	535			P
7439-92-1	Lead	1.2			P
7439-95-4	Magnesium	4500			P
7439-96-5	Manganese	169			P
7439-97-6	Mercury	0.046	U		CV
7440-02-0	Nickel	0.57	U		P
7440-09-7	Potassium	14900		E	P
7782-49-2	Selenium	0.93	U		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	428	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	0.95	B		P
7440-66-6	Zinc	35.9		E	P
57-12-5	Cyanide	1.3	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
SHERWPPLT23

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 534697

Level (low/med): LOW Date Received: 07/18/03

% Solids: 31.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	153			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	247			P
7440-41-7	Beryllium	0.11	B		P
7440-43-9	Cadmium	0.50	B		P
7440-70-2	Calcium	12200			P
7440-47-3	Chromium	0.37	U		P
7440-48-4	Cobalt	0.53	U		P
7440-50-8	Copper	4.6	B		P
7439-89-6	Iron	197			P
7439-92-1	Lead	1.3			P
7439-95-4	Magnesium	4690			P
7439-96-5	Manganese	291			P
7439-97-6	Mercury	0.050	B		CV
7440-02-0	Nickel	0.56	U		P
7440-09-7	Potassium	16700		E	P
7782-49-2	Selenium	0.91	B		P
7440-22-4	Silver	0.58	U		P
7440-23-5	Sodium	370	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	0.81	B		P
7440-66-6	Zinc	27.2		E	P
57-12-5	Cyanide	1.6	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
SHERWPPLT23(100)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 534698

Level (low/med): LOW Date Received: 07/18/03

% Solids: 30.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	206			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	253			P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.58	B		P
7440-70-2	Calcium	12600			P
7440-47-3	Chromium	0.39	U		P
7440-48-4	Cobalt	0.55	U		P
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	260			P
7439-92-1	Lead	1.3			P
7439-95-4	Magnesium	5060			P
7439-96-5	Manganese	283			P
7439-97-6	Mercury	0.049	B		CV
7440-02-0	Nickel	0.58	U		P
7440-09-7	Potassium	17300		E	P
7782-49-2	Selenium	1.0	B		P
7440-22-4	Silver	0.67	B		P
7440-23-5	Sodium	374	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	0.71	B		P
7440-66-6	Zinc	28.4		E	P
57-12-5	Cyanide	1.7	U	N	AS

Color Before: green Clarity Before: _____ Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
TILL-WP-PLT-27

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Lab Sample ID: 533934

Level (low/med): LOW Date Received: 07/15/03

% Solids: 36.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	284			P
7440-36-0	Antimony	0.94	U		P
7440-38-2	Arsenic	1.0	B		P
7440-39-3	Barium	272			P
7440-41-7	Beryllium	0.087	B		P
7440-43-9	Cadmium	2.6			P
7440-70-2	Calcium	20000			P
7440-47-3	Chromium	0.48	B		P
7440-48-4	Cobalt	0.40	U		P
7440-50-8	Copper	5.0			P
7439-89-6	Iron	427			P
7439-92-1	Lead	2.7			P
7439-95-4	Magnesium	4120			P
7439-96-5	Manganese	158			P
7439-97-6	Mercury	0.070	B		CV
7440-02-0	Nickel	0.42	U		P
7440-09-7	Potassium	13700		E	P
7782-49-2	Selenium	0.70	B		P
7440-22-4	Silver	0.44	U		P
7440-23-5	Sodium	262	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	0.90	B		P
7440-66-6	Zinc	70.2		E	P
57-12-5	Cyanide	1.1	U	N	AS

Color Before: green Clarity Before: Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	25370.00	97.6	30200.0	29720.00	98.4	29580.00	97.9	P
Antimony	250.0	256.50	102.6	300.0	314.20	104.7	311.80	103.9	P
Arsenic	250.0	255.50	102.2	100.0	104.80	104.8	103.50	103.5	P
Barium	500.0	501.80	100.4	200.0	201.40	100.7	200.90	100.4	P
Beryllium	500.0	509.20	101.8	100.0	99.83	99.8	99.87	99.9	P
Cadmium	500.0	497.10	99.4	100.0	100.10	100.1	99.63	99.6	P
Calcium	25000.0	24860.00	99.4	30200.0	29850.00	98.8	29650.00	98.2	P
Chromium	500.0	500.60	100.1	200.0	195.30	97.6	194.20	97.1	P
Cobalt	500.0	495.90	99.2	200.0	200.80	100.4	200.40	100.2	P
Copper	500.0	509.90	102.0	200.0	204.10	102.0	204.60	102.3	P
Iron	25500.0	25380.00	99.5	30200.0	29790.00	98.6	29670.00	98.2	P
Lead	1000.0	1008.00	100.8	400.0	401.60	100.4	398.60	99.6	P
Magnesium	25000.0	24570.00	98.3	30200.0	29670.00	98.2	29560.00	97.9	P
Manganese	500.0	498.10	99.6	200.0	199.40	99.7	198.60	99.3	P
Mercury	3.0	3.00	100.0	5.0	5.49	109.8	5.43	108.6	CV
Nickel	500.0	497.70	99.5	200.0	194.60	97.3	193.70	96.8	P
Potassium	25000.0	25180.00	100.7	30200.0	31200.00	103.3	31120.00	103.0	P
Selenium	250.0	247.60	99.0	100.0	99.67	99.7	100.80	100.8	P
Silver	500.0	498.80	99.8	100.0	104.00	104.0	104.10	104.1	P
Sodium	25000.0	23780.00	95.1	30200.0	28960.00	95.9	28980.00	96.0	P
Thallium	250.0	244.30	97.7	100.0	107.10	107.1	103.60	103.6	P
Vanadium	500.0	498.60	99.7	200.0	201.00	100.5	201.10	100.6	P
Zinc	500.0	505.70	101.1	200.0	202.30	101.2	202.30	101.2	P
Cyanide	120.0	109.26	91.0	150.0	152.87	101.9	154.97	103.3	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	29140.00	96.5	29670.00	98.2	P
Antimony				300.0	305.40	101.8	314.30	104.8	P
Arsenic				100.0	100.30	100.3	102.50	102.5	P
Barium				200.0	198.30	99.2	201.50	100.8	P
Beryllium				100.0	98.84	98.8	100.50	100.5	P
Cadmium				100.0	98.51	98.5	100.60	100.6	P
Calcium				30200.0	29220.00	96.8	29860.00	98.9	P
Chromium				200.0	191.10	95.6	195.10	97.6	P
Cobalt				200.0	197.20	98.6	201.00	100.5	P
Copper				200.0	201.50	100.8	205.10	102.6	P
Iron				30200.0	29240.00	96.8	29810.00	98.7	P
Lead				400.0	393.00	98.2	399.90	100.0	P
Magnesium				30200.0	29150.00	96.5	29730.00	98.4	P
Manganese				200.0	195.80	97.9	199.50	99.8	P
Nickel				200.0	191.70	95.8	194.00	97.0	P
Potassium				30200.0	30700.00	101.7	31210.00	103.3	P
Selenium				100.0	98.70	98.7	98.43	98.4	P
Silver				100.0	102.80	102.8	104.20	104.2	P
Sodium				30200.0	28930.00	95.8	28860.00	95.6	P
Thallium				100.0	97.33	97.3	101.70	101.7	P
Vanadium				200.0	197.40	98.7	200.80	100.4	P
Zinc				200.0	199.70	99.8	203.60	101.8	P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	29210.00	96.7			P
Antimony				300.0	305.60	101.9			P
Arsenic				100.0	99.66	99.7			P
Barium				200.0	198.40	99.2			P
Beryllium				100.0	98.54	98.5			P
Cadmium				100.0	98.29	98.3			P
Calcium				30200.0	29370.00	97.3			P
Chromium				200.0	194.10	97.0			P
Cobalt				200.0	197.70	98.8			P
Copper				200.0	201.70	100.8			P
Iron				30200.0	29280.00	97.0			P
Lead				400.0	392.50	98.1			P
Magnesium				30200.0	29170.00	96.6			P
Manganese				200.0	196.80	98.4			P
Nickel				200.0	197.60	98.8			P
Potassium				30200.0	30650.00	101.5			P
Selenium				100.0	99.94	99.9			P
Silver				100.0	102.80	102.8			P
Sodium				30200.0	28500.00	94.4			P
Thallium				100.0	100.20	100.2			P
Vanadium				200.0	197.60	98.8			P
Zinc				200.0	199.70	99.8			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	987.40	98.7	400.0	393.20	98.3	387.40	96.8	P
Mercury	3.0	2.96	98.7	5.0	5.43	108.6	5.33	106.6	CV
Cyanide	120.0	129.19	107.7	150.0	147.38	98.3	148.86	99.2	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				400.0	384.80	96.2	390.30	97.6	P
Cyanide				150.0	146.51	97.7			AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead				400.0	391.00	97.8			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	956.30	95.6	400.0	378.50	94.6	388.70	97.2	P
Mercury	3.0	3.06	102.0	5.0	5.05	101.0	4.68	93.6	CV
Cyanide	120.0	119.46	99.6	150.0	141.85	94.6	140.20	93.5	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				400.0	385.00	96.2			P
Mercury				5.0	4.92	98.4	4.82	96.4	CV
Cyanide				150.0	143.25	95.5			AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26350.00	101.3	30200.0	30440.00	100.8	30260.00	100.2	P
Antimony	250.0	250.60	100.2	300.0	303.90	101.3	303.20	101.1	P
Arsenic	250.0	245.90	98.4	100.0	98.91	98.9	101.20	101.2	P
Barium	500.0	493.60	98.7	200.0	201.70	100.8	201.00	100.5	P
Beryllium	500.0	501.00	100.2	100.0	99.94	99.9	100.70	100.7	P
Cadmium	500.0	490.30	98.1	100.0	98.85	98.8	99.80	99.8	P
Calcium	25000.0	25630.00	102.5	30200.0	30640.00	101.5	30850.00	102.2	P
Chromium	500.0	498.00	99.6	200.0	199.20	99.6	200.20	100.1	P
Cobalt	500.0	489.90	98.0	200.0	199.30	99.6	200.00	100.0	P
Copper	500.0	502.50	100.5	200.0	204.60	102.3	204.20	102.1	P
Iron	25500.0	26480.00	103.8	30200.0	30510.00	101.0	30670.00	101.6	P
Lead	1000.0	987.60	98.8	400.0	392.70	98.2	397.60	99.4	P
Magnesium	25000.0	25590.00	102.4	30200.0	30310.00	100.4	30550.00	101.2	P
Manganese	500.0	491.60	98.3	200.0	199.80	99.9	200.00	100.0	P
Mercury	3.0	2.97	99.0	5.0	4.83	96.6	4.63	92.6	CV
Nickel	500.0	495.00	99.0	200.0	198.00	99.0	198.20	99.1	P
Potassium	25000.0	26340.00	105.4	30200.0	31580.00	104.6	31430.00	104.1	P
Selenium	250.0	242.10	96.8	100.0	100.10	100.1	99.95	100.0	P
Silver	500.0	497.80	99.6	100.0	100.90	100.9	101.70	101.7	P
Sodium	25000.0	25240.00	101.0	30200.0	29430.00	97.5	29560.00	97.9	P
Thallium	250.0	236.00	94.4	100.0	97.47	97.5	96.25	96.2	P
Vanadium	500.0	495.50	99.1	200.0	201.10	100.6	201.70	100.8	P
Zinc	500.0	500.90	100.2	200.0	202.70	101.4	204.00	102.0	P
Cyanide	120.0	122.17	101.8	150.0	148.25	98.8	153.71	102.5	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	30560.00	101.2			P
Antimony				300.0	305.30	101.8			P
Arsenic				100.0	102.20	102.2			P
Barium				200.0	201.80	100.9			P
Beryllium				100.0	100.30	100.3			P
Cadmium				100.0	99.55	99.6			P
Calcium				30200.0	30970.00	102.5			P
Chromium				200.0	200.20	100.1			P
Cobalt				200.0	199.50	99.8			P
Copper				200.0	206.20	103.1			P
Iron				30200.0	30690.00	101.6			P
Lead				400.0	396.50	99.1			P
Magnesium				30200.0	30610.00	101.4			P
Manganese				200.0	199.80	99.9			P
Mercury				5.0	4.67	93.4			CV
Nickel				200.0	199.10	99.6			P
Potassium				30200.0	32060.00	106.2			P
Selenium				100.0	101.80	101.8			P
Silver				100.0	101.30	101.3			P
Sodium				30200.0	29660.00	98.2			P
Thallium				100.0	98.77	98.8			P
Vanadium				200.0	201.20	100.6			P
Zinc				200.0	204.50	102.2			P

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	3.0	2.82	94.0	5.0	4.90	98.0	4.71	94.2	CV
Cyanide	120.0	117.46	97.9	150.0	140.94	94.0	143.67	95.8	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	4.61	92.2			CV
Cyanide				150.0	142.40	94.9	142.75	95.2	AS

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	3.0	2.73	91.0	5.0	4.93	98.6	4.77	95.4	CV

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

USEPA-CLP FORMS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury				5.0	4.87	97.4	4.85	97.0	CV

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

USEPA-CLP FORMS

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	473.80	118.4	471.00	117.8
Antimony				120.0	127.10	105.9	125.50	104.6
Arsenic				20.0	20.93	104.6	19.80	99.0
Barium				400.0	398.90	99.7	391.40	97.8
Beryllium				10.0	10.20	102.0	10.03	100.3
Cadmium				10.0	10.03	100.3	9.99	99.9
Calcium				10000.0	10280.00	102.8	10200.00	102.0
Chromium				20.0	25.59	128.0	22.24	111.2
Cobalt				100.0	98.65	98.6	97.06	97.1
Copper				50.0	50.95	101.9	49.92	99.8
Iron				200.0	294.40	147.2	268.30	134.2
Lead				6.0	6.45	107.5	6.35	105.8
Magnesium				10000.0	9944.00	99.4	9851.00	98.5
Manganese				30.0	29.81	99.4	29.29	97.6
Mercury	0.2	0.20	100.0					
Nickel				80.0	83.02	103.8	85.52	106.9
Potassium				10000.0	11570.00	115.7	11350.00	113.5
Selenium				10.0	10.05	100.5	9.37	93.7
Silver				20.0	21.92	109.6	21.31	106.6
Sodium				10000.0	9592.00	95.9	9503.00	95.0
Thallium				20.0	23.41	117.0	23.17	115.8
Vanadium				100.0	100.30	100.3	97.90	97.9
Zinc				40.0	40.84	102.1	40.73	101.8

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead				6.0	4.64	77.3	4.06	67.7
Mercury	0.2	0.16	80.0					

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead				6.0	6.23	103.8	4.79	79.8
Mercury	0.2	0.17	85.0					

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	510.40	127.6	534.70	133.7
Antimony				120.0	120.60	100.5	120.90	100.8
Arsenic				20.0	20.87	104.4	20.53	102.6
Barium				400.0	397.70	99.4	398.00	99.5
Beryllium				10.0	10.23	102.3	10.28	102.8
Cadmium				10.0	10.46	104.6	10.42	104.2
Calcium				10000.0	10560.00	105.6	10680.00	106.8
Chromium				20.0	21.52	107.6	22.67	113.4
Cobalt				100.0	97.89	97.9	98.69	98.7
Copper				50.0	51.86	103.7	51.86	103.7
Iron				200.0	285.30	142.6	295.10	147.6
Lead				6.0	5.99	99.8	6.77	112.8
Magnesium				10000.0	10310.00	103.1	10420.00	104.2
Manganese				30.0	30.60	102.0	30.96	103.2
Mercury	0.2	0.21	105.0					
Nickel				80.0	79.56	99.4	83.25	104.1
Potassium				10000.0	11030.00	110.3	11230.00	112.3
Selenium				10.0	11.70	117.0	9.12	91.2
Silver				20.0	20.25	101.2	20.45	102.2
Sodium				10000.0	10160.00	101.6	10090.00	100.9
Thallium				20.0	23.50	117.5	19.01	95.0
Vanadium				100.0	99.96	100.0	100.40	100.4
Zinc				40.0	42.10	105.2	42.47	106.2

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.2	0.22	110.0					

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.2	0.17	85.0					

Control Limits: no limits have been established by EPA at this time

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOLID

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	23.6	U	-27.3	B	-2.952	B	P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U	0.470	U	P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U	0.480	U	P
Barium	5.9	U	5.9	U	5.9	U	5.9	U	0.590	U	P
Beryllium	0.2	U	0.2	U	0.2	U	0.2	U	0.035	B	P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.060	U	P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U	18.210	U	P
Chromium	-5.7	B	-6.8	B	-7.2	B	-6.6	B	-0.520	B	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	0.200	U	P
Copper	2.4	U	2.4	U	2.4	U	2.4	U	0.240	U	P
Iron	33.3	U	33.3	U	33.3	U	33.3	U	3.413	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	0.257	B	P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U	17.830	U	P
Manganese	-1.7	B	-1.8	B	-1.9	B	-1.7	B	-0.168	B	P
Mercury	0.1	U	0.1	U	0.1	U			0.017	U	CV
Nickel	-6.9	B	-7.4	B	-7.9	B	-7.2	B	-1.036	B	P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U	39.300	U	P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U	0.340	U	P
Silver	2.2	U	2.2	U	2.2	U	2.2	U	0.220	U	P
Sodium	472.7	U	472.7	U	472.7	U	541.8	B	124.300	B	P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U	0.570	U	P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	0.200	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	0.100	U	P
Cyanide	10.0	U	10.0	U	10.0	U			0.467	U	AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOLID

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			23.6	U	-28.5	B			-4.752	B	P
Antimony			4.7	U	4.7	U			0.470	U	P
Arsenic			4.8	U	4.8	U			0.480	U	P
Barium			5.9	U	5.9	U			0.590	U	P
Beryllium			0.2	U	0.2	B			0.025	B	P
Cadmium			0.6	U	0.6	U			0.060	U	P
Calcium			182.1	U	182.1	U			18.210	U	P
Chromium			-6.7	B	-6.5	B			-0.400	B	P
Cobalt			2.0	U	2.0	U			0.200	U	P
Copper			2.4	U	2.4	U			0.240	U	P
Iron			33.3	U	33.3	U			3.330	U	P
Lead			2.6	B	1.3	U			0.150	U	P
Magnesium			178.3	U	178.3	U			17.830	U	P
Manganese			-1.8	B	-1.7	B			-0.145	B	P
Nickel			-9.0	B	-8.7	B			-0.681	B	P
Potassium			393.0	U	393.0	U			39.300	U	P
Selenium			3.4	U	3.4	U			0.340	U	P
Silver			2.2	U	2.2	U			0.220	U	P
Sodium			472.7	U	472.7	U			129.500	B	P
Thallium			5.7	U	5.7	U			0.570	U	P
Vanadium			2.0	U	2.0	U			0.200	U	P
Zinc			1.0	U	1.0	U			0.100	U	P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.495	U	AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead	1.3	U	-2.0	B	1.3	U	-1.9	B			P
Mercury	0.1	U	0.1	U	0.1	U					CV

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead			-1.9	B	-1.6	B					P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.500	U	AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead	1.5	U	1.5	U	1.5	U	1.5	U			P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury			0.1	U					0.017	U	CV

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U			0.463	U	AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	23.6	U	37.3	B			P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U			P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U			P
Barium	5.9	U	5.9	U	5.9	U	5.9	U			P
Beryllium	0.2	U	0.2	U	0.2	U	0.2	U			P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U			P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U			P
Chromium	1.4	U	1.4	U	1.4	U	1.4	U			P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			P
Copper	2.4	U	2.4	U	2.4	U	2.4	U			P
Iron	33.3	U	33.3	U	33.3	U	33.3	U			P
Lead	1.5	B	1.3	U	1.3	U	1.3	U			P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U			P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P
Mercury	0.1	U	0.1	U	0.1	U	-0.1	B			CV
Nickel	2.1	U	2.1	U	2.1	U	2.1	U			P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U			P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U			P
Silver	2.2	U	2.2	U	2.2	U	2.2	U			P
Sodium	472.7	U	472.7	U	472.7	U	472.7	U			P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U			P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U			P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U			P

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.495	U	AS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV
Cyanide			10.0	U							AS

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.017	U	CV

USEPA-CLP FORMS

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Mercury			0.1	B							CV

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	486000	486900.0	100.9	477500	480100.0	99.5
Antimony	0	596	-2	639.4	107.3	1	633.7	106.3
Arsenic	0	102	10	108.1	106.0	5	109.2	107.1
Barium	0	503	2	509.7	101.3	2	505.3	100.5
Beryllium	0	482	0	490.2	101.7	0	489.3	101.5
Cadmium	0	938	3	955.9	101.9	3	953.6	101.7
Calcium	500000	477840	486400	489800.0	102.5	482900	485800.0	101.7
Chromium	0	483	-3	486.9	100.8	-3	482.2	99.8
Cobalt	0	457	-1	469.4	102.7	-1	465.2	101.8
Copper	0	526	3	525.9	100.0	3	523.0	99.4
Iron	200000	191980	198200	197400.0	102.8	196100	195500.0	101.8
Lead	0	49	-4	40.4	82.4	-6	40.4	82.4
Magnesium	500000	521880	528200	532300.0	102.0	522600	528000.0	101.2
Manganese	0	474	0	482.0	101.7	0	478.0	100.8
Nickel	0	952	-6	979.9	102.9	-6	971.8	102.1
Potassium	0	0	191	173.1		278	241.1	
Selenium	0	47	5	56.4	120.0	7	53.9	114.7
Silver	0	213	1	214.6	100.8	1	213.6	100.3
Sodium	0	0	110	-24.5		7	-32.8	
Thallium	0	89	-4	85.9	96.5	-5	91.8	103.1
Vanadium	0	478	1	476.0	99.6	1	472.3	98.8
Zinc	0	998	5	1017.0	101.9	6	1013.0	101.5

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	49	-5	41.8	85.3	-3	40.6	82.9

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	44	2	47.1	107.0	2	46.5	105.7

USEPA-CLP FORMS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	507400	502200.0	104.0	508100	503700.0	104.3
Antimony	0	596	-5	613.0	102.9	0	610.9	102.5
Arsenic	0	102	8	107.1	105.0	6	106.1	104.0
Barium	0	503	2	498.3	99.1	2	499.2	99.2
Beryllium	0	482	0	486.2	100.9	0	487.2	101.1
Cadmium	0	938	0	936.2	99.8	0	936.4	99.8
Calcium	500000	477840	498400	498800.0	104.4	504600	501600.0	105.0
Chromium	0	483	4	477.1	98.8	4	477.9	98.9
Cobalt	0	457	-1	454.5	99.5	-1	454.0	99.3
Copper	0	526	4	511.7	97.3	4	513.1	97.5
Iron	200000	191980	201700	199100.0	103.7	203000	199300.0	103.8
Lead	0	49	-2	44.8	91.4	0	44.2	90.2
Magnesium	500000	521880	540400	541400.0	103.7	545300	542800.0	104.0
Manganese	0	474	1	471.9	99.6	1	471.1	99.4
Nickel	0	952	0	938.8	98.6	1	940.5	98.8
Potassium	0	0	-82	-76.1		-20	-19.3	
Selenium	0	47	0	41.8	88.9	-1	46.5	98.9
Silver	0	213	0	213.8	100.4	0	213.8	100.4
Sodium	0	0	87	-50.0		-79	-133.8	
Thallium	0	89	-8	86.2	96.9	-5	92.2	103.6
Vanadium	0	478	2	469.2	98.2	2	469.3	98.2
Zinc	0	998	3	1013.0	101.5	3	1016.0	101.8

USEPA-CLP FORMS

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANBGPLT36S

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Matrix (soil/water): SOLID Level (low/med): LOW

% Solids for Sample: 35.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	750.8095		213.0187		476.10	113.0		P
Antimony	75 - 125	121.8102		1.0395	U	119.02	102.3		P
Arsenic	75 - 125	8.5103		1.0617	U	9.52	89.4		P
Barium	75 - 125	977.9091		505.1757		476.10	99.3		P
Beryllium	75 - 125	11.9287		0.0539	B	11.90	99.8		P
Cadmium	75 - 125	11.9144		0.1327	U	11.90	100.1		P
Chromium	75 - 125	47.6100		0.3097	U	47.61	100.0		P
Cobalt	75 - 125	116.5492		0.4424	U	119.02	97.9		P
Copper	75 - 125	66.8444		4.8018	B	59.51	104.3		P
Iron	75 - 125	502.0473		246.8371		238.05	107.2		P
Lead	75 - 125	4.9990		0.3837	B	4.76	97.0		P
Manganese	75 - 125	449.4382		324.4714		119.02	105.0		P
Mercury	75 - 125	0.4392		0.0446	U	0.45	97.6		CV
Nickel	75 - 125	114.6686		0.4645	U	119.02	96.3		P
Selenium	75 - 125	3.1423		0.9491	B	2.38	92.2		P
Silver	75 - 125	11.7620		0.4866	U	11.90	98.8		P
Thallium	75 - 125	10.3599		1.2607	U	11.90	87.1		P
Vanadium	75 - 125	119.6201		0.5992	B	119.02	100.0		P
Zinc	75 - 125	137.1882		13.4345		119.02	104.0		P
Cyanide	75 - 125	6.6028		1.4045	U	13.91	47.5	N	AS

Comments:

USEPA-CLP FORMS

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANBGPLT36A

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS _____ SDG No.: GCV001

Matrix (soil/water): SOLID Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		3114.00		963.10		2000.0	107.5		P
Antimony		537.20		4.70	U	500.0	107.4		P
Arsenic		35.79		4.80	U	40.0	89.5		P
Barium		4297.00		2284.00		2000.0	100.6		P
Beryllium		52.18		0.24	B	50.0	103.9		P
Cadmium		52.43		0.60	U	50.0	104.9		P
Chromium		209.80		1.40	U	200.0	104.9		P
Cobalt		513.30		2.00	U	500.0	102.7		P
Copper		294.90		21.71	B	250.0	109.3		P
Iron		2133.00		1116.00		1000.0	101.7		P
Lead		24.12		1.74	B	20.0	111.9		P
Manganese		1983.00		1467.00		500.0	103.2		P
Nickel		506.30		2.10	U	500.0	101.3		P
Selenium		11.53		4.29	B	10.0	72.4		P
Silver		52.72		2.20	U	50.0	105.4		P
Thallium		41.72		5.70	U	50.0	83.4		P
Vanadium		525.80		2.71	B	500.0	104.6		P
Zinc		583.80		60.74		500.0	104.6		P
Cyanide		20.14		10.00	U	20.0	100.7		AS

Comments: _____

6

DUPLICATES

SAMPLE NO.

GRANBGPLT36D

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Level (low/med): LOW

% Solids for Sample: 35.6 % Solids for Duplicate: 36.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	44.2	213.0187		211.6685		0.6		P
Antimony		1.0395	U	1.1683	U			P
Arsenic		1.0617	U	1.1932	U			P
Barium		505.1757		512.5784		1.5		P
Beryllium		0.0539	B	0.1035	B	63.0		P
Cadmium		0.1327	U	0.1768	B	200.0		P
Calcium		17329.4707		17763.7500		2.5		P
Chromium		0.3097	U	0.3480	U			P
Cobalt		0.4424	U	0.4972	U			P
Copper		4.8018	B	4.4720	B	7.1		P
Iron		246.8371		256.2892		3.8		P
Lead		0.3837	B	0.3910	B	1.9		P
Magnesium	1105.9	4567.3721		4618.6738		1.1		P
Manganese		324.4714		329.1240		1.4		P
Mercury		0.0446	U	0.0571	B	200.0		CV
Nickel		0.4645	U	0.5220	U			P
Potassium		16227.9902		16545.6895		1.9		P
Selenium		0.9491	B	1.1062	B	15.3		P
Silver		0.4866	U	0.5469	U			P
Sodium		284.6590	B	300.0398	B	5.3		P
Thallium		1.2607	U	1.4169	U			P
Vanadium		0.5992	B	0.7087	B	16.7		P
Zinc	4.4	13.4345		13.5055		0.5		P
Cyanide		1.4045	U	1.2213	U			AS

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum				200.0	187.7		160.0	240.0	93.8
Antimony				50.0	49.6		40.0	60.0	99.2
Arsenic				24.0	22.5		19.2	28.8	93.8
Barium				200.0	190.0		160.0	240.0	95.0
Beryllium				5.0	4.9		4.0	6.0	98.0
Cadmium				25.0	24.1		20.0	30.0	96.4
Calcium				2000.0	1932.0		1600.0	2400.0	96.6
Chromium				20.0	19.2		16.0	24.0	96.0
Cobalt				50.0	47.6		40.0	60.0	95.2
Copper				25.0	25.0		20.0	30.0	100.0
Iron				100.0	95.5		80.0	120.0	95.5
Lead				22.0	21.2		17.6	26.4	96.4
Magnesium				2000.0	1872.0		1600.0	2400.0	93.6
Manganese				50.0	48.4		40.0	60.0	96.8
Mercury				0.1	0.1		0.1	0.1	100.0
Nickel				50.0	47.1		40.0	60.0	94.2
Potassium				2000.0	1895.0		1600.0	2400.0	94.8
Selenium				21.0	18.8		16.8	25.2	89.5
Silver				25.0	24.0		20.0	30.0	96.0
Sodium				2000.0	1925.0		1600.0	2400.0	96.2
Thallium				25.0	23.2		20.0	30.0	92.8
Vanadium				50.0	48.5		40.0	60.0	97.0
Zinc				50.0	48.5		40.0	60.0	97.0
Cyanide				9.6	8.5		7.4	11.8	88.5

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum				200.0	203.6		160.0	240.0	101.8
Antimony				50.0	52.5		40.0	60.0	105.0
Arsenic				24.0	23.6		19.2	28.8	98.3
Barium				200.0	202.7		160.0	240.0	101.4
Beryllium				5.0	5.2		4.0	6.0	104.0
Cadmium				25.0	25.7		20.0	30.0	102.8
Calcium				2000.0	2052.0		1600.0	2400.0	102.6
Chromium				20.0	20.5		16.0	24.0	102.5
Cobalt				50.0	50.7		40.0	60.0	101.4
Copper				25.0	27.0		20.0	30.0	108.0
Iron				100.0	100.2		80.0	120.0	100.2
Lead				22.0	22.6		17.6	26.4	102.7
Magnesium				2000.0	1994.0		1600.0	2400.0	99.7
Manganese				50.0	51.6		40.0	60.0	103.2
Nickel				50.0	50.4		40.0	60.0	100.8
Potassium				2000.0	1978.0		1600.0	2400.0	98.9
Selenium				21.0	19.8		16.8	25.2	94.3
Silver				25.0	25.5		20.0	30.0	102.0
Sodium				2000.0	2046.0		1600.0	2400.0	102.3
Thallium				25.0	24.4		20.0	30.0	97.6
Vanadium				50.0	51.9		40.0	60.0	103.8
Zinc				50.0	51.7		40.0	60.0	103.4

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				9.6	8.6		7.4 11.8	89.6

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Mercury				0.1	0.1		0.1	0.1	100.0
Cyanide				9.6	8.9		7.4	11.8	92.7

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 0.1	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	6.1		5.4 6.6	101.7

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Mercury				0.1	0.1		0.1	0.1	100.0
Cyanide				6.0	5.9		5.4	6.6	98.3

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.1	0.1		0.1 0.1	100.0

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				200.0	196.7		160.0 240.0	98.4
Antimony				50.0	51.7		40.0 60.0	103.4
Arsenic				24.0	23.4		19.2 28.8	97.5
Barium				200.0	198.6		160.0 240.0	99.3
Beryllium				5.0	5.1		4.0 6.0	102.0
Cadmium				25.0	25.2		20.0 30.0	100.8
Calcium				2000.0	2008.0		1600.0 2400.0	100.4
Chromium				20.0	20.1		16.0 24.0	100.5
Cobalt				50.0	49.7		40.0 60.0	99.4
Copper				25.0	26.4		20.0 30.0	105.6
Iron				100.0	96.9		80.0 120.0	96.9
Lead				22.0	22.2		17.6 26.4	100.9
Magnesium				2000.0	1950.0		1600.0 2400.0	97.5
Manganese				50.0	50.6		40.0 60.0	101.2
Nickel				50.0	49.2		40.0 60.0	98.4
Potassium				2000.0	1944.0		1600.0 2400.0	97.2
Selenium				21.0	19.5		16.8 25.2	92.9
Silver				25.0	25.1		20.0 30.0	100.4
Sodium				2000.0	2000.0		1600.0 2400.0	100.0
Thallium				25.0	24.3		20.0 30.0	97.2
Vanadium				50.0	50.8		40.0 60.0	101.6
Zinc				50.0	50.3		40.0 60.0	100.6
Cyanide				9.6	8.7		7.4 11.8	90.6

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Solid LCS Source: IV, ENVEXP, LOT0899

Aqueous LCS Source: _____

	Aqueous (ug/L)			Solid (mg/kg)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				6.0	5.9		5.4 6.6	98.3

9
ICP SERIAL DILUTIONS

SAMPLE NO.

GRANBGPLT36L

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

Matrix (soil/water): SOLID Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	963.10		1362.00		41.4		P
Antimony	4.70	U	23.50	U			P
Arsenic	4.80	U	24.00	U			P
Barium	2284.00		2291.00		0.3		P
Beryllium	0.24	B	1.00	U	100.0		P
Cadmium	0.60	U	3.00	U			P
Calcium	78350.00		82480.00		5.3		P
Chromium	1.40	U	7.00	U			P
Cobalt	2.00	U	10.00	U			P
Copper	21.71	B	14.03	B	35.4		P
Iron	1116.00		1304.00		16.8		P
Lead	1.74	B	6.50	U	100.0		P
Magnesium	20650.00		21850.00	B	5.8		P
Manganese	1467.00		1490.00		1.6		P
Nickel	2.10	U	10.50	U			P
Potassium	73370.00		90980.00		24.0	E	P
Selenium	4.29	B	17.00	U	100.0		P
Silver	2.20	U	11.00	U			P
Sodium	1287.00	B	2363.50	U	100.0		P
Thallium	5.70	U	54.43		100.0		P
Vanadium	2.71	B	10.00	U	100.0		P
Zinc	60.74		72.79	B	19.8	E	P

USEPA-CLP FORMS

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

ICP ID Number: Date: 07/01/03

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	10.0	AS

Comments:

USEPA-CLP FORMS

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCV001

ICP ID Number: Date: 07/01/03

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	23.6	P
Antimony	206.838		60	4.7	P
Arsenic	189.042		10	4.8	P
Barium	493.409		200	5.9	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.6	P
Calcium	317.933		5000	182.1	P
Chromium	267.716		10	1.4	P
Cobalt	228.616		50	2.0	P
Copper	324.754		25	2.4	P
Iron	271.441		100	33.3	P
Lead	220.353		3	1.3	P
Magnesium	279.078		5000	178.3	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.1	P
Potassium	766.491		5000	393.0	P
Selenium	196.026		5	3.4	P
Silver	328.068		10	2.2	P
Sodium	330.232		5000	472.7	P
Thallium	190.864		10	5.7	P
Vanadium	292.402		50	2.0	P
Zinc	213.856		20	1.0	P

Comments: _____

USEPA-CLP FORMS

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Lead	220.353		3	1.5	P

Comments: _____

_____

_____

_____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 Date: 06/30/03

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ag
Aluminum	308.215	0.0000000	0.0000000	-0.0002180	0.0000000	0.0000000
Antimony	206.838	0.0000080	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000170	0.0000000	-0.0000590	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Cadmium	226.502	0.0000010	0.0000000	0.0000590	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000100	0.0000000	-0.0000200	0.0000060	0.0000000
Cobalt	228.616	0.0000000	0.0000000	-0.0000400	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0001740	0.0000000	0.0000000	-0.001587	0.0000000
Lead	220.353	-0.0000300	0.0000000	0.0000550	-0.000006	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000520	0.0000000	0.0000000
Phosphorus	178.287	0.0000070	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	-0.0007500	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000240	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000080	0.0000000	-0.0001100	0.0000000	0.0000000
Tin	189.989	0.0000090	0.0000000	-0.0000750	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000140	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000030	0.0000040	0.0000000
Zinc	206.200	0.0000300	0.0000000	-0.0000600	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		As	B	Be	Cd	Co
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	-0.0082960
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001900
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0002350
Tin	189.989	0.0000000	0.0000000	-0.0004370	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Cr	Cu	Mn	Na	Ni
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0078510	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	-0.0002840	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001750
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0008900	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000800
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	-0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0044570	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Pb	Sb	Se	Si	Tl
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0003500	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0003900	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 10/01/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.215	0.0173200	0.0000000			
Antimony	206.838	-0.0012700	0.0000000			
Arsenic	189.042	-0.0002800	0.0000000			
Barium	493.409	0.0000000	0.0000000			
Beryllium	313.042	0.0004800	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000000	0.0000000			
Calcium	317.933	0.0000000	0.0000000			
Chromium	267.716	-0.0003600	0.0000000			
Cobalt	228.616	0.0000000	0.0000000			
Copper	324.754	0.0000000	0.0000000			
Iron	271.441	0.0081200	0.0000000			
Lead	220.353	-0.0000850	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Manganese	257.610	0.0000000	0.0000000			
Molybdenum	202.030	0.0000000	0.0000000			
Nickel	231.604	0.0000000	0.0000000			
Phosphorus	178.287	0.0000000	0.0164830			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.026	0.0000000	0.0000000			
Silver	328.068	-0.0003350	0.0000000			
Sodium	330.232	-0.1479730	0.6581000			
Strontium	421.552	0.0000000	0.0000000			
Thallium	190.864	0.0014900	0.0000000			
Tin	189.989	0.0000000	0.0000000			
Titanium	334.941	0.0000000	0.0000000			
Vanadium	292.402	0.0000000	0.0000000			
Zinc	206.200	-0.0004730	0.0000000			

Comments: _____

USEPA-CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 4 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	10000.0	P
Iron	10.00	1000000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	10000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	5000.0	P

Comments: _____

USEPA-CLP FORMS

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

ICP ID Number: TJA ICAP 6 Date: 07/01/03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Lead	10.00	50000.0	P

Comments: _____

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: AS

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
ICV	07/21/03	50.0	50.0
LCSDS0721A	07/21/03	1.04	50.0
LCSS0721A	07/21/03	1.06	50.0
MONU-WP-PLT-14	07/21/03	1.05	50.0
MONU-WP-PLT-15	07/21/03	1.10	50.0
PBS0721A	07/21/03	1.07	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CENT-WP-PLT-31	07/22/03	0.96	50.0
ICV	07/22/03	50.0	50.0
LCSS0722A	07/22/03	1.06	50.0
PBS0722A	07/22/03	1.01	50.0
TILL-WP-PLT-27	07/22/03	1.23	50.0

USEPA-CLP FORMS

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CAPMWPPLT20	07/27/03	0.98	50.0
GRANBGPLT34	07/27/03	1.10	50.0
GRANBGPLT35	07/27/03	1.05	50.0
GRANBGPLT36	07/27/03	1.00	50.0
GRANBGPLT36D	07/27/03	1.15	50.0
GRANBGPLT36S	07/27/03	1.01	50.0
ICV	07/27/03	50.0	50.0
LCSS0727A	07/27/03	1.02	50.0
PBS0727A	07/27/03	1.00	50.0
SHERWPPLT23	07/27/03	1.04	50.0
SHERWPPLT23(100)	07/27/03	0.99	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
AJAXPDPLT06	07/29/03	1.01	50.0
AJAXWPPLT08	07/29/03	1.09	50.0
ICV	07/29/03	50.0	50.0
LCSS0729C	07/29/03	1.00	50.0
LUCABGPLT19	07/29/03	1.00	50.0
MAGNPDPLT11	07/29/03	1.02	50.0
MAGNWPPLT14	07/29/03	1.02	50.0
MAGNWPPLT17	07/29/03	1.05	50.0
PBS0729C	07/29/03	1.08	50.0

USEPA-CLP FORMS

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: AS

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
BLUEWPPLT20	08/01/03	1.02	50.0
BLUEWPPLT24	08/01/03	1.00	50.0
EBLK2	08/01/03	1.02	50.0
ICV	08/01/03	50.0	50.0
LCS0801B	08/01/03	1.00	50.0
LCSD0801B	08/01/03	1.00	50.0
PBS0801B	08/01/03	1.01	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
EBLK1	07/21/03	0.60	100.0
LCSS0721G	07/21/03	1.00	100.0
MONU-WP-PLT-14	07/21/03	0.61	100.0
MONU-WP-PLT-15	07/21/03	0.62	100.0
PBS0721G	07/21/03	0.60	100.0

USEPA-CLP FORMS

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CAPMWPPLT20	07/31/03	0.60	100.0
GRANBGPLT34	07/31/03	0.68	100.0
GRANBGPLT35	07/31/03	0.65	100.0
GRANBGPLT36	07/31/03	0.63	100.0
GRANBGPLT36D	07/31/03	0.63	100.0
GRANBGPLT36S	07/31/03	0.63	100.0
LCSS0731A	07/31/03	1.00	100.0
PBS0731A	07/31/03	0.60	100.0
SHERWPPLT23	07/31/03	0.64	100.0
SHERWPPLT23(100)	07/31/03	0.68	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
CENT-WP-PLT-31	07/31/03	0.63	100.0
LCSS0731B	07/31/03	1.00	100.0
PBS0731B	07/31/03	0.60	100.0
TILL-WP-PLT-27	07/31/03	0.67	100.0

USEPA-CLP FORMS

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXPDPLT06	08/08/03	0.61	100.0
AJAXWPPLT08	08/08/03	0.61	100.0
LCSS0808B	08/08/03	1.00	100.0
LUCABGPLT19	08/08/03	0.60	100.0
MAGNPDPLT11	08/08/03	0.69	100.0
MAGNWPPLT14	08/08/03	0.61	100.0
MAGNWPPLT17	08/08/03	0.62	100.0
PBS0808B	08/08/03	0.60	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLUEWPPLT20	08/13/03	0.65	100.0
BLUEWPPLT24	08/13/03	0.60	100.0
EBLK2	08/13/03	0.61	100.0
LCSS0813B	08/13/03	1.00	100.0
PBS0813B	08/13/03	0.60	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLUEWPPLT20	08/07/03	1.20	100.0
BLUEWPPLT24	08/07/03	1.09	100.0
CAPMWPPLT20	08/07/03	1.23	100.0
CENT-WP-PLT-31	08/07/03	1.06	100.0
EBLK1	08/07/03	1.00	100.0
EBLK2	08/07/03	1.00	100.0
GRANBGPLT34	08/07/03	1.21	100.0
GRANBGPLT35	08/07/03	1.27	100.0
GRANBGPLT36	08/07/03	1.27	100.0
GRANBGPLT36D	08/07/03	1.13	100.0
GRANBGPLT36S	08/07/03	1.18	100.0
LCSS0807J	08/07/03	1.00	100.0
MONU-WP-PLT-14	08/07/03	1.17	100.0
MONU-WP-PLT-15	08/07/03	1.04	100.0
PBS0807J	08/07/03	1.00	100.0
SHERWPPLT23	08/07/03	1.22	100.0
SHERWPPLT23(100)	08/07/03	1.19	100.0
TILL-WP-PLT-27	08/07/03	1.39	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXPDPLT06	08/15/03	1.09	100.0
AJAXWPPLT08	08/15/03	1.01	100.0
LCSDS0815C	08/15/03	1.00	100.0
LCSS0815C	08/15/03	1.00	100.0
LUCABGPLT19	08/15/03	1.18	100.0
MAGNPDPLT11	08/15/03	1.00	100.0
MAGNWPPLT14	08/15/03	1.04	100.0
MAGNWPPLT17	08/15/03	1.04	100.0
PBS0815C	08/15/03	1.00	100.0

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/21/03 End Date: 07/21/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1618																								X
S10	1.00	1619																								X
S30	1.00	1620																								X
S50	1.00	1621																								X
S100	1.00	1622																								X
S200	1.00	1623																								X
S300	1.00	1624																								X
ICV	1.00	1626																								X
ICB	1.00	1627																								X
LRS	1.00	1628																								X
LRS	1.00	1629																								X
CCV	1.00	1630																								X
CCB	1.00	1631																								X
ZZZZZZ	1.00	1632																								
PBS0721A	1.00	1633																								X
ZZZZZZ	1.00	1634																								
LCSS0721A	1.00	1635																								X
LCSDS0721A	1.00	1636																								X
ZZZZZZ	1.00	1637																								
ZZZZZZ	1.00	1638																								
ZZZZZZ	1.00	1638																								
MONU-WP-PLT-15	1.00	1639																								X
MONU-WP-PLT-14	1.00	1640																								X
CCV	1.00	1641																								X
CCB	1.00	1642																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/22/03 End Date: 07/22/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1539																								X
S10	1.00	1540																								X
S30	1.00	1541																								X
S50	1.00	1542																								X
S100	1.00	1543																								X
S200	1.00	1544																								X
S300	1.00	1545																								X
ICV	1.00	1547																								X
ICB	1.00	1548																								X
LRS	1.00	1549																								X
LRS	1.00	1550																								X
CCV	1.00	1551																								X
CCB	1.00	1552																								X
ZZZZZZ	1.00	1553																								
PBS0722A	1.00	1553																								X
LCSS0722A	1.00	1554																								X
ZZZZZZ	1.00	1555																								
ZZZZZZ	1.00	1556																								
ZZZZZZ	1.00	1557																								
ZZZZZZ	1.00	1558																								
ZZZZZZ	1.00	1559																								
ZZZZZZ	1.00	1600																								
CENT-WP-PLT-31	1.00	1601																								X
CCV	1.00	1602																								X
CCB	1.00	1603																								X
TILL-WP-PLT-27	1.00	1604																								X
ZZZZZZ	1.00	1605																								
ZZZZZZ	1.00	1606																								
ZZZZZZ	1.00	1607																								
ZZZZZZ	1.00	1608																								
ZZZZZZ	1.00	1609																								
ZZZZZZ	1.00	1610																								
ZZZZZZ	1.00	1611																								
ZZZZZZ	1.00	1612																								
ZZZZZZ	1.00	1613																								
CCV	1.00	1614																								X
CCB	1.00	1615																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/27/03 End Date: 07/27/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1809																								X
S10	1.00	1810																								X
S30	1.00	1811																								X
S50	1.00	1812																								X
S100	1.00	1813																								X
S200	1.00	1814																								X
S300	1.00	1815																								X
ICV	1.00	1816																								X
ICB	1.00	1817																								X
LRS	1.00	1818																								X
LRS	1.00	1819																								X
CCV	1.00	1820																								X
CCB	1.00	1821																								X
PBS0727A	1.00	1822																								X
LCSS0727A	1.00	1823																								X
SHERWPPLT23	1.00	1824																								X
SHERWPPLT23(100)	1.00	1825																								X
CAPMWPPLT20	1.00	1826																								X
GRANBGPLT35	1.00	1827																								X
GRANBGPLT34	1.00	1828																								X
GRANBGPLT36	1.00	1829																								X
GRANBGPLT36D	1.00	1830																								X
GRANBGPLT36S	1.00	1831																								X
CCV	1.00	1832																								X
CCB	1.00	1833																								X
ZZZZZZ	1.00	1834																								
ZZZZZZ	1.00	1835																								
ZZZZZZ	1.00	1836																								
ZZZZZZ	1.00	1837																								
ZZZZZZ	1.00	1838																								
ZZZZZZ	1.00	1839																								
ZZZZZZ	1.00	1840																								
ZZZZZZ	1.00	1841																								
ZZZZZZ	1.00	1842																								
ZZZZZZ	1.00	1843																								
CCV	1.00	1843																								X
CCB	1.00	1844																								X
ZZZZZZ	1.00	1845																								

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/27/03 End Date: 07/27/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1846																								
ZZZZZZ	1.00	1847																								
GRANBGPLT36A	1.00	1848																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 07/29/03 End Date: 07/29/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2152																								X
S10	1.00	2153																								X
S30	1.00	2154																								X
S50	1.00	2155																								X
S100	1.00	2156																								X
S200	1.00	2157																								X
S300	1.00	2157																								X
ICV	1.00	2159																								X
ICB	1.00	2200																								X
LRS	1.00	2201																								X
LRS	1.00	2202																								X
CCV	1.00	2203																								X
CCB	1.00	2204																								X
PBS0729C	1.00	2205																								X
LCSS0729C	1.00	2206																								X
ZZZZZZ	1.00	2207																								
ZZZZZZ	1.00	2208																								
AJAXWPPLT08	1.00	2209																								X
AJAXPDPLT06	1.00	2210																								X
MAGNWPPLT14	1.00	2211																								X
MAGNPDPLT11	1.00	2212																								X
LUCABGPLT19	1.00	2213																								X
MAGNWPPLT17	1.00	2214																								X
CCV	1.00	2215																								X
CCB	1.00	2216																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 08/01/03 End Date: 08/01/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1707																								X
S10	1.00	1708																								X
S30	1.00	1709																								X
S50	1.00	1710																								X
S100	1.00	1711																								X
S200	1.00	1712																								X
S300	1.00	1713																								X
ICV	1.00	1715																								X
ICB	1.00	1716																								X
LRS	1.00	1717																								X
LRS	1.00	1718																								X
CCV	1.00	1719																								X
CCB	1.00	1720																								X
ZZZZZZ	1.00	1721																								
PBS0801B	1.00	1722																								X
LCS0801B	1.00	1723																								X
LCSD0801B	1.00	1724																								X
ZZZZZZ	1.00	1724																								
ZZZZZZ	1.00	1725																								
ZZZZZZ	1.00	1726																								
ZZZZZZ	1.00	1727																								
ZZZZZZ	1.00	1728																								
ZZZZZZ	1.00	1729																								
CCV	1.00	1730																								X
CCB	1.00	1731																								X
ZZZZZZ	1.00	1732																								
ZZZZZZ	1.00	1733																								
ZZZZZZ	1.00	1734																								
ZZZZZZ	1.00	1735																								
ZZZZZZ	1.00	1736																								
ZZZZZZ	1.00	1737																								
ZZZZZZ	1.00	1738																								
ZZZZZZ	1.00	1739																								
BLUEWPPLT20	1.00	1740																								X
BLUEWPPLT24	1.00	1741																								X
CCV	1.00	1742																								X
CCB	1.00	1743																								X
EBLK2	1.00	1744																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 08/01/03 End Date: 08/01/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1745																								
ZZZZZZ	1.00	1746																								
ZZZZZZ	1.00	1747																								
CCV	1.00	1748																								X
CCB	1.00	1749																								X

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 08/21/03 End Date: 08/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0..	1.00	1510													X															
S	1.00	1515																												
S	1.00	1520													X															
S	1.00	1524																												
LRS	1.00	1529													X															
LRS	1.00	1534													X															
LRS	1.00	1539													X															
ICV	1.00	1545													X															
ICB	1.00	1550													X															
ICSA	1.00	1555													X															
ICSAB	1.00	1600													X															
CRI	1.00	1605													X															
CCV	1.00	1610													X															
CCB	1.00	1616													X															
ZZZZZZ	1.00	1621																												
ZZZZZZ	1.00	1626																												
ZZZZZZ	1.00	1631																												
ZZZZZZ	1.00	1636																												
ZZZZZZ	1.00	1641																												
ZZZZZZ	1.00	1646																												
ZZZZZZ	1.00	1651																												
ZZZZZZ	1.00	1656																												
ZZZZZZ	1.00	1701																												
ZZZZZZ	1.00	1706																												
CCV	1.00	1711													X															
CCB	1.00	1716													X															
ZZZZZZ	1.00	1722																												
ZZZZZZ	1.00	1727																												
ZZZZZZ	1.00	1732																												
ZZZZZZ	1.00	1737																												
ZZZZZZ	5.00	1742																												
ZZZZZZ	1.00	1747																												
ZZZZZZ	1.00	1752																												
ZZZZZZ	1.00	1757																												
ZZZZZZ	1.00	1802																												
ZZZZZZ	5.00	1807																												
CCV	1.00	1812													X															
CCB	1.00	1817													X															

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 08/21/03 End Date: 08/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1.00	1823																												
ZZZZZZ	1.00	1828																												
ZZZZZZ	1.00	1833																												
ZZZZZZ	1.00	1838																												
ZZZZZZ	1.00	1843																												
ZZZZZZ	1.00	1848																												
ZZZZZZ	1.00	1853																												
ZZZZZZ	1.00	1858																												
ZZZZZZ	1.00	1903																												
ZZZZZZ	1.00	1908																												
CCV	1.00	1913												X																
CCB	1.00	1918												X																
ZZZZZZ	1.00	1923																												
ZZZZZZ	1.00	1929																												
EBLK1	1.00	1934												X																
CAPMWPPLT20	1.00	1939												X																
GRANBGPLT34	1.00	1944												X																
GRANBGPLT36	1.00	1949												X																
GRANBGPLT36L	5.00	1954												X																
GRANBGPLT36A	1.00	1959												X																
GRANBGPLT36D	1.00	2004												X																
GRANBGPLT36S	1.00	2009												X																
CCV	1.00	2014												X																
CCB	1.00	2019												X																
ZZZZZZ	1.00	2024																												
ZZZZZZ	1.00	2029																												
ICSA	1.00	2035												X																
ICSAB	1.00	2040												X																
CRI	1.00	2045												X																
CCV	1.00	2050																												
CCB	1.00	2055																												

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 08/25/03 End Date: 08/25/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN				
S0	1.00	0700													X															
S	1.00	0704																												
S	1.00	0707													X															
S	1.00	0711																												
LRS	1.00	0716													X															
LRS	1.00	0720													X															
LRS	1.00	0724													X															
ICV	1.00	0728													X															
ICB	1.00	0732													X															
ICSA	1.00	0737													X															
ICSAB	1.00	0741													X															
CRI	1.00	0745													X															
CCV	1.00	0749													X															
CCB	1.00	0753													X															
BLUEWPPLT20	1.00	0757													X															
PBS0815C	1.00	0801													X															
ZZZZZZ	1.00	0806																												
ZZZZZZ	1.00	0810																												
ZZZZZZ	1.00	0814																												
ZZZZZZ	20.00	0818																												
ZZZZZZ	100.00	0822																												
ZZZZZZ	20.00	0826																												
ZZZZZZ	20.00	0830																												
CCV	1.00	0834													X															
CCB	1.00	0838													X															
ICSA	1.00	0842													X															
ICSAB	1.00	0846													X															
CRI	1.00	0850													X															
CCV	1.00	0855													X															
CCB	1.00	0859													X															

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 09/12/03 End Date: 09/12/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0917		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.00	0922		X						X				X		X				X			X				
S	1.00	0925			X	X									X						X			X			
S	1.00	0929					X	X	X		X	X	X				X		X			X			X	X	
LRS	1.00	0934		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LRS	1.00	0939		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LRS	1.00	0944		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICV	1.00	0949		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICB	1.00	0953		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	0958		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1003		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1008		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1012		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1017		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
PBS0807J	1.00	1022													X												
GRANBGPLT36L	5.00	1027		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1031																									
ZZZZZZ	1.00	1036																									
ZZZZZZ	1.00	1041																									
MONU-WP-PLT-15	1.00	1045													X												
GRANBGPLT35	1.00	1050													X												
BLUEWPPLT24	1.00	1054													X												
CENT-WP-PLT-31	1.00	1059																			X						
CCV	1.00	1104		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1109		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LUCABGPLT19	1.00	1113																			X						
ZZZZZZ	1.00	1118																									
ICSA	1.00	1123		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1127		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1132		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1137		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1142		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 07/23/03 End Date: 07/23/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1428																X									
S0.2	1.00	1430																X									
S0.5	1.00	1432																X									
S1	1.00	1433																X									
S5	1.00	1435																X									
S10	1.00	1437																X									
ICV	1.00	1439																X									
ICB	1.00	1441																X									
CRA	1.00	1443																X									
CCV	1.00	1444																X									
CCB	1.00	1447																X									
PBS0721G	1.00	1448																X									
LCSS0721G	1.00	1450																X									
ZZZZZZ	100.00	1452																									
ZZZZZZ	100.00	1453																									
ZZZZZZ	100.00	1455																									
ZZZZZZ	100.00	1457																									
ZZZZZZ	100.00	1459																									
ZZZZZZ	100.00	1501																									
ZZZZZZ	100.00	1502																									
CCV	1.00	1504																X									
CCB	1.00	1506																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 07/23/03 End Date: 07/23/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1803																X									
S0.2	1.00	1805																X									
S0.5	1.00	1807																X									
S1	1.00	1809																X									
S5	1.00	1811																X									
S10	1.00	1813																X									
ICV	1.00	1815																X									
ICB	1.00	1817																X									
CRA	1.00	1819																X									
CCV	1.00	1820																X									
CCB	1.00	1822																X									
MONU-WP-PLT-15	1.00	1824																X									
MONU-WP-PLT-14	1.00	1826																X									
EBLK1	1.00	1828																X									
ZZZZZZ	1000.00	1829																									
ZZZZZZ	1.00	1831																									
ZZZZZZ	1.00	1833																									
ZZZZZZ	1.00	1835																									
ZZZZZZ	1.00	1837																									
ZZZZZZ	1.00	1838																									
CCV	1.00	1840																X									
CCB	1.00	1842																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/04/03 End Date: 08/04/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
S0	1.00	1112																X										
S0.2	1.00	1114																X										
S0.5	1.00	1116																X										
S1	1.00	1117																X										
S5	1.00	1119																X										
S10	1.00	1121																X										
ICV	1.00	1123																X										
ICB	1.00	1125																X										
CRA	1.00	1126																X										
CCV	1.00	1128																X										
CCB	1.00	1130																X										
PBS0731A	1.00	1133																X										
LCSS0731A	1.00	1134																X										
ZZZZZZ	1.00	1136																										
ZZZZZZ	1.00	1138																										
ZZZZZZ	1.00	1140																										
ZZZZZZ	1.00	1142																										
ZZZZZZ	1.00	1144																										
SHERWPPLT23	1.00	1146																X										
SHERWPPLT23(100)	1.00	1148																X										
CCV	1.00	1150																X										
CCB	1.00	1152																X										
CAPMWPPLT20	1.00	1153																X										
GRANBGPLT35	1.00	1155																X										
GRANBGPLT34	1.00	1157																X										
GRANBGPLT36	1.00	1159																X										
GRANBGPLT36D	1.00	1201																X										
GRANBGPLT36S	1.00	1203																X										
ZZZZZZ	1.00	1205																										
ZZZZZZ	1.00	1207																										
ZZZZZZ	1.00	1208																										
CCV	1.00	1210																X										
CCB	1.00	1212																X										
ZZZZZZ	1.00	1214																										
ZZZZZZ	1.00	1216																										
ZZZZZZ	1.00	1218																										
ZZZZZZ	1.00	1220																										
ZZZZZZ	1.00	1222																										

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/04/03 End Date: 08/04/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1224																										
PBS0731B	1.00	1226																X										
LCSS0731B	1.00	1228																X										
ZZZZZZ	1.00	1230																										
CCV	1.00	1232																X										
CCB	1.00	1234																X										

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/04/03 End Date: 08/04/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1417																X									
S0.2	1.00	1419																X									
S0.5	1.00	1422																X									
S1	1.00	1423																X									
S5	1.00	1426																X									
S10	1.00	1428																X									
ICV	1.00	1430																X									
ICB	1.00	1432																X									
CRA	1.00	1434																X									
CCV	1.00	1435																X									
CCB	1.00	1437																X									
ZZZZZZ	100.00	1439																									
ZZZZZZ	100.00	1441																									
ZZZZZZ	100.00	1442																									
ZZZZZZ	100.00	1444																									
ZZZZZZ	100.00	1446																									
ZZZZZZ	100.00	1448																									
ZZZZZZ	100.00	1450																									
ZZZZZZ	1.00	1451																									
ZZZZZZ	100.00	1453																									
CCV	1.00	1455																X									
CCB	1.00	1457																X									
ZZZZZZ	100.00	1459																									
CENT-WP-PLT-31	1.00	1500																X									
TILL-WP-PLT-27	1.00	1502																X									
ZZZZZZ	1.00	1504																									
CCV	1.00	1506																X									
CCB	1.00	1508																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1016																X									
S0.2	1.00	1018																X									
S0.5	1.00	1019																X									
S1	1.00	1021																X									
S5	1.00	1023																X									
S10	1.00	1025																X									
ICV	1.00	1027																X									
ICB	1.00	1029																X									
CRA	1.00	1031																X									
CCV	1.00	1033																X									
CCB	1.00	1035																X									
PBS0808B	1.00	1036																X									
LCSS0808B	1.00	1038																X									
ZZZZZZ	1.00	1040																									
ZZZZZZ	1.00	1042																									
ZZZZZZ	1.00	1044																									
ZZZZZZ	1.00	1046																									
AJAXWPPLT08	1.00	1048																X									
AJAXPDPLT06	1.00	1049																X									
MAGNWPPLT14	1.00	1051																X									
CCV	1.00	1053																X									
CCB	1.00	1055																X									
MAGNPDPLT11	1.00	1057																X									
LUCABGPLT19	1.00	1058																X									
MAGNWPPLT17	1.00	1100																X									
ZZZZZZ	1.00	1102																									
ZZZZZZ	1.00	1104																									
ZZZZZZ	1.00	1105																									
ZZZZZZ	1.00	1107																									
ZZZZZZ	1.00	1109																									
ZZZZZZ	1.00	1111																									
CCV	1.00	1113																X									
CCB	1.00	1115																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1654																X									
S0.2	1.00	1656																X									
S0.5	1.00	1658																X									
S1	1.00	1700																X									
S5	1.00	1701																X									
S10	1.00	1703																X									
ICV	1.00	1705																X									
ICB	1.00	1707																X									
CRA	1.00	1709																X									
CCV	1.00	1710																X									
CCB	1.00	1712																X									
ZZZZZZ	2.00	1714																									
ZZZZZZ	1.00	1716																									
ZZZZZZ	5.00	1718																									
ZZZZZZ	1.00	1719																									
PBS0813B	1.00	1721																X									
LCSS0813B	1.00	1723																X									
ZZZZZZ	1.00	1725																									
ZZZZZZ	1.00	1727																									
ZZZZZZ	1.00	1728																									
CCV	1.00	1730																X									
CCB	1.00	1732																X									
ZZZZZZ	1.00	1734																									
ZZZZZZ	1.00	1736																									
ZZZZZZ	1.00	1737																									
ZZZZZZ	1.00	1739																									
ZZZZZZ	1.00	1741																									
ZZZZZZ	1.00	1743																									
ZZZZZZ	1.00	1745																									
ZZZZZZ	1.00	1746																									
ZZZZZZ	1.00	1749																									
CCV	1.00	1751																X									
CCB	1.00	1753																X									
ZZZZZZ	1.00	1755																									
ZZZZZZ	1.00	1757																									
ZZZZZZ	1.00	1759																									
ZZZZZZ	1.00	1801																									
ZZZZZZ	1.00	1802																									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 08/14/03 End Date: 08/14/03

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
BLUEWPPLT20	1.00	1804																X									
BLUEWPPLT24	1.00	1806																X									
EBLK2	1.00	1808																X									
ZZZZZZ	1.00	1810																									
CCV	1.00	1811																X									
CCB	1.00	1813																X									

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 08/21/03 End Date: 08/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	0313		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
S	1.00	0318		X						X				X		X				X			X							
S	1.00	0322			X	X									X						X			X						
S	1.00	0326					X	X	X		X	X	X				X		X			X			X	X				
LRS	1.00	0332		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LRS	1.00	0337		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LRS	1.00	0342		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICV	1.00	0347		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICB	1.00	0352		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICSA	1.00	0357		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICSAB	1.00	0403		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CRI	1.00	0408		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	0413		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	0418		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
PBS0807J	1.00	0423		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
LCSS0807J	1.00	0428		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
MONU-WP-PLT-15	1.00	0433		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
MONU-WP-PLT-14	1.00	0438		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
EBLK1	1.00	0444		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
CENT-WP-PLT-31	1.00	0449		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X		X	X	X	X	X				
TILL-WP-PLT-27	1.00	0454		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
SHERWPPLT23	1.00	0459		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
SHERWPPLT23(100)	1.00	0504		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
CAPMWPPLT20	1.00	0509		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
CCV	1.00	0514		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
CCB	1.00	0519		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X				
GRANBGPLT35	1.00	0524		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
GRANBGPLT34	1.00	0529		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
GRANBGPLT36	1.00	0534		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X				
GRANBGPLT36L	5.00	0540																												
GRANBGPLT36A	1.00	0545		X	X	X	X	X	X		X	X	X	X			X		X		X	X		X	X	X				
GRANBGPLT36D	1.00	0550		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
GRANBGPLT36S	1.00	0555		X	X	X	X	X	X		X	X	X	X			X		X		X	X		X	X	X				
BLUEWPPLT20	1.00	0600		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
BLUEWPPLT24	1.00	0605		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
EBLK2	1.00	0610		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	0615		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	0620		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				

USEPA-CLP FORMS

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCV001

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 08/21/03 End Date: 08/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN				
PBS0815C	1.00	0625		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
LCSS0815C	1.00	0630		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LCSDS0815C	1.00	0636		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
AJAXWPPLT08	1.00	0641		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
AJAXPDPLT06	1.00	0646		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
MAGNWPPLT14	1.00	0651		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
MAGNPDPLT11	1.00	0656		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LUCABGPLT19	1.00	0701		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
MAGNWPPLT17	1.00	0706		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	0711		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	0716		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICSA	1.00	0721		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICSAB	1.00	0727		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CRI	1.00	0732		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	0737		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	0742		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: GCW003

SEVERN TRENT STL

September 9, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCW003

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 22, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/22/03 ETR No: 94950		
535396	AJAXSTPWP04	07/17/03	Water
535397	AJAXSTPWP04F	07/17/03	Water
535398	AJAXSTSFW04	07/17/03	Water
535399	AJAXSTSFW04F	07/17/03	Water
535400	AJAXPDSFW06	07/17/03	Water
535401	AJAXPDSFW06F	07/17/03	Water
535402	AJAXADSFW07	07/17/03	Water
535403	AJAXADSFW07F	07/17/03	Water
535404	AJAXSTSFW52	07/17/03	Water
535405	AJAXSTSFW52F	07/17/03	Water
535406	GRANSTSFW54	07/17/03	Water
535407	GRANSTSFW54F	07/17/03	Water
535408	GRANSTSFW53	07/17/03	Water
535409	GRANSTSFW53F	07/17/03	Water
535410	MAGNSTSFW01	07/18/03	Water
535411	MAGNSTSFW01F	07/18/03	Water
535412	MAGNSTPWP01	07/18/03	Water
535413	MAGNSTPWP01F	07/18/03	Water
535414	MAGNSTSFW02	07/18/03	Water
535415	MAGNSTSFW02F	07/18/03	Water

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

Severn Trent Laboratories, Inc.
STL Burlington • 208 South Park Drive, Suite 1, Colchester, VT 05446
Tel 802 655 1203 Fax 802 655 1248 • *www.stl-inc.com*

A part of Severn Trent plc

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample log-in is included in the Sample Handling section of this submittal.

The analysis for arsenic speciation was performed by STL's North Canton facility, as approved by EA Engineering. STL North Canton assigned "Lot" numbers as samples were received. Though laboratory numbers may differ, the client's sample identifications were maintained. The results for this delivery group including a case narrative prepared by the North Canton laboratory are attached to this report.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Sulfate by 375.4
Please note that the due to instrumentation problems, sulfate was analyzed by Method 375.4 versus 300.0 as agreed to by the client.

Solids by 160.x
The analyses of all samples in this delivery group submitted for solids determinations (total, suspended, and / or dissolved) were performed one to two days beyond the method specified holding time of seven days. Samples were received with two days remaining in hold time and the laboratory analyzed all samples as quickly as was possible.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0412.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtw/jmm

0001 B LAST Alpha

Water p 1 of 2

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: EA Engineering	Company: Same
Address: 12011 Bel-Red Rd Bellevue, WA 98005	Address:
Contact: Jon Kindred	Contact:
Phone: 425-451-7400	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Sampler's Name: James Gaithever

Sampler's Signature:

Proj. No.: B590.13

Project Name: Granite Creek Watershed

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2]: VOA	A/G 1 Lt.	250 ml	P/O	Arsenic speciation	pH, redox, Sp etc	TSS/TDS	TAL Metals - total	TAL Metals - dissolved	Cyanide	Lab/Sample ID (Lab Use Only)
W	7/17/03	1415		X	AJAX-ST-PWP-04	(0)	3	1	2	X				X	X	
W	7/17/03	1516		X	AJAX-ST-SFW-04		3	1	2	X	X	X	X	X	X	
W	7/17/03	1400		X	AJAX-PD-SFW-06		3	1	2	X	X	X	X	X	X	
W	7/17/03	1645		X	AJAX-AD-SFW-07		3	1	2	X	X	X	X	X	X	
W	7/17/03	1500		X	AJAX-ST-SFW-52		3	1	2	X	X	X	X	X	X	
W	7/17/03	1740		X	GRAN-ST-SFW-54		3	1	2	X	X	X	X	X	X	
W	7/17/03	1830		X	GRAN-ST-SFW-53		3	1	2	X	X	X	X	X	X	
W	7/18/03	1440		X	MAGN-ST-SFW-01		3	1	2	X	X	X	X	X	X	
W	7/18/03	0800		X	MAGN-ST-PWP-01		1	1	1	X				X	X	
W	7/18/03	1515		X	MAGN-ST-SFW-02		3	1	2	X	X	X	X	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
[signature]	7-21-03	0900	[signature]	7/22/03	1020
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil

[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other 500 mL

STL cannot accept verbal changes.
Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL

Geotechnical Analysis
Sample Data Summary Package

EASEAT GCW003

Oxidation-Reduction Potential

By ASTM 1498

Client:	EASEAT	**ETR(s):**	94950
Client Code:	EASEAT	**SDG(s):**	GCW003
Project:	23046	**Analyst(s):**	MRD
Job #:	N/A	**Start Date:**	17-Aug-03
Date Received:	22-Jul-03	**End Date:**	17-Aug-03

ORP Probe Calibration Check

Calibration Solution	ORP reading (mV)		Temp. (°C)
	Pre	Post	
100 mL pH 4 buffer + 1.0g Quinhydrone	297	295	18.5
100 mL pH 7 buffer + 1.0g Quinhydrone	123	121	18.5

Redox. Potential

Lab #	Sample ID	Temp. (°C)	Reading 1	Reading 2	ORP (mV)
535398	SFW04	16.0	151	153	**152.0**
535400	SFW06	16.0	164	165	**164.5**
535402	SFW07	16.0	170	169	**169.5**
535404	SFW52	16.0	184	184	**184.0**
535406	SFW54	16.0	182	180	**181.0**
535410	SFW01	16.0	164	164	**164.0**
535414	SFW02	16.0	169	166	**167.5**

SEVERN TRENT STL

Sample Data Summary Package
For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.

AJAXSTSFW04

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535398

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	307	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	224	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	1	5.0	260	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	3.1	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	137	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	137	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	5	25.0	58.6	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	8.1	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

AJAXPDSFW06

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535400

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	760	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	524	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	1	5.0	700	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	4.1	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	170	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	170	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	50	250	350	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	8.1	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
AJAXADSFW07

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCW003

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535402

Matrix: WATER
Client: EASEAT
Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	758	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	512	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	1	5.0	692	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	2	1.0	69.0	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	166	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	166	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	50	250	380	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	7.9	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

AJAXSTSFW52

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535404

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	761	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	524	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	1	5.0	733	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	2	0.77	36.0	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	9.7	
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	176	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	176	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	25	125	320	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	7.5	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

GRANSTSFW54

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535406

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	112	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	104	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	1	5.0	116	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	5.0	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	51.2	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	51.2	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	1	5.0	15.3	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	7.7	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MAGNSTSFW01

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535410

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	215	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	260	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	1	5.0	169	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	0.90	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	142	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	142	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	1	5.0	5.2	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	8.0	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MAGNSTSFW02

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW003

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535414

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	318	
130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	1	2.0	156	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	1	5.0	252	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	5.2	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	139	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	139	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	10	50.0	69.3	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	8.1	

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Method Blank Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW003

Lab Code: STLVT **Case No.:** 23046

Matrix: WATER **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Conc.	Units	Qual.	DF	RL	Analytical Run Date	Analytical Batch
BLKAL0728A	310.1	Hydroxide Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0728A	310.1	Carbonate Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0728A	310.1	Bicarbonate Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0728A	310.1	Total Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKDS0726A	160.1	Total Dissolved Solids	5.0	mg/L	U	1	5.0	07/26/03	BLKDS0726A
BLKDS0726B	160.1	Total Dissolved Solids	5.0	mg/L	U	1	5.0	07/26/03	BLKDS0726B
BLKHA0731A	130.2	Total Hardness as CaCO3	2.0	mg/L	U	1	2.0	07/31/03	BLKHA0731A
BLKSS0725A	160.2	Total Suspended Solids	0.50	mg/L	U	1	0.50	07/25/03	BLKSS0725A
BLKSU0811A	375.4	Sulfate	5.0	mg/L	U	1	5.0	08/11/03	BLKSU0811A

Printed on: 09/05/03 02:05 PM

WET CHEMISTRY

Laboratory Control Sample Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW003

Lab Code: STLVT **Case No.:** 23046

Matrix: WATER **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCS Conc.	True Value	% Recovery*
LCS DS0726A	160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	50.0	50.0	100.0
LCS DS0726B	160.1	Total Dissolved Solids	07/26/03	BLKDS0726B	mg/L	51.0	50.0	102.0
LCSAL0728A	310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	58.8	54.7000	107.5
LCSAL0728A	310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	58.8	54.7000	107.5
LCSAL0728A	310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	58.8	54.7000	107.5
LCSAL0728A	310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	58.8	54.7000	107.5
LCSCD0725A	120.1	Conductivity (umhos/cm)	07/25/03		umhos/c	930	977.0000	95.2
LCSHA0731A	130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	124	121.0000	102.5
LCSPH0725A	9040B	Corrosivity by pH	07/25/03		pH Units	6.0	6.0000	100.0
LCSSS0725A	160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	502	500	100.4
LCSSU0811A	375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	9.6	10.0	96.0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*

Printed on: 09/05/03 02:20 PM

WET CHEMISTRY

Laboratory Control Sample Duplicate
Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW003

Lab Code: STLVT **Case No.:** 23046

Matrix: SOIL **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCSD Conc.	True Value	% Recovery*	RPD**
LCSDCD0725A	120.1	Conductivity (umhos/cm)	07/25/03		umhos/c	958	977.0000	98.1	3
LCSDHA0731A	130.2	Total Hardness as CaCO3	07/31/03	BLKHA0731A	mg/L	124	121.0000	102.5	0
LCSDPH0725A	9040B	Corrosivity by pH	07/25/03		pH Units	6.0	6.0000	100.2	0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*
*** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/05/03 02:05 PM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
AJAXADSFW07	535402
AJAXADSFW07F	535403
AJAXPDSFW06	535400
AJAXPDSFW06F	535401
AJAXSTPWP04	535396
AJAXSTPWP04F	535397
AJAXSTSFW04	535398
AJAXSTSFW04F	535399
AJAXSTSFW52	535404
AJAXSTSFW52F	535405
GRANSTSFW54	535406
GRANSTSFW54F	535407
MAGNSTPWP01	535412
MAGNSTPWP01F	535413
MAGNSTSFW01	535410
MAGNSTSFW01F	535411
MAGNSTSFW02	535414
MAGNSTSFW02F	535415

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXADSFW07

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535402

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27.7	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.6	B		P
7440-39-3	Barium	12.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	105000			P
7440-47-3	Chromium	3.0	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	16.8	U		P
7439-92-1	Lead	1.6	B		P
7439-95-4	Magnesium	58000			P
7439-96-5	Manganese	215			P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	9.9	B		P
7440-09-7	Potassium	3460	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5170			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXADSFW07F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535403

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	907			P
7440-36-0	Antimony	4.5	B		P
7440-38-2	Arsenic	41.9			P
7440-39-3	Barium	29.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	109000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	13.3	B		P
7440-50-8	Copper	10.3	B		P
7439-89-6	Iron	10500			P
7439-92-1	Lead	4.4			P
7439-95-4	Magnesium	59500			P
7439-96-5	Manganese	1590			P
7439-97-6	Mercury	0.48			CV
7440-02-0	Nickel	41.6			P
7440-09-7	Potassium	3860	B		P
7782-49-2	Selenium	1.8	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5200			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	B		P
7440-66-6	Zinc	83.0			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXPDSFW06

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535400

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	56.5	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	5.4	B		P
7440-39-3	Barium	10.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	107000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	3.0	B		P
7439-89-6	Iron	765			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	58800			P
7439-96-5	Manganese	154			P
7439-97-6	Mercury	0.12	B		CV
7440-02-0	Nickel	6.9	B		P
7440-09-7	Potassium	3530	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5230			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	11.9	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXPDSFW06F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535401

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30.6	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	9.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	106000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	16.8	U		P
7439-92-1	Lead	2.3	B		P
7439-95-4	Magnesium	58400			P
7439-96-5	Manganese	95.9			P
7439-97-6	Mercury	0.12	B		CV
7440-02-0	Nickel	5.0	B		P
7440-09-7	Potassium	3480	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5240			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTPWP04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535396

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTPWP04F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535397

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.0	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	11.5			P
7440-39-3	Barium	84.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	44200			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	34.9	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	20000			P
7439-96-5	Manganese	15.2			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	2480	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	7420			P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	5.0	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXSTSFW04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535398

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.1	B		P
7440-36-0	Antimony	4.2	B		P
7440-38-2	Arsenic	23.6			P
7440-39-3	Barium	69.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	40600			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	151			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	18600			P
7439-96-5	Manganese	12.8	B		P
7439-97-6	Mercury	0.15	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2570	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6480			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
AJAXSTSFW04F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535399

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.2	B		P
7440-36-0	Antimony	4.2	B		P
7440-38-2	Arsenic	22.9			P
7440-39-3	Barium	70.2	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	41000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	90.2	B		P
7439-92-1	Lead	2.0	B		P
7439-95-4	Magnesium	18800			P
7439-96-5	Manganese	8.6	B		P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2530	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6700			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.5	B		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTSFW52

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535404

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33.8	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	47.3			P
7440-39-3	Barium	33.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	107000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	31.1	B		P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	56500			P
7439-96-5	Manganese	362			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	4520	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5450			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

AJAXSTSFW52F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535405

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	83.1	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	63.6			P
7440-39-3	Barium	26.7	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	111000			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1230			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	58800			P
7439-96-5	Manganese	136			P
7439-97-6	Mercury	0.16	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	4440	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5420			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	7.5	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTSFW54

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535406

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	54.1	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	12.6			P
7440-39-3	Barium	53.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	16200			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	78.1	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	4120	B		P
7439-96-5	Manganese	15.0			P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2530	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	3490	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTSFW54F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535407

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.4	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	9.6	B		P
7440-39-3	Barium	51.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	15900			P
7440-47-3	Chromium	0.74	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	32.3	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	4040	B		P
7439-96-5	Manganese	6.7	B		P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2490	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	3650	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPWP01

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535412

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPWP01F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535413

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	60.7	B		P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	74.4	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	29200			P
7440-47-3	Chromium	2.1	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	40.4	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	12500			P
7439-96-5	Manganese	4.0	B		P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2150	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6550			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTSFW01

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535410

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	51.8	B		P
7440-36-0	Antimony	4.4	B		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	56.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	28400			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	57.1	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	12900			P
7439-96-5	Manganese	4.8	B		P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2320	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6570			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	5.7	U		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTSFW01F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535411

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30.2	B		P
7440-36-0	Antimony	4.1	B		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	55.2	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	28200			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	38.8	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	12800			P
7439-96-5	Manganese	3.3	B		P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2420	B		P
7782-49-2	Selenium	2.4	B		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6480			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNSTSFW02

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535414

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	60.0	B		P
7440-36-0	Antimony	4.9	B		P
7440-38-2	Arsenic	36.2			P
7440-39-3	Barium	65.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	40900			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	464			P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	18700			P
7439-96-5	Manganese	28.0			P
7439-97-6	Mercury	0.18	B		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2790	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6300			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTSFW02F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Lab Sample ID: 535415

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29.1	B		P
7440-36-0	Antimony	5.6	B		P
7440-38-2	Arsenic	29.7			P
7440-39-3	Barium	62.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	40500			P
7440-47-3	Chromium	0.60	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	102			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	18500			P
7439-96-5	Manganese	21.2			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	2780	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	6230			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.2	U		P
7440-66-6	Zinc	5.7	U		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	1070.00	107.0	400.0	390.80	97.7	433.40	108.4	P
Mercury	3.0	3.09	103.0	5.0	4.98	99.6	4.87	97.4	CV
Cyanide	120.0	113.99	95.0	150.0	144.40	96.3	149.38	99.6	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead				400.0	431.50	107.9	430.70	107.7	P
Mercury				5.0	4.61	92.2	4.73	94.6	CV
Cyanide				150.0	153.09	102.1	151.26	100.8	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26760.00	102.9	30200.0	29200.00	96.7	29630.00	98.1	P
Antimony	250.0	254.70	101.9	300.0	301.50	100.5	300.10	100.0	P
Arsenic	250.0	259.60	103.8	100.0	100.90	100.9	101.60	101.6	P
Barium	500.0	505.30	101.1	200.0	192.10	96.0	194.40	97.2	P
Beryllium	500.0	512.00	102.4	100.0	95.85	95.8	96.00	96.0	P
Cadmium	500.0	500.20	100.0	100.0	94.54	94.5	94.92	94.9	P
Calcium	25000.0	25570.00	102.3	30200.0	28950.00	95.9	29030.00	96.1	P
Chromium	500.0	507.00	101.4	200.0	190.90	95.4	192.00	96.0	P
Cobalt	500.0	501.70	100.3	200.0	193.10	96.6	195.40	97.7	P
Copper	500.0	514.70	102.9	200.0	195.80	97.9	198.30	99.2	P
Iron	25500.0	26060.00	102.2	30200.0	28820.00	95.4	28510.00	94.4	P
Magnesium	25000.0	25270.00	101.1	30200.0	28930.00	95.8	29070.00	96.3	P
Manganese	500.0	502.70	100.5	200.0	191.20	95.6	192.20	96.1	P
Nickel	500.0	506.80	101.4	200.0	192.00	96.0	194.50	97.2	P
Potassium	25000.0	26850.00	107.4	30200.0	30710.00	101.7	31270.00	103.5	P
Selenium	250.0	251.70	100.7	100.0	99.13	99.1	99.85	99.8	P
Silver	500.0	505.00	101.0	100.0	98.79	98.8	100.00	100.0	P
Sodium	25000.0	25260.00	101.0	30200.0	28670.00	94.9	29320.00	97.1	P
Thallium	250.0	247.60	99.0	100.0	94.81	94.8	96.47	96.5	P
Vanadium	500.0	503.70	100.7	200.0	189.80	94.9	192.10	96.0	P
Zinc	500.0	502.70	100.5	200.0	195.60	97.8	190.10	95.0	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	29150.00	96.5	29330.00	97.1	P
Antimony				300.0	302.60	100.9	299.90	100.0	P
Arsenic				100.0	100.30	100.3	99.99	100.0	P
Barium				200.0	193.90	97.0	192.00	96.0	P
Beryllium				100.0	97.14	97.1	94.30	94.3	P
Cadmium				100.0	96.79	96.8	94.26	94.3	P
Calcium				30200.0	29440.00	97.5	28750.00	95.2	P
Chromium				200.0	195.00	97.5	190.50	95.2	P
Cobalt				200.0	198.50	99.2	194.00	97.0	P
Copper				200.0	195.90	98.0	195.00	97.5	P
Iron				30200.0	28540.00	94.5	27610.00	91.4	P
Magnesium				30200.0	29380.00	97.3	28840.00	95.5	P
Manganese				200.0	193.80	96.9	189.30	94.6	P
Nickel				200.0	197.20	98.6	192.40	96.2	P
Potassium				30200.0	31070.00	102.9	30920.00	102.4	P
Selenium				100.0	100.20	100.2	98.45	98.4	P
Silver				100.0	99.90	99.9	99.13	99.1	P
Sodium				30200.0	28750.00	95.2	29030.00	96.1	P
Thallium				100.0	97.81	97.8	95.22	95.2	P
Vanadium				200.0	192.50	96.2	189.40	94.7	P
Zinc				200.0	194.10	97.0	186.50	93.2	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26170.00	100.7	30200.0	30260.00	100.2	30190.00	100.0	P
Antimony	250.0	251.50	100.6	300.0	305.50	101.8	306.30	102.1	P
Arsenic	250.0	245.00	98.0	100.0	100.10	100.1	100.30	100.3	P
Barium	500.0	495.30	99.1	200.0	201.20	100.6	200.80	100.4	P
Beryllium	500.0	501.70	100.3	100.0	99.17	99.2	100.70	100.7	P
Cadmium	500.0	492.70	98.5	100.0	98.33	98.3	100.30	100.3	P
Calcium	25000.0	25420.00	101.7	30200.0	30230.00	100.1	30630.00	101.4	P
Chromium	500.0	501.60	100.3	200.0	198.20	99.1	200.00	100.0	P
Cobalt	500.0	491.80	98.4	200.0	198.90	99.4	201.10	100.6	P
Copper	500.0	502.30	100.5	200.0	203.00	101.5	203.20	101.6	P
Iron	25500.0	26220.00	102.8	30200.0	30220.00	100.1	30550.00	101.2	P
Lead	1000.0	984.80	98.5	400.0	392.20	98.0	397.90	99.5	P
Magnesium	25000.0	25360.00	101.4	30200.0	30000.00	99.3	30470.00	100.9	P
Manganese	500.0	494.80	99.0	200.0	199.00	99.5	201.00	100.5	P
Nickel	500.0	497.10	99.4	200.0	195.60	97.8	197.40	98.7	P
Potassium	25000.0	26390.00	105.6	30200.0	31300.00	103.6	31120.00	103.0	P
Selenium	250.0	241.30	96.5	100.0	99.90	99.9	102.30	102.3	P
Silver	500.0	499.90	100.0	100.0	101.10	101.1	100.70	100.7	P
Sodium	25000.0	24940.00	99.8	30200.0	29690.00	98.3	29470.00	97.6	P
Thallium	250.0	233.70	93.5	100.0	98.20	98.2	100.70	100.7	P
Vanadium	500.0	495.40	99.1	200.0	199.30	99.6	201.30	100.6	P
Zinc	500.0	498.40	99.7	200.0	200.30	100.2	201.80	100.9	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				30200.0	30870.00	102.2	30230.00	100.1	P
Antimony				300.0	310.20	103.4	302.90	101.0	P
Arsenic				100.0	102.90	102.9	99.10	99.1	P
Barium				200.0	205.30	102.6	200.40	100.2	P
Beryllium				100.0	101.70	101.7	99.53	99.5	P
Cadmium				100.0	101.00	101.0	98.60	98.6	P
Calcium				30200.0	30800.00	102.0	30180.00	99.9	P
Chromium				200.0	201.90	101.0	197.60	98.8	P
Cobalt				200.0	202.40	101.2	197.90	99.0	P
Copper				200.0	207.40	103.7	202.70	101.4	P
Iron				30200.0	30870.00	102.2	30200.00	100.0	P
Lead				400.0	395.00	98.8	389.80	97.4	P
Magnesium				30200.0	30630.00	101.4	29960.00	99.2	P
Manganese				200.0	203.40	101.7	199.00	99.5	P
Nickel				200.0	198.70	99.4	194.80	97.4	P
Potassium				30200.0	31710.00	105.0	31040.00	102.8	P
Selenium				100.0	99.83	99.8	100.50	100.5	P
Silver				100.0	102.70	102.7	101.30	101.3	P
Sodium				30200.0	29870.00	98.9	29570.00	97.9	P
Thallium				100.0	97.74	97.7	95.03	95.0	P
Vanadium				200.0	204.30	102.2	199.00	99.5	P
Zinc				200.0	205.00	102.5	200.40	100.2	P

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

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead				6.0	9.03	150.5	7.39	123.2
Mercury	0.2	0.30	150.0					

Control Limits: no limits have been established by EPA at this time

2B-IN
CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	497.90	124.5	551.10	137.8
Antimony				120.0	120.10	100.1	122.00	101.7
Arsenic				20.0	20.28	101.4	21.79	109.0
Barium				400.0	382.80	95.7	381.10	95.3
Beryllium				10.0	9.90	99.0	9.92	99.2
Cadmium				10.0	9.86	98.6	9.94	99.4
Calcium				10000.0	10100.00	101.0	10100.00	101.0
Chromium				20.0	19.43	97.2	21.57	107.8
Cobalt				100.0	95.36	95.4	96.07	96.1
Copper				50.0	48.37	96.7	47.38	94.8
Iron				200.0	244.40	122.2	249.30	124.6
Magnesium				10000.0	9866.00	98.7	9916.00	99.2
Manganese				30.0	28.89	96.3	28.67	95.6
Nickel				80.0	78.34	97.9	79.29	99.1
Potassium				10000.0	11430.00	114.3	11530.00	115.3
Selenium				10.0	10.16	101.6	12.43	124.3
Silver				20.0	19.50	97.5	19.50	97.5
Sodium				10000.0	9488.00	94.9	9581.00	95.8
Thallium				20.0	20.61	103.0	17.28	86.4
Vanadium				100.0	96.35	96.4	96.57	96.6
Zinc				40.0	41.24	103.1	38.18	95.4

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	472.90	118.2	484.10	121.0
Antimony				120.0	124.00	103.3	124.70	103.9
Arsenic				20.0	20.22	101.1	20.70	103.5
Barium				400.0	393.80	98.4	393.10	98.3
Beryllium				10.0	10.11	101.1	10.15	101.5
Cadmium				10.0	10.10	101.0	10.00	100.0
Calcium				10000.0	10420.00	104.2	10410.00	104.1
Chromium				20.0	21.06	105.3	21.12	105.6
Cobalt				100.0	98.58	98.6	97.19	97.2
Copper				50.0	50.31	100.6	50.36	100.7
Iron				200.0	244.40	122.2	260.60	130.3
Lead				6.0	4.15	69.2	4.18	69.7
Magnesium				10000.0	10150.00	101.5	10130.00	101.3
Manganese				30.0	29.92	99.7	29.81	99.4
Nickel				80.0	79.22	99.0	78.70	98.4
Potassium				10000.0	10780.00	107.8	10760.00	107.6
Selenium				10.0	8.45	84.5	7.99	79.9
Silver				20.0	20.79	104.0	19.79	99.0
Sodium				10000.0	9837.00	98.4	9716.00	97.2
Thallium				20.0	22.85	114.2	19.75	98.8
Vanadium				100.0	99.45	99.4	98.11	98.1
Zinc				40.0	41.49	103.7	41.64	104.1

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum									18.300	U	P
Antimony									3.800	U	P
Arsenic									2.400	U	P
Barium									7.300	U	P
Beryllium									0.200	U	P
Cadmium									0.300	U	P
Calcium									223.200	U	P
Chromium									0.600	U	P
Cobalt									1.800	U	P
Copper									1.400	U	P
Iron									16.800	U	P
Lead	1.7	B	1.5	U	2.1	B	2.4	B	2.095	B	P
Magnesium									181.700	U	P
Manganese									0.700	U	P
Mercury	0.1	B	0.1	U	0.1	U	0.1	U	0.140	B	CV
Nickel									2.000	U	P
Potassium									250.000	U	P
Selenium									1.700	U	P
Silver									0.900	U	P
Sodium									218.800	U	P
Thallium									-6.031	B	P
Vanadium									2.200	U	P
Zinc									5.700	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	AS

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead			2.3	B							P
Mercury			0.2	B							CV
Cyanide			10.0	U							AS

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	32.0	B	18.3	U	18.3	U	34.8	B			P
Antimony	3.8	U	3.8	U	3.8	U	3.8	U			P
Arsenic	2.4	U	2.4	U	2.4	U	2.4	U			P
Barium	7.3	U	7.3	U	7.3	U	7.3	U			P
Beryllium	0.5	B	0.2	U	0.3	B	0.2	U			P
Cadmium	0.5	B	0.3	U	0.3	U	0.3	U			P
Calcium	223.2	U	223.2	U	223.2	U	223.2	U			P
Chromium	0.6	U	0.6	U	-1.1	B	0.6	U			P
Cobalt	1.8	U	1.8	U	1.8	U	1.8	U			P
Copper	1.4	U	1.4	U	1.4	U	1.4	U			P
Iron	20.6	B	16.8	U	-20.2	B	16.8	U			P
Magnesium	181.7	U	181.7	U	181.7	U	181.7	U			P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P
Nickel	2.0	U	2.0	U	2.0	U	2.0	U			P
Potassium	281.3	B	355.3	B	250.8	B	664.4	B			P
Selenium	1.7	U	1.7	B	1.7	U	1.7	U			P
Silver	0.9	U	0.9	U	0.9	U	0.9	U			P
Sodium	218.8	U	218.8	U	218.8	U	218.8	U			P
Thallium	2.8	U	2.8	U	2.8	U	-4.2	B			P
Vanadium	2.2	U	2.2	U	2.2	U	2.2	U			P
Zinc	5.7	U	5.7	U	5.7	U	5.7	U			P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			49.2	B							P
Antimony			3.8	U							P
Arsenic			2.4	U							P
Barium			7.3	U							P
Beryllium			0.2	U							P
Cadmium			0.3	U							P
Calcium			223.2	U							P
Chromium			0.6	U							P
Cobalt			1.8	U							P
Copper			1.4	U							P
Iron			21.2	B							P
Magnesium			181.7	U							P
Manganese			0.7	U							P
Nickel			2.0	U							P
Potassium			376.8	B							P
Selenium			2.1	B							P
Silver			0.9	U							P
Sodium			218.8	U							P
Thallium			2.8	U							P
Vanadium			2.2	U							P
Zinc			5.7	U							P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	23.6	U	23.6	U			P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U			P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U			P
Barium	5.9	U	5.9	U	5.9	U	5.9	U			P
Beryllium	0.2	U	0.2	U	0.2	U	0.2	U			P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U			P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U			P
Chromium	1.4	U	1.4	U	1.4	U	1.4	U			P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			P
Copper	2.4	U	2.4	U	2.4	U	2.4	U			P
Iron	33.3	U	33.3	U	33.3	U	33.3	U			P
Lead	1.3	U	1.3	U	-2.7	B	-1.3	B			P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U			P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U			P
Nickel	2.1	U	2.1	U	2.1	U	2.1	U			P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U			P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U			P
Silver	2.2	U	2.2	U	2.2	U	2.2	U			P
Sodium	472.7	U	472.7	U	472.7	U	472.7	U			P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U			P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U			P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U			P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			23.6	U							P
Antimony			4.7	U							P
Arsenic			4.8	U							P
Barium			5.9	U							P
Beryllium			0.2	U							P
Cadmium			0.6	U							P
Calcium			182.1	U							P
Chromium			1.4	U							P
Cobalt			2.0	U							P
Copper			2.4	U							P
Iron			33.3	U							P
Lead			1.3	U							P
Magnesium			178.3	U							P
Manganese			0.7	U							P
Nickel			2.1	U							P
Potassium			393.0	U							P
Selenium			3.4	U							P
Silver			2.2	U							P
Sodium			472.7	U							P
Thallium			5.7	U							P
Vanadium			2.0	U							P
Zinc			1.0	U							P

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	44	-3	44.2	100.5	3	50.7	115.2

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	452460	486700	488400.0	107.9	485500	491600.0	108.7
Antimony	0	572	4	642.2	112.3	12	636.5	111.3
Arsenic	0	94	5	105.7	112.4	1	108.6	115.5
Barium	0	466	1	495.3	106.3	2	499.6	107.2
Beryllium	0	446	0	484.1	108.5	0	480.0	107.6
Cadmium	0	874	2	952.1	108.9	2	955.4	109.3
Calcium	500000	421280	463300	468600.0	111.2	462100	468600.0	111.2
Chromium	0	436	4	476.9	109.4	5	479.5	110.0
Cobalt	0	435	8	471.5	108.4	8	476.6	109.6
Copper	0	473	3	515.6	109.0	3	518.7	109.7
Iron	200000	172540	194400	195100.0	113.1	186700	187700.0	108.8
Magnesium	500000	498160	533200	543900.0	109.2	534600	544700.0	109.3
Manganese	0	428	0	469.3	109.6	0	468.0	109.3
Nickel	0	877	11	961.7	109.7	12	968.0	110.4
Potassium	0	0	434	491.4		516	580.5	
Selenium	0	48	-7	46.7	97.3	-9	40.5	84.4
Silver	0	196	0	213.2	108.8	1	215.5	109.9
Sodium	0	0	-252	-448.7		-302	-401.1	
Thallium	0	95	3	99.8	105.1	0	96.3	101.4
Vanadium	0	417	-2	454.1	108.9	-1	458.1	109.9
Zinc	0	841	8	961.1	114.3	7	937.3	111.5

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	504500	502300.0	104.1	514500	509400.0	105.5
Antimony	0	596	0	614.4	103.1	3	622.3	104.4
Arsenic	0	102	7	106.0	103.9	4	108.8	106.7
Barium	0	503	2	508.0	101.0	2	511.9	101.8
Beryllium	0	482	0	483.7	100.4	-1	496.9	103.1
Cadmium	0	938	1	939.5	100.2	1	967.7	103.2
Calcium	500000	477840	494300	492300.0	103.0	506100	504600.0	105.6
Chromium	0	483	3	482.9	100.0	4	492.4	101.9
Cobalt	0	457	-1	462.4	101.2	-1	470.8	103.0
Copper	0	526	4	521.1	99.1	3	526.8	100.2
Iron	200000	191980	202000	198700.0	103.5	206900	203300.0	105.9
Lead	0	49	2	46.1	94.1	0	47.0	95.9
Magnesium	500000	521880	541000	539600.0	103.4	554900	552900.0	105.9
Manganese	0	474	1	477.0	100.6	1	487.1	102.8
Nickel	0	952	-1	955.1	100.3	-1	976.9	102.6
Potassium	0	0	46	10.0		141	121.2	
Selenium	0	47	3	51.0	108.5	0	48.5	103.2
Silver	0	213	1	216.4	101.6	1	219.2	102.9
Sodium	0	0	-273	-305.2		-242	-161.8	
Thallium	0	89	-7	92.3	103.7	1	90.6	101.8
Vanadium	0	478	0	472.7	98.9	0	481.3	100.7
Zinc	0	998	5	1009.0	101.1	5	1029.0	103.1

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	51000.0	49630.00	97.3					
Antimony	2000.0	1984.00	99.2					
Arsenic	1050.0	1019.00	97.0					
Barium	500.0	474.10	94.8					
Beryllium	500.0	468.80	93.8					
Cadmium	525.0	482.20	91.8					
Calcium	50000.0	47290.00	94.6					
Chromium	500.0	470.90	94.2					
Cobalt	500.0	466.10	93.2					
Copper	500.0	491.50	98.3					
Iron	50500.0	47490.00	94.0					
Lead	1015.0	1023.00	100.8					
Magnesium	50000.0	47210.00	94.4					
Manganese	500.0	465.40	93.1					
Mercury	1.0	1.03	103.0					
Nickel	500.0	464.60	92.9					
Potassium	50000.0	48340.00	96.7					
Selenium	525.0	495.30	94.3					
Silver	500.0	399.30	79.9					
Sodium	50000.0	49250.00	98.5					
Thallium	550.0	514.10	93.5					
Vanadium	500.0	468.20	93.6					
Zinc	500.0	462.70	92.5					
Cyanide	120.0	114.44	95.4					

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	51000.0	49940.00	97.9					
Antimony	2000.0	1999.00	100.0					
Arsenic	1050.0	1030.00	98.1					
Barium	500.0	475.80	95.2					
Beryllium	500.0	474.00	94.8					
Cadmium	525.0	488.60	93.1					
Calcium	50000.0	47870.00	95.7					
Chromium	500.0	476.40	95.3					
Cobalt	500.0	472.00	94.4					
Copper	500.0	493.00	98.6					
Iron	50500.0	48030.00	95.1					
Lead	1015.0	1036.00	102.1					
Magnesium	50000.0	47800.00	95.6					
Manganese	500.0	470.10	94.0					
Mercury	1.0	0.96	96.0					
Nickel	500.0	472.00	94.4					
Potassium	50000.0	48460.00	96.9					
Selenium	525.0	496.90	94.6					
Silver	500.0	401.80	80.4					
Sodium	50000.0	49740.00	99.5					
Thallium	550.0	519.30	94.4					
Vanadium	500.0	473.20	94.6					
Zinc	500.0	466.90	93.4					
Cyanide	120.0	131.67	109.7					

9
ICP SERIAL DILUTIONS

SAMPLE NO.

AJAXSTPWP04FL

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	28.02	B	118.00	U	100.0		P
Antimony	4.70	U	23.50	U			P
Arsenic	11.47		24.00	U	100.0		P
Barium	84.13	B	83.50	B	0.7		P
Beryllium	0.20	U	1.00	U			P
Cadmium	0.60	U	3.00	U			P
Calcium	44160.00		44670.00		1.2		P
Chromium	1.40	U	7.00	U			P
Cobalt	2.00	U	10.00	U			P
Copper	2.40	U	12.00	U			P
Iron	34.91	B	166.50	U	100.0		P
Lead	1.30	U	6.50	U			P
Magnesium	20010.00		20210.00	B	1.0		P
Manganese	15.16		14.95	B	1.4		P
Nickel	2.10	U	10.50	U			P
Potassium	2483.00	B	2596.00	B	4.6		P
Selenium	3.40	U	17.00	U			P
Silver	2.20	U	11.00	U			P
Sodium	7418.00		6821.00	B	8.0		P
Thallium	5.70	U	28.50	U			P
Vanadium	2.00	U	10.00	U			P
Zinc	4.98	B	8.30	B	66.7		P

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

ICP ID Number: Date: 7/1/2003

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	10.0	AS

Comments:

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: _____ Date: 7/1/2003

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments: _____

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	23.6	P
Antimony	206.838		60	4.7	P
Arsenic	189.042		10	4.8	P
Barium	493.409		200	5.9	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.6	P
Calcium	317.933		5000	182.1	P
Chromium	267.716		10	1.4	P
Cobalt	228.616		50	2.0	P
Copper	324.754		25	2.4	P
Iron	271.441		100	33.3	P
Lead	220.353		3	1.3	P
Magnesium	279.078		5000	178.3	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.1	P
Potassium	766.491		5000	393.0	P
Selenium	196.026		5	3.4	P
Silver	328.068		10	2.2	P
Sodium	330.232		5000	472.7	P
Thallium	190.864		10	5.7	P
Vanadium	292.402		50	2.0	P
Zinc	213.856		20	1.0	P

Comments:

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Lead	220.353		3	1.5	P

Comments: _____

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	18.3	P
Antimony	206.838		60	3.8	P
Arsenic	189.042		10	2.4	P
Barium	493.409		200	7.3	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.3	P
Calcium	317.933		5000	223.2	P
Chromium	267.716		10	0.6	P
Cobalt	228.616		50	1.8	P
Copper	324.754		25	1.4	P
Iron	271.441		100	16.8	P
Magnesium	279.079		5000	181.7	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.0	P
Potassium	766.491		5000	250.0	P
Selenium	196.026		5	1.7	P
Silver	328.068		10	0.9	P
Sodium	330.232		5000	218.8	P
Thallium	190.864		10	2.8	P
Vanadium	292.402		50	2.2	P
Zinc	206.200		20	5.7	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ag
Aluminum	308.215	0.0000000	0.0000000	-0.0002180	0.0000000	0.0000000
Antimony	206.838	0.0000080	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000170	0.0000000	-0.0000590	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Cadmium	226.502	0.0000010	0.0000000	0.0000590	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000100	0.0000000	-0.0000200	0.0000060	0.0000000
Cobalt	228.616	0.0000000	0.0000000	-0.0000400	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0001740	0.0000000	0.0000000	-0.001587	0.0000000
Lead	220.353	-0.0000300	0.0000000	0.0000550	-0.000006	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000520	0.0000000	0.0000000
Phosphorus	178.287	0.0000070	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	-0.0007500	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000240	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000080	0.0000000	-0.0001100	0.0000000	0.0000000
Tin	189.989	0.0000090	0.0000000	-0.0000750	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000140	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000030	0.0000040	0.0000000
Zinc	206.200	0.0000300	0.0000000	-0.0000600	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		As	B	Be	Cd	Co
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	-0.0082960
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001900
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0002350
Tin	189.989	0.0000000	0.0000000	-0.0004370	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Na	Ni
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0078510	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	-0.0002840	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001750
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0008900	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000800
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	-0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0044570	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Pb	Sb	Se	Si	Tl
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0003500	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0003900	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.215	0.0173200	0.0000000			
Antimony	206.838	-0.0012700	0.0000000			
Arsenic	189.042	-0.0002800	0.0000000			
Barium	493.409	0.0000000	0.0000000			
Beryllium	313.042	0.0004800	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000000	0.0000000			
Calcium	317.933	0.0000000	0.0000000			
Chromium	267.716	-0.0003600	0.0000000			
Cobalt	228.616	0.0000000	0.0000000			
Copper	324.754	0.0000000	0.0000000			
Iron	271.441	0.0081200	0.0000000			
Lead	220.353	-0.0000850	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Manganese	257.610	0.0000000	0.0000000			
Molybdenum	202.030	0.0000000	0.0000000			
Nickel	231.604	0.0000000	0.0000000			
Phosphorus	178.287	0.0000000	0.0164830			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.026	0.0000000	0.0000000			
Silver	328.068	-0.0003350	0.0000000			
Sodium	330.232	-0.1479730	0.6581000			
Strontium	421.552	0.0000000	0.0000000			
Thallium	190.864	0.0014900	0.0000000			
Tin	189.989	0.0000000	0.0000000			
Titanium	334.941	0.0000000	0.0000000			
Vanadium	292.402	0.0000000	0.0000000			
Zinc	206.200	-0.0004730	0.0000000			

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	10000.0	P
Iron	10.00	1000000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	10000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	5000.0	P

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Lead	10.00	50000.0	P

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	100000.0	P
Iron	10.00	1000000.0	P
Magnesium	10.00	600000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium	10.00	5000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Thallium	10.00	5000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	10000.0	P

Comments: _____

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Method: AS

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXADSFW07	7/30/2003	50.0	50.0
AJAXPDSFW06	7/30/2003	50.0	50.0
AJAXSTPWP04	7/30/2003	50.0	50.0
AJAXSTSFW04	7/30/2003	50.0	50.0
AJAXSTSFW52	7/30/2003	50.0	50.0
GRANSTSFW54	7/30/2003	50.0	50.0
ICV	7/30/2003	50.0	50.0
LCS0730B	7/30/2003	50.0	50.0
LCSD0730B	7/30/2003	50.0	50.0
MAGNSTPWP01	7/30/2003	50.0	50.0
MAGNSTSFW01	7/30/2003	50.0	50.0
MAGNSTSFW02	7/30/2003	50.0	50.0
PBW0730B	7/30/2003	50.0	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXADSFW07	8/5/2003	100.0	100.0
AJAXADSFW07F	8/5/2003	100.0	100.0
AJAXPDSFW06	8/5/2003	100.0	100.0
AJAXPDSFW06F	8/5/2003	100.0	100.0
AJAXSTPWP04F	8/5/2003	100.0	100.0
AJAXSTSFW04	8/5/2003	100.0	100.0
AJAXSTSFW04F	8/5/2003	100.0	100.0
AJAXSTSFW52	8/5/2003	100.0	100.0
AJAXSTSFW52F	8/5/2003	100.0	100.0
GRANSTSFW54	8/5/2003	100.0	100.0
GRANSTSFW54F	8/5/2003	100.0	100.0
LCSDW0805B	8/5/2003	100.0	100.0
LCSW0805B	8/5/2003	100.0	100.0
MAGNSTPWP01F	8/5/2003	100.0	100.0
MAGNSTSFW01	8/5/2003	100.0	100.0
MAGNSTSFW01F	8/5/2003	100.0	100.0
MAGNSTSFW02	8/5/2003	100.0	100.0
MAGNSTSFW02F	8/5/2003	100.0	100.0
PBW0805B	8/5/2003	100.0	100.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
AJAXADSFW07	8/8/2003	100.0	100.0
AJAXADSFW07F	8/8/2003	100.0	100.0
AJAXPDSFW06	8/8/2003	100.0	100.0
AJAXPDSFW06F	8/8/2003	100.0	100.0
AJAXSTPWP04F	8/8/2003	100.0	100.0
AJAXSTSFW04	8/8/2003	100.0	100.0
AJAXSTSFW04F	8/8/2003	100.0	100.0
AJAXSTSFW52	8/8/2003	100.0	100.0
AJAXSTSFW52F	8/8/2003	100.0	100.0
GRANSTSFW54	8/8/2003	100.0	100.0
GRANSTSFW54F	8/8/2003	100.0	100.0
LCSDW0808B	8/8/2003	100.0	100.0
LCSW0808B	8/8/2003	100.0	100.0
MAGNSTPWP01F	8/8/2003	100.0	100.0
MAGNSTSFW01	8/8/2003	100.0	100.0
MAGNSTSFW01F	8/8/2003	100.0	100.0
MAGNSTSFW02	8/8/2003	100.0	100.0
MAGNSTSFW02F	8/8/2003	100.0	100.0
PBW0808B	8/8/2003	100.0	100.0

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/30/2003 End Date: 7/30/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1650																								X
S10	1.00	1651																								X
S30	1.00	1652																								X
S50	1.00	1653																								X
S100	1.00	1654																								X
S200	1.00	1655																								X
S300	1.00	1656																								X
ICV	1.00	1658																								X
ICB	1.00	1659																								X
LRS	1.00	1700																								X
LRS	1.00	1701																								X
CCV	1.00	1702																								X
CCB	1.00	1703																								X
PBW0730B	1.00	1704																								X
ZZZZZZ	1.00	1705																								
LCS0730B	1.00	1706																								X
AJAXSTPWP04	1.00	1707																								X
AJAXSTSFW04	1.00	1708																								X
AJAXPDSFW06	1.00	1709																								X
AJAXADSFW07	1.00	1710																								X
AJAXSTSFW52	1.00	1711																								X
GRANSTSFW54	1.00	1711																								X
MAGNSTSFW01	1.00	1712																								X
CCV	1.00	1713																								X
CCB	1.00	1714																								X
MAGNSTPWP01	1.00	1715																								X
MAGNSTSFW02	1.00	1716																								X
ZZZZZZ	1.00	1717																								
ZZZZZZ	1.00	1718																								
ZZZZZZ	1.00	1719																								
ZZZZZZ	1.00	1720																								
ZZZZZZ	1.00	1721																								
ZZZZZZ	1.00	1722																								
ZZZZZZ	1.00	1723																								
ZZZZZZ	1.00	1724																								
CCV	1.00	1725																								X
CCB	1.00	1726																								X
ZZZZZZ	1.00	1727																								

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/30/2003 End Date: 7/30/2003

EPA Sample No.	D/F	Time	% R	Analytes																									
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1728																									
ZZZZZZ	1.00	1729																									
LCSD0730B	1.00	1730																									X
CCV	1.00	1731																									X
CCB	1.00	1732																									X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW003

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/20/2003 End Date: 8/20/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN				
S0	1.00	0857													X															
S	1.00	0901																												
S	1.00	0904													X															
S	1.00	0908																												
LRS	1.00	0912													X															
LRS	1.00	0917													X															
LRS	1.00	0921													X															
ICV	1.00	0925													X															
ICB	1.00	0929													X															
ICSA	1.00	0933													X															
ICSAB	1.00	0937													X															
CRI	1.00	0941													X															
CCV	1.00	0946													X															
CCB	1.00	0950													X															
PBW0808B	1.00	0954													X															
LCSW0808B	1.00	0958													X															
LCSDW0808B	1.00	1002													X															
ZZZZZZ	1.00	1006																												
ZZZZZZ	5.00	1010																												
AJAXSTSFW04	1.00	1014													X															
AJAXSTSFW04F	1.00	1018													X															
AJAXPDSFW06	1.00	1022													X															
AJAXPDSFW06F	1.00	1026													X															
AJAXADSFW07	1.00	1030													X															
CCV	1.00	1034													X															
CCB	1.00	1039													X															
AJAXADSFW07F	1.00	1043													X															
AJAXSTSFW52	1.00	1047													X															
ZZZZZZ	1.00	1051																												
GRANSTSFW54	1.00	1055													X															
ZZZZZZ	1.00	1059																												
MAGNSTSFW01	1.00	1103													X															
MAGNSTSFW01F	1.00	1107													X															
MAGNSTPWP01F	1.00	1111													X															
MAGNSTSFW02	1.00	1115													X															
MAGNSTSFW02F	1.00	1119													X															
CCV	1.00	1123													X															
CCB	1.00	1127													X															

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/20/2003 End Date: 8/20/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ICSA	1.00	1132													X															
ICSAB	1.00	1136													X															
CRI	1.00	1140													X															
CCV	1.00	1144													X															
CCB	1.00	1148													X															

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/21/2003 End Date: 8/21/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	0802		X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			
S	1.00	0806		X						X				X		X				X			X							
S	1.00	0809			X	X															X			X						
S	1.00	0813					X	X	X		X	X	X				X		X			X			X	X				
LRS	1.00	0818		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
LRS	1.00	0822		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
LRS	1.00	0826		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
ICV	1.00	0830		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
ICB	1.00	0835		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
ICSA	1.00	0839		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
ICSAB	1.00	0843		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CRI	1.00	0847		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CCV	1.00	0851		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CCB	1.00	0855		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
PBW0808B	1.00	0900		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
LCSW0808B	1.00	0904		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
LCSDW0808B	1.00	0908		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
ZZZZZZ	1.00	0912																												
ZZZZZZ	5.00	0916																												
AJAXSTSFW04	1.00	0920		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXSTSFW04F	1.00	0924		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXPDSFW06	1.00	0928		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXPDSFW06F	1.00	0932		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXADSFW07	1.00	0936		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CCV	1.00	0940		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CCB	1.00	0944		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXADSFW07F	1.00	0948		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXSTSFW52	1.00	0952		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
AJAXSTSFW52F	1.00	0956		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
GRANSTSFW54	1.00	1000		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
GRANSTSFW54F	1.00	1005		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
MAGNSTSFW01	1.00	1009		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
MAGNSTSFW01F	1.00	1013		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
MAGNSTPWP01F	1.00	1017		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
MAGNSTSFW02	1.00	1021		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
MAGNSTSFW02F	1.00	1025		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CCV	1.00	1029		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
CCB	1.00	1033		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/21/2003 End Date: 8/21/2003

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1037																									
ZZZZZZ	5.00	1041																									
ZZZZZZ	10.00	1045																									
ZZZZZZ	50.00	1049																									
ICSA	1.00	1053		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1058		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1102		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1106		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1110		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/8/2003 End Date: 9/9/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2204		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.00	2209		X						X				X		X					X			X				
S	1.00	2213			X	X									X							X			X			
S	1.00	2217					X	X	X		X	X	X				X		X			X				X	X	
LRS	1.00	2223		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
LRS	1.00	2228		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
LRS	1.00	2233		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
ICV	1.00	2238		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
ICB	1.00	2243		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
ICSA	1.00	2248		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
ICSAB	1.00	2254		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
CRI	1.00	2259		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
CRILOW	1.00	2304		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV	1.00	2309		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
CCB	1.00	2314		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	2319																										
ZZZZZZ	1.00	2324																										
ZZZZZZ	1.00	2329																										
ZZZZZZ	5.00	2334																										
ZZZZZZ	1.00	2339																										
ZZZZZZ	1.00	2344																										
ZZZZZZ	5.00	2349																										
ZZZZZZ	1.00	2354																										
ZZZZZZ	1.00	2359																										
AJAXSTPWP04F	1.00	0004		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV	1.00	0009		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
CCB	1.00	0015		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
AJAXSTPWP04FL	5.00	0020		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
AJAXSTSFW52F	1.00	0025													X													
GRANSTSFW54F	1.00	0030													X													
ZZZZZZ	100.00	0035																										
ZZZZZZ	1.00	0040																										
ZZZZZZ	1.00	0045																										
ZZZZZZ	1.00	0050																										
ZZZZZZ	1.00	0055																										
ZZZZZZ	5.00	0100																										
ZZZZZZ	1.00	0105																										
CCV	1.00	0110		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/8/2003 End Date: 9/9/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CCB	1.00	0115		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	0120																										
ZZZZZZ	5.00	0125																										
ZZZZZZ	1.00	0130																										
ZZZZZZ	1.00	0135																										
ZZZZZZ	5.00	0140																										
ZZZZZZ	1.00	0145																										
ICSA	1.00	0150		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	0156		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	0201		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRILOW	1.00	0206		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	0211		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	0216		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/8/2003 End Date: 8/8/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1355																X								
S0.2	1.00	1356																X								
S0.5	1.00	1358																X								
S1	1.00	1400																X								
S5	1.00	1402																X								
S10	1.00	1404																X								
ICV	1.00	1406																X								
ICB	1.00	1408																X								
CRA	1.00	1410																X								
CCV	1.00	1411																X								
CCB	1.00	1413																X								
PBW0805B	1.00	1415																X								
LCSW0805B	1.00	1417																X								
LCSDW0805B	1.00	1418																X								
AJAXSTPWP04F	1.00	1420																X								
AJAXSTSFW04	1.00	1422																X								
AJAXSTSFW04F	1.00	1424																X								
AJAXPDSFW06	1.00	1425																X								
AJAXPDSFW06F	1.00	1427																X								
AJAXADSFW07	1.00	1429																X								
CCV	1.00	1431																X								
CCB	1.00	1433																X								
AJAXADSFW07F	1.00	1435																X								
AJAXSTSFW52	1.00	1436																X								
AJAXSTSFW52F	1.00	1438																X								
GRANSTSFW54	1.00	1440																X								
GRANSTSFW54F	1.00	1442																X								
MAGNSTSFW01	1.00	1443																X								
MAGNSTSFW01F	1.00	1445																X								
MAGNSTPWP01F	1.00	1447																X								
MAGNSTSFW02	1.00	1449																X								
CCV	1.00	1450																X								
CCB	1.00	1452																X								
MAGNSTSFW02F	1.00	1454																X								
ZZZZZZ	1.00	1455																								
ZZZZZZ	1.00	1458																								
ZZZZZZ	1.00	1459																								
ZZZZZZ	1.00	1501																								

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW003

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/8/2003 End Date: 8/8/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1503																										
ZZZZZZ	1.00	1505																										
ZZZZZZ	1.00	1507																										
ZZZZZZ	1.00	1509																										
CCV	1.00	1510																X										
CCB	1.00	1512																X										

SEVERN TRENT STL

September 9, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCW003

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 22, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/22/03 ETR No: 94950		
535396	AJAXSTPWP04	07/17/03	Water
535397	AJAXSTPWP04F	07/17/03	Water
535398	AJAXSTSFW04	07/17/03	Water
535399	AJAXSTSFW04F	07/17/03	Water
535400	AJAXPDSFW06	07/17/03	Water
535401	AJAXPDSFW06F	07/17/03	Water
535402	AJAXADSFW07	07/17/03	Water
535403	AJAXADSFW07F	07/17/03	Water
535404	AJAXSTSFW52	07/17/03	Water
535405	AJAXSTSFW52F	07/17/03	Water
535406	GRANSTSFW54	07/17/03	Water
535407	GRANSTSFW54F	07/17/03	Water
535410	MAGNSTSFW01	07/18/03	Water
535411	MAGNSTSFW01F	07/18/03	Water
535412	MAGNSTPWP01	07/18/03	Water
535413	MAGNSTPWP01F	07/18/03	Water
535414	MAGNSTSFW02	07/18/03	Water
535415	MAGNSTSFW02F	07/18/03	Water

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample log-in is included in the Sample Handling section of this submittal. Please note that sample GRANSTSFW53 listed on the chain-of-custody form with a sample date and time of July 17 at 1830 was not received. A similarly identified sample

Severn Trent Laboratories, Inc.
STL Burlington • 208 South Park Drive, Suite 1, Colchester, VT 05446
Tel 802 655 1203 Fax 802 655 1248 • *www.stl-inc.com*

(GRANSTSFW53MS) was listed on the second chain-of-custody form received on July 22, 2003. Based on how quality control samples had previously been identified, the laboratory identified this sample as the parent sample to be used for quality control purposes.

The analysis for arsenic speciation was performed by STL's North Canton facility, as approved by EA Engineering. STL North Canton assigned "Lot" numbers as samples were received. Though laboratory numbers may differ, the client's sample identifications were maintained. The results for this delivery group including a case narrative prepared by the North Canton laboratory are attached to this report.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Sulfate by 375.4
Please note that the due to instrumentation problems, sulfate was analyzed by Method 375.4 versus 300.0 as agreed to by the client.

Solids by 160.x
The analyses of all samples in this delivery group submitted for solids determinations (total, suspended, and / or dissolved) were performed one to two days beyond the method specified holding time of seven days. Samples were received with two days remaining in hold time and the laboratory analyzed all samples as quickly as was possible.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0412.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtw/jmm

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: GCW004

SEVERN TRENT STL

September 9, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCW004

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 22, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/22/03 ETR No: 94961		
535378	MAGNSTPWP02	07/18/03	Water
535379	MAGNSTPWP02F	07/18/03	Water
535380	MAGNSTSFW03	07/18/03	Water
535381	MAGNSTSFW03F	07/18/03	Water
535382	MAGNSTPWP03	07/18/03	Water
535383	MAGNSTPWP03F	07/18/03	Water
535384	MAGNPDSFW11	07/18/03	Water
535385	MAGNPDSFW11F	07/18/03	Water
535386	MAGNADSFW13	07/18/03	Water
535387	MAGNADSFW13F	07/18/03	Water
535388	GRANSTPWP54	07/18/03	Water
535389	GRANSTPWP54F	07/18/03	Water
535390	GRANSTPWP53	07/19/03	Water
535391	GRANSTPWP53F	07/19/03	Water
535392	GRANSTSFW53	07/19/03	Water
535392MS	GRANSTSFW53MS	07/19/03	Water
535392DP	GRANSTSFW53REP	07/19/03	Water
535393	GRANSTSFW53F	07/19/03	Water
535393MS	GRANSTSFW53FMS	07/19/03	Water
535393DP	GRANSTSFW53FREP	07/19/03	Water
535394	MAGNADSFW55	07/19/03	Water
535395	MAGNADSFW55F	07/19/03	Water

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

Severn Trent Laboratories, Inc.
STL Burlington • 208 South Park Drive, Suite 1, Colchester, VT 05446
Tel 802 655 1203 Fax 802 655 1248 • *www.stl-inc.com*

0001-A

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample log-in is included in the Sample Handling section of this submittal.

The analysis for arsenic speciation was performed by STL's North Canton facility, as approved by EA Engineering. STL North Canton assigned "Lot" numbers as samples were received. Though laboratory numbers may differ, the client's sample identifications were maintained. The results for this delivery group including a case narrative prepared by the North Canton laboratory are attached to this report.

This narrative identifies anomalies that occurred during the analyses of samples in this delivery group. If there is no description following regarding a certain methodology requested on the chain-of-custody record, then there were no exceptions to the laboratory quality control criteria noted during that analysis.

Sulfate by 375.4
Please note that the due to instrumentation problems, sulfate was analyzed by Method 375.4 versus 300.0 as agreed to by the client.

Solids by 160.x
The dissolved solids analyses of samples MAGNSTSFW03, MAGNPDSFW11, and MAGNADSFW13 were performed one day beyond the method specified holding time of seven days. Samples were received with three days remaining in hold time and the laboratory analyzed all samples as quickly as was possible.

Reproducibility between the initial and duplicate total suspended solids analysis of sample GRANSTSFW53 was poor (RPD of 80). The laboratory could not reanalyze the sample for confirmational purposes due to limited sample volume.

Cyanide by 9012
An initial analysis for cyanide was performed on July 30, 2003 but results could not be used due to quality control failures. When preparing samples for reanalysis on July 31, 2003, the analyst found limited sample volume remaining for sample GRANSTSFW53 and consulted with the project manager on how to proceed. Not remembering that a second aliquot existed for cyanide analysis, the project manager instructed the laboratory to cancel the duplicate analysis and continue with the matrix spike analysis. Once this error was discovered, the holding time for cyanide was out by more than a month. The laboratory notified the client of this error and the client concurred that a duplicate analysis should not be performed at this time.

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report is sequentially numbered starting with page 0001 and ending with page 0424.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtw/jmm

0001-C Last Alpha

Water p'2 of 2

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: EA Engineering
Address: 12011 Bel-Red Rd Suite 200
Bellevue, WA 98005
Contact: Jen Kindred
Phone: 425-451-7450
Fax: 425-451-7800
Contract/ Quote:

Invoice to:
Company: Same
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Marty Sneen
Sampler's Signature:

Proj. No.: 13890.13
Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	Arsenic Speciation	pH, redox, SO4, etc.	TSS/TDS	TAL Metals-Total	TAL Metals-dissolved	Cyanide	Lab/Sample ID (Lab Use Only)
W	7/18/03	1630		X	MAGN-ST-PWP-02		1	1	1	X			X	X		
W	7/18/03	1700		X	MAGN-ST-SFW-03		3	1	2	X	X	X	X	X	X	
W	7/18/03	1530		X	MAGN-ST-PWP-03		1	1	1	X			X	X		
W	7/18/03	1445		X	MAGN-PD-SFW-11		3	1	2	X	X	X	X	X	X	
W	7/18/03	1700		X	MAGN-AD-SFW-13		3	1	2	X	X	X	X	X	X	
W	7/18/03	1832		X	GRAN-ST-PWP-54		1	1	1	X			X	X		
W	7/19/03	1400		X	GRAN-ST-PWP-53		1	1	1	X			X	X		
W	7/19/03	1350		X	GRAN-ST-SFW-53 MS		6	2	4	X	X	X	X	X	X	MS
W	7/19/03	1215		X	MAGN-AD-SFW-55		3	1	2	X	X	X	X	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
	7-21-03	0800		7/22/03	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other 500 mL

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNSTSFW03

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535380

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	315	
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	1	2.0	188	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	1	5.0	256	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	0.90	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	137	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	137	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	5	25.0	57.3	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	8.0	

Printed on: 09/05/03 02:47 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNPDSFW11

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535384

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	899	
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	1	2.0	680	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	1	5.0	772	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	0.80	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	226	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	226	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	50	250	391	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	8.0	

Printed on: 09/05/03 02:48 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNADSFW13

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535386

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	906	
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	1	2.0	680	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	1	5.0	841	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	28.7	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	230	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	230	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	100	500	637	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	7.0	

Printed on: 09/05/03 02:49 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
GRANSTSFW53

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535392

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	108	
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	1	2.0	80.0	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	1	5.0	100.0	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	1	0.50	7.2	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	46.9	
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	1	1.0	46.9	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	1	5.0	14.8	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	7.6	

Printed on: 09/05/03 02:50 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNADSFW55

Lab Name: STL BURLINGTON
Contract: LSO1024805
SDG No.: GCW004

Lab Code: STLVT
Case No.: 23046
Lab Sample ID: 535394

Matrix: WATER
Client: EASEAT
Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	07/25/03		umhos/cm	1	0.000	180	
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	1	2.0	112	
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	1	5.0	128	
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	2	0.77	90.5	
160.4	Volatile Suspended Solids	07/25/03		mg/L	1	5.0	7.1	
310.1	Hydroxide Alkalinity	07/29/03	BLKAL0729A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/29/03	BLKAL0729A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/29/03	BLKAL0729A	mg/L	1	1.0	111	
310.1	Total Alkalinity	07/29/03	BLKAL0729A	mg/L	1	1.0	111	
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	2	10.0	16.8	
9040B	Corrosivity by pH	07/25/03		pH Units	1	0.000	7.3	

Printed on: 09/05/03 02:52 PM

WET CHEMISTRY

Method Blank Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW004

Lab Code: STLVT **Case No.:** 23046

Matrix: WATER **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Conc.	Units	Qual.	DF	RL	Analytical Run Date	Analytical Batch
BLKAL0728A	310.1	Hydroxide Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0728A	310.1	Carbonate Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0728A	310.1	Bicarbonate Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0728A	310.1	Total Alkalinity	1.0	mg/L	U	1	1.0	07/28/03	BLKAL0728A
BLKAL0729A	310.1	Hydroxide Alkalinity	1.0	mg/L	U	1	1.0	07/29/03	BLKAL0729A
BLKAL0729A	310.1	Carbonate Alkalinity	1.0	mg/L	U	1	1.0	07/29/03	BLKAL0729A
BLKAL0729A	310.1	Bicarbonate Alkalinity	1.0	mg/L	U	1	1.0	07/29/03	BLKAL0729A
BLKAL0729A	310.1	Total Alkalinity	1.0	mg/L	U	1	1.0	07/29/03	BLKAL0729A
BLKDS0726A	160.1	Total Dissolved Solids	5.0	mg/L	U	1	5.0	07/26/03	BLKDS0726A
BLKHA0808A	130.2	Total Hardness as CaCO3	2.0	mg/L	U	1	2.0	08/08/03	BLKHA0808A
BLKSS0725A	160.2	Total Suspended Solids	0.50	mg/L	U	1	0.50	07/25/03	BLKSS0725A
BLKSU0811A	375.4	Sulfate	5.0	mg/L	U	1	5.0	08/11/03	BLKSU0811A

Printed on: 09/05/03 02:54 PM

WET CHEMISTRY

Matrix Spike Sample Report Summary

Client Sample No.
GRANSTSFW53MS

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535392MS

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Matrix Spike Result Conc.	Qual.	Sample Result Conc.	Qual.	Spike Added	% Recovery*
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	196		80.0		121.00	95.9
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	102		46.9		54.70	100.7
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	22.3		14.8		10.0	75.0

** Control Limit for Percent Recovery is 75-125%, unless otherwise specified.*

Printed on: 09/05/03 02:52 PM

WET CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.
GRANSTSFW53REP

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535392DP

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD*
120.1	Conductivity (umhos/cm)	07/25/03		umhos/c	108		110		2
130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	80.0		80.0		0
160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	100.0		96.0		4
160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	7.2		3.1		80
160.4	Volatile Suspended Solids	07/25/03		mg/L	5.0	U	5.0	U	0
310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	1.0	U	1.0	U	0
310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	1.0	U	1.0	U	0
310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	46.9		48.2		3
310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	46.9		48.2		3
375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	14.8		14.6		1
9040B	Corrosivity by pH	07/25/03		pH Units	7.6		7.5		1

** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/05/03 02:49 PM

WET CHEMISTRY

Laboratory Control Sample Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW004

Lab Code: STLVT **Case No.:** 23046

Matrix: WATER **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCS Conc.	True Value	% Recovery*
LCS DS0726A	160.1	Total Dissolved Solids	07/26/03	BLKDS0726A	mg/L	50.0	50.0	100.0
LCSAL0728A	310.1	Hydroxide Alkalinity	07/28/03	BLKAL0728A	mg/L	57.6	54.7000	105.3
LCSAL0728A	310.1	Carbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	57.6	54.7000	105.3
LCSAL0728A	310.1	Bicarbonate Alkalinity	07/28/03	BLKAL0728A	mg/L	57.6	54.7000	105.3
LCSAL0728A	310.1	Total Alkalinity	07/28/03	BLKAL0728A	mg/L	57.6	54.7000	105.3
LCSAL0729A	310.1	Hydroxide Alkalinity	07/29/03	BLKAL0729A	mg/L	58.2	54.7000	106.3
LCSAL0729A	310.1	Carbonate Alkalinity	07/29/03	BLKAL0729A	mg/L	58.2	54.7000	106.3
LCSAL0729A	310.1	Bicarbonate Alkalinity	07/29/03	BLKAL0729A	mg/L	58.2	54.7000	106.3
LCSAL0729A	310.1	Total Alkalinity	07/29/03	BLKAL0729A	mg/L	58.2	54.7000	106.3
LCSCD0725A	120.1	Conductivity (umhos/cm)	07/25/03		umhos/c	930	977.0000	95.2
LCSHA0808A	130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	124	121.0000	102.5
LCSPH0725A	9040B	Corrosivity by pH	07/25/03		pH Units	6.0	6.0000	100.0
LCSSS0725A	160.2	Total Suspended Solids	07/25/03	BLKSS0725A	mg/L	502	500	100.4
LCSSU0811A	375.4	Sulfate	08/11/03	BLKSU0811A	mg/L	9.6	10.0	96.0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*

Printed on: 09/05/03 02:56 PM

WET CHEMISTRY

Laboratory Control Sample Duplicate
Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW004

Lab Code: STLVT **Case No.:** 23046

Matrix: SOIL **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCSD Conc.	True Value	% Recovery*	RPD**
LCSDCD0725A	120.1	Conductivity (umhos/cm)	07/25/03		umhos/c	958	977.0000	98.1	3
LCSDHA0808A	130.2	Total Hardness as CaCO3	08/08/03	BLKHA0808A	mg/L	124	121.0000	102.5	0
LCSDPH0725A	9040B	Corrosivity by pH	07/25/03		pH Units	6.0	6.0000	100.2	0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*
*** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/05/03 02:58 PM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
GRANSTPWP53	535390
GRANSTPWP53F	535391
GRANSTPWP54	535388
GRANSTPWP54F	535389
GRANSTSFW53	535392
GRANSTSFW53D	535392DP
GRANSTSFW53F	535393
GRANSTSFW53FD	535393DP
GRANSTSFW53FS	535393MS
GRANSTSFW53S	535392MS
MAGNADSFW13	535386
MAGNADSFW13F	535387
MAGNADSFW55	535394
MAGNADSFW55F	535395
MAGNPDSFW11	535384
MAGNPDSFW11F	535385
MAGNSTPWP02	535378
MAGNSTPWP02F	535379
MAGNSTPWP03	535382
MAGNSTPWP03F	535383
MAGNSTSFW03	535380
MAGNSTSFW03F	535381

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTPWP53

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535390

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTPWP53F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535391

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	60.5	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	16.7			P
7440-39-3	Barium	47.6	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	15500			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	23.3	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	3580	B		P
7439-96-5	Manganese	4.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	2000	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3420	B		P
7440-28-0	Thallium	4.1	B		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	5.9	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTPWP54

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535388

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTPWP54F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535389

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	45.7	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	13.2			P
7440-39-3	Barium	45.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	16700			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	16.8	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	4440	B		P
7439-96-5	Manganese	4.4	B		P
7439-97-6	Mercury	0.12	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1830	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3540	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	5.4	B		P

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTSFW53

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535392

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	93.9	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	13.1			P
7440-39-3	Barium	54.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	15100			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	113			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	3470	B		P
7439-96-5	Manganese	18.8			P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1850	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3130	B		P
7440-28-0	Thallium	3.1	B		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	3.6	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GRANSTSFW53F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535393

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	79.3	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	13.1			P
7440-39-3	Barium	55.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	15300			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	16.8	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	3540	B		P
7439-96-5	Manganese	10.3	B		P
7439-97-6	Mercury	0.20	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1870	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3380	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	3.1	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNADSFW13

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535386

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	367			P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	239			P
7440-39-3	Barium	26.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	134000			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	13.0	B		P
7440-50-8	Copper	5.3	B		P
7439-89-6	Iron	9530			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	69400			P
7439-96-5	Manganese	1740			P
7439-97-6	Mercury	0.33			CV
7440-02-0	Nickel	68.0			P
7440-09-7	Potassium	4930	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6420			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	35.3			P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNADSFW13F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535387

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33.5	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	61.6			P
7440-39-3	Barium	21.1	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	132000			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	11.1	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	955			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	68700			P
7439-96-5	Manganese	1690			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	64.7			P
7440-09-7	Potassium	4800	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	5780			P
7440-28-0	Thallium	4.3	B		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	26.1			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNADSFW55

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535394

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1180			P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	52.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	21500			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	B		P
7439-89-6	Iron	636			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	10500			P
7439-96-5	Manganese	48.9			P
7439-97-6	Mercury	0.13	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1360	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6340			P
7440-28-0	Thallium	3.7	B		P
7440-62-2	Vanadium	2.6	B		P
7440-66-6	Zinc	5.4	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNADSFW55F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535395

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.2	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	42.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	21500			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	4.6	B		P
7439-89-6	Iron	16.8	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	10600			P
7439-96-5	Manganese	36.1			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1480	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6360			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	4.6	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNPDSFW11

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535384

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33.4	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	9.7	B		P
7440-39-3	Barium	16.2	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	133000			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	5.5	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	64.3	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	69100			P
7439-96-5	Manganese	905			P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	39.4	B		P
7440-09-7	Potassium	4680	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	5580			P
7440-28-0	Thallium	3.1	B		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	11.5	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNPDSFW11F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535385

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29.4	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	7.7	B		P
7440-39-3	Barium	15.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	134000			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	5.2	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	484			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	69800			P
7439-96-5	Manganese	880			P
7439-97-6	Mercury	0.16	B		CV
7440-02-0	Nickel	43.0			P
7440-09-7	Potassium	4750	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	5870			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	11.9	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPWP02

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535378

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPWP02F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535379

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	26.2			P
7440-39-3	Barium	76.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	41800			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	65.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	19300			P
7439-96-5	Manganese	8.6	B		P
7439-97-6	Mercury	0.19	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	2380	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6400			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	9.7	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MAGNSTPWP03

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535382

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNSTPWP03F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535383

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	27.3			P
7440-39-3	Barium	74.2	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	41700			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	86.9	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	19200			P
7439-96-5	Manganese	3.7	B		P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	2470	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6320			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	8.5	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNSTSFW03

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535380

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	40.5	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	29.6			P
7440-39-3	Barium	73.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	42200			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	266			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	19400			P
7439-96-5	Manganese	7.4	B		P
7439-97-6	Mercury	0.18	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	2410	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6200			P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	4.0	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MAGNSTSFW03F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Lab Sample ID: 535381

Level (low/med): LOW Date Received: 7/22/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33.4	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	28.2			P
7440-39-3	Barium	71.7	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	41900			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	112			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	19300			P
7439-96-5	Manganese	4.7	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	2400	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	6100			P
7440-28-0	Thallium	3.1	B		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	3.3	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	26000.0	26420.00	101.6	30200.0	30410.00	100.7	30340.00	100.5	P
Antimony	250.0	261.90	104.8	300.0	315.60	105.2	316.60	105.5	P
Arsenic	250.0	255.90	102.4	100.0	102.00	102.0	102.90	102.9	P
Barium	500.0	509.40	101.9	200.0	203.90	102.0	205.00	102.5	P
Beryllium	500.0	519.40	103.9	100.0	101.10	101.1	101.10	101.1	P
Cadmium	500.0	505.30	101.1	100.0	100.20	100.2	99.74	99.7	P
Calcium	25000.0	25630.00	102.5	30200.0	30380.00	100.6	30310.00	100.4	P
Chromium	500.0	513.00	102.6	200.0	205.40	102.7	206.10	103.0	P
Cobalt	500.0	506.80	101.4	200.0	203.40	101.7	205.00	102.5	P
Copper	500.0	517.40	103.5	200.0	206.20	103.1	207.50	103.8	P
Lead	1000.0	1018.00	101.8	400.0	399.90	100.0	403.30	100.8	P
Magnesium	25000.0	25460.00	101.8	30200.0	30390.00	100.6	30510.00	101.0	P
Manganese	500.0	509.60	101.9	200.0	202.90	101.4	203.30	101.6	P
Mercury	3.0	3.09	103.0	5.0	4.98	99.6	4.87	97.4	CV
Nickel	500.0	509.80	102.0	200.0	200.10	100.0	202.60	101.3	P
Potassium	25000.0	26150.00	104.6	30200.0	31870.00	105.5	32090.00	106.3	P
Silver	500.0	505.80	101.2	100.0	103.60	103.6	104.20	104.2	P
Sodium	25000.0	25080.00	100.3	30200.0	30150.00	99.8	30280.00	100.3	P
Vanadium	500.0	509.50	101.9	200.0	202.50	101.2	203.80	101.9	P
Zinc	500.0	512.80	102.6	200.0	205.70	102.8	206.50	103.2	P
Cyanide	120.0	118.54	98.8	150.0	146.46	97.6	149.40	99.6	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	30490.00	101.0	30480.00	100.9	P
Antimony				300.0	325.70	108.6	323.60	107.9	P
Arsenic				100.0	106.90	106.9	106.70	106.7	P
Barium				200.0	209.00	104.5	207.60	103.8	P
Beryllium				100.0	101.60	101.6	101.60	101.6	P
Cadmium				100.0	99.81	99.8	99.95	100.0	P
Calcium				30200.0	30140.00	99.8	30430.00	100.8	P
Chromium				200.0	208.40	104.2	209.00	104.5	P
Cobalt				200.0	208.10	104.0	210.30	105.2	P
Copper				200.0	212.20	106.1	209.80	104.9	P
Lead				400.0	407.10	101.8	410.20	102.6	P
Magnesium				30200.0	30700.00	101.7	30850.00	102.2	P
Manganese				200.0	205.10	102.6	205.30	102.6	P
Mercury				5.0	4.61	92.2	4.73	94.6	CV
Nickel				200.0	203.50	101.8	205.20	102.6	P
Potassium				30200.0	32310.00	107.0	32330.00	107.1	P
Silver				100.0	105.10	105.1	104.70	104.7	P
Sodium				30200.0	30980.00	102.6	30730.00	101.8	P
Vanadium				200.0	205.90	103.0	206.40	103.2	P
Zinc				200.0	210.10	105.0	209.50	104.8	P
Cyanide				150.0	149.12	99.4			AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury				5.0	4.94	98.8	4.80	96.0	CV

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Iron	25500.0	26250.00	102.9	30200.0	31150.00	103.1	31010.00	102.7	P
Selenium	250.0	244.90	98.0	100.0	101.00	101.0	102.80	102.8	P
Thallium	250.0	238.80	95.5	100.0	101.40	101.4	100.50	100.5	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Iron				30200.0	30430.00	100.8	30760.00	101.9	P
Selenium				100.0	101.40	101.4	103.10	103.1	P
Thallium				100.0	98.09	98.1	105.80	105.8	P

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

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	515.30	128.8	565.50	141.4
Antimony				120.0	126.60	105.5	127.80	106.5
Arsenic				20.0	21.98	109.9	22.00	110.0
Barium				400.0	403.60	100.9	409.20	102.3
Beryllium				10.0	10.25	102.5	9.89	98.9
Cadmium				10.0	10.11	101.1	10.03	100.3
Calcium				10000.0	10550.00	105.5	10530.00	105.3
Chromium				20.0	21.69	108.4	23.12	115.6
Cobalt				100.0	99.11	99.1	102.50	102.5
Copper				50.0	50.35	100.7	50.86	101.7
Lead				6.0	6.64	110.7	6.28	104.7
Magnesium				10000.0	10260.00	102.6	10390.00	103.9
Manganese				30.0	30.33	101.1	30.53	101.8
Mercury	0.2	0.30	150.0					
Nickel				80.0	80.58	100.7	81.80	102.2
Potassium				10000.0	11640.00	116.4	11800.00	118.0
Silver				20.0	19.80	99.0	20.41	102.0
Sodium				10000.0	9906.00	99.1	10200.00	102.0
Vanadium				100.0	98.91	98.9	100.60	100.6
Zinc				40.0	41.60	104.0	42.62	106.6

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Iron				200.0	329.10	164.6	379.50	189.8
Selenium				10.0	9.21	92.1	8.74	87.4
Thallium				20.0	19.06	95.3	22.25	111.2

Control Limits: no limits have been established by EPA at this time

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	23.6	U	38.3	B	23.600	U	P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U	4.700	U	P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U	4.800	U	P
Barium	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Beryllium	0.2	U	0.2	U	0.2	U	-0.3	B	0.200	U	P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U	182.100	U	P
Chromium	-1.6	B	-2.0	B	-1.4	B	1.4	U	1.400	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Copper	2.4	U	2.4	U	2.4	U	2.4	U	2.400	U	P
Iron									38.690	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	-1.315	B	P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U	178.300	U	P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Mercury	0.1	B	0.1	U	0.1	U	0.1	U	0.140	B	CV
Nickel	-6.2	B	-5.2	B	-5.7	B	-4.9	B	-4.287	B	P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U	393.000	U	P
Selenium									1.700	U	P
Silver	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Sodium	472.7	U	472.7	U	472.7	U	472.7	U	472.700	U	P
Thallium									2.969	B	P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	2.758	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			37.2	B							P
Antimony			4.7	U							P
Arsenic			4.8	U							P
Barium			5.9	U							P
Beryllium			-0.2	B							P
Cadmium			0.6	U							P
Calcium			182.1	U							P
Chromium			-1.7	B							P
Cobalt			2.0	U							P
Copper			2.4	U							P
Lead			1.3	U							P
Magnesium			178.3	U							P
Manganese			0.7	U							P
Mercury			0.2	B	0.1	U	0.1	B			CV
Nickel			-5.3	B							P
Potassium			393.0	U							P
Silver			2.2	U							P
Sodium			472.7	U							P
Vanadium			2.0	U							P
Zinc			1.0	U							P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Iron	16.8	U	16.8	U	16.8	U	16.8	U			P
Selenium	1.7	U	-2.3	B	1.7	U	1.7	U			P
Thallium	2.8	U	2.8	U	2.8	U	2.8	U			P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Iron			16.8	U							P
Selenium			1.7	U							P
Thallium			2.8	U							P

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	500100	501500.0	103.9	497800	499700.0	103.5
Antimony	0	596	0	647.4	108.6	0	666.2	111.8
Arsenic	0	102	10	113.2	111.0	8	110.8	108.6
Barium	0	503	2	523.0	104.0	2	529.7	105.3
Beryllium	0	482	0	502.0	104.1	-1	506.6	105.1
Cadmium	0	938	3	973.0	103.7	2	968.8	103.3
Calcium	500000	477840	497700	502700.0	105.2	493300	501900.0	105.0
Chromium	0	483	2	500.3	103.6	2	507.5	105.1
Cobalt	0	457	-2	480.5	105.1	-2	496.1	108.6
Copper	0	526	3	541.0	102.9	2	549.5	104.5
Lead	0	49	2	49.2	100.4	1	51.3	104.7
Magnesium	500000	521880	547200	552400.0	105.8	552300	561900.0	107.7
Manganese	0	474	1	493.7	104.2	1	498.4	105.1
Nickel	0	952	-4	1005.0	105.6	-4	1029.0	108.1
Potassium	0	0	-10	64.4		-115	0.0	
Silver	0	213	-1	219.2	102.9	0	219.7	103.1
Sodium	0	0	-103	-371.9		-125	-56.2	
Vanadium	0	478	-1	488.0	102.1	0	494.7	103.5
Zinc	0	998	7	1042.0	104.4	7	1064.0	106.6

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 6 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Iron	200000	172540	201500	201200.0	116.6	204100	199300.0	115.5
Selenium	0	48	-2	50.0	104.2	-3	46.9	97.7
Thallium	0	95	4	98.7	103.9	0	105.8	111.4

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANSTSFW53S

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2214.0000		93.8800	B	2000.00	106.0		P
Antimony	75 - 125	556.9000		4.7000	U	500.00	111.4		P
Arsenic	75 - 125	55.7400		13.1400		40.00	106.5		P
Barium	75 - 125	2117.0000		54.7500	B	2000.00	103.1		P
Beryllium	75 - 125	51.6100		0.2000	U	50.00	103.2		P
Cadmium	75 - 125	50.8700		0.6000	U	50.00	101.7		P
Chromium	75 - 125	208.5000		1.4000	U	200.00	104.2		P
Cobalt	75 - 125	521.2000		2.0000	U	500.00	104.2		P
Copper	75 - 125	269.3000		2.4000	U	250.00	107.7		P
Iron	75 - 125	1252.0000		112.8000		1000.00	113.9		P
Lead	75 - 125	18.6400		1.3000	U	20.00	93.2		P
Manganese	75 - 125	541.4000		18.8000		500.00	104.5		P
Mercury	75 - 125	0.9280		0.1120	B	1.00	81.6		CV
Nickel	75 - 125	521.2000		2.1000	U	500.00	104.2		P
Selenium	75 - 125	10.6100		1.7000	U	10.00	106.1		P
Silver	75 - 125	52.0700		2.2000	U	50.00	104.1		P
Thallium	75 - 125	53.5800		3.0880	B	50.00	101.0		P
Vanadium	75 - 125	525.5000		2.0000	U	500.00	105.1		P
Zinc	75 - 125	543.3000		3.5690	B	500.00	107.9		P
Cyanide	75 - 125	104.0662		10.0000	U	100.00	104.1		AS

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANSTSFW53FS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2127.0000		79.2600	B	2000.00	102.4		P
Antimony	75 - 125	561.2000		4.7000	U	500.00	112.2		P
Arsenic	75 - 125	54.6000		13.0600		40.00	103.8		P
Barium	75 - 125	2108.0000		54.9500	B	2000.00	102.7		P
Beryllium	75 - 125	51.8500		0.2000	U	50.00	103.7		P
Cadmium	75 - 125	51.2000		0.6000	U	50.00	102.4		P
Chromium	75 - 125	210.9000		1.4000	U	200.00	105.4		P
Cobalt	75 - 125	529.0000		2.0000	U	500.00	105.8		P
Copper	75 - 125	267.2000		2.4000	U	250.00	106.9		P
Iron	75 - 125	1131.0000		16.8000	U	1000.00	113.1		P
Lead	75 - 125	19.7100		1.3000	U	20.00	98.6		P
Manganese	75 - 125	535.0000		10.3100	B	500.00	104.9		P
Mercury	75 - 125	1.0200		0.1980	B	1.00	82.2		CV
Nickel	75 - 125	526.9000		2.1000	U	500.00	105.4		P
Selenium	75 - 125	8.4000		1.7000	U	10.00	84.0		P
Silver	75 - 125	53.0400		2.2000	U	50.00	106.1		P
Thallium	75 - 125	55.6100		2.8000	U	50.00	111.2		P
Vanadium	75 - 125	528.2000		2.0000	U	500.00	105.6		P
Zinc	75 - 125	543.4000		3.0900	B	500.00	108.1		P

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANSTSFW53A

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS _____ SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		2278.00		93.88	B	2000.0	109.2		P
Antimony		573.00		4.70	U	500.0	114.6		P
Arsenic		54.03		13.14		40.0	102.2		P
Barium		2165.00		54.75	B	2000.0	105.5		P
Beryllium		53.31		0.20	U	50.0	106.6		P
Cadmium		52.61		0.60	U	50.0	105.2		P
Chromium		216.10		1.40	U	200.0	108.0		P
Cobalt		538.60		2.00	U	500.0	107.7		P
Copper		276.10		2.40	U	250.0	110.4		P
Iron		1191.00		112.80		1000.0	107.8		P
Lead		19.58		1.30	U	20.0	97.9		P
Manganese		557.40		18.80		500.0	107.7		P
Nickel		540.40		2.10	U	500.0	108.1		P
Selenium		8.92		1.70	U	10.0	89.2		P
Silver		55.71		2.20	U	50.0	111.4		P
Thallium		54.03		3.09	B	50.0	101.9		P
Vanadium		541.90		2.00	U	500.0	108.4		P
Zinc		559.50		3.57	B	500.0	111.2		P

Comments: _____

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

GRANSTSFW53FA

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS _____ SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum		2311.00		79.26	B	2000.0	111.6		P
Antimony		588.90		4.70	U	500.0	117.8		P
Arsenic		52.79		13.06		40.0	99.3		P
Barium		2239.00		54.95	B	2000.0	109.2		P
Beryllium		54.66		0.20	U	50.0	109.3		P
Cadmium		53.89		0.60	U	50.0	107.8		P
Chromium		222.40		1.40	U	200.0	111.2		P
Cobalt		554.90		2.00	U	500.0	111.0		P
Copper		285.40		2.40	U	250.0	114.2		P
Iron		1140.00		16.80	U	1000.0	114.0		P
Lead		20.85		1.30	U	20.0	104.2		P
Manganese		564.00		10.31	B	500.0	110.7		P
Nickel		553.10		2.10	U	500.0	110.6		P
Selenium		8.90		1.70	U	10.0	89.0		P
Silver		57.05		2.20	U	50.0	114.1		P
Thallium		56.00		2.80	U	50.0	112.0		P
Vanadium		558.90		2.00	U	500.0	111.8		P
Zinc		576.10		3.09	B	500.0	114.6		P

Comments: _____

6
DUPLICATES

SAMPLE NO.

GRANSTSFW53D

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		93.8800	B	124.1000	B	27.7		P
Antimony		4.7000	U	4.7000	U			P
Arsenic	10.0	13.1400		13.0400		0.8		P
Barium		54.7500	B	56.8200	B	3.7		P
Beryllium		0.2000	U	0.2000	U			P
Cadmium		0.6000	U	0.6000	U			P
Calcium	5000.0	15090.0000		15430.0000		2.2		P
Chromium		1.4000	U	1.4000	U			P
Cobalt		2.0000	U	2.0000	U			P
Copper		2.4000	U	2.4000	U			P
Iron	100.0	112.8000		125.7000		10.8		P
Lead		1.3000	U	1.3000	U			P
Magnesium		3472.0000	B	3565.0000	B	2.6		P
Manganese	15.0	18.8000		19.4700		3.5		P
Mercury		0.1120	B	0.1350	B	18.6		CV
Nickel		2.1000	U	2.1000	U			P
Potassium		1851.0000	B	1909.0000	B	3.1		P
Selenium		1.7000	U	1.7000	U			P
Silver		2.2000	U	2.2000	U			P
Sodium		3130.0000	B	3381.0000	B	7.7		P
Thallium		3.0880	B	2.8000	U	200.0		P
Vanadium		2.0000	U	2.0000	U			P
Zinc		3.5690	B	3.5530	B	0.4		P

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

GRANSTSFW53FD

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		79.2600	B	51.9700	B	41.6		P
Antimony		4.7000	U	4.7000	U			P
Arsenic	10.0	13.0600		11.8800		9.5		P
Barium		54.9500	B	54.6200	B	0.6		P
Beryllium		0.2000	U	0.2000	U			P
Cadmium		0.6000	U	0.6000	U			P
Calcium	5000.0	15340.0000		15380.0000		0.3		P
Chromium		1.4000	U	1.4000	U			P
Cobalt		2.0000	U	2.0000	U			P
Copper		2.4000	U	2.4000	U			P
Iron		16.8000	U	29.4700	B	200.0		P
Lead		1.3000	U	1.3000	U			P
Magnesium		3535.0000	B	3553.0000	B	0.5		P
Manganese		10.3100	B	10.1800	B	1.3		P
Mercury		0.1980	B	0.1300	B	41.5		CV
Nickel		2.1000	U	2.1000	U			P
Potassium		1867.0000	B	1886.0000	B	1.0		P
Selenium		1.7000	U	1.7000	U			P
Silver		2.2000	U	2.2000	U			P
Sodium		3385.0000	B	3407.0000	B	0.6		P
Thallium		2.8000	U	2.9720	B	200.0		P
Vanadium		2.0000	U	2.0000	U			P
Zinc		3.0900	B	3.3390	B	7.7		P

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	51000.0	51820.00	101.6					
Antimony	2000.0	2143.00	107.2					
Arsenic	1050.0	1084.00	103.2					
Barium	500.0	509.70	101.9					
Beryllium	500.0	512.50	102.5					
Cadmium	525.0	521.70	99.4					
Calcium	50000.0	50990.00	102.0					
Chromium	500.0	508.30	101.7					
Cobalt	500.0	503.90	100.8					
Copper	500.0	517.70	103.5					
Iron	50500.0	51970.00	102.9					
Lead	1015.0	1021.00	100.6					
Magnesium	50000.0	51250.00	102.5					
Manganese	500.0	504.50	100.9					
Mercury	1.0	0.96	96.0					
Nickel	500.0	507.50	101.5					
Potassium	50000.0	50830.00	101.7					
Selenium	525.0	542.60	103.4					
Silver	500.0	422.90	84.6					
Sodium	50000.0	51680.00	103.4					
Thallium	550.0	538.70	97.9					
Vanadium	500.0	512.10	102.4					
Zinc	500.0	514.60	102.9					
Cyanide	120.0	121.37	101.1					

9
ICP SERIAL DILUTIONS

SAMPLE NO.

GRANSTSFW53L

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	93.88	B	235.20	B	150.5		P
Antimony	4.70	U	23.50	U			P
Arsenic	13.14		24.00	U	100.0		P
Barium	54.75	B	55.07	B	0.6		P
Beryllium	0.20	U	1.00	U			P
Cadmium	0.60	U	3.00	U			P
Calcium	15090.00		15200.00	B	0.7		P
Chromium	1.40	U	7.00	U			P
Cobalt	2.00	U	10.00	U			P
Copper	2.40	U	12.00	U			P
Iron	112.80		106.30	B	5.8		P
Lead	1.30	U	6.50	U			P
Magnesium	3472.00	B	3458.00	B	0.4		P
Manganese	18.80		17.69	B	5.9		P
Nickel	2.10	U	10.50	U			P
Potassium	1851.00	B	1965.00	U	100.0		P
Selenium	1.70	U	8.50	U			P
Silver	2.20	U	11.00	U			P
Sodium	3130.00	B	2410.00	B	23.0		P
Thallium	3.09	B	14.00	U	100.0		P
Vanadium	2.00	U	10.00	U			P
Zinc	3.57	B	5.14	B	44.0		P

9
ICP SERIAL DILUTIONS

SAMPLE NO.

GRANSTSFW53FL

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	79.26	B	362.70	B	357.6		P
Antimony	4.70	U	23.50	U			P
Arsenic	13.06		24.00	U	100.0		P
Barium	54.95	B	55.77	B	1.5		P
Beryllium	0.20	U	1.00	U			P
Cadmium	0.60	U	3.00	U			P
Calcium	15340.00		15510.00	B	1.1		P
Chromium	1.40	U	7.00	U			P
Cobalt	2.00	U	10.00	U			P
Copper	2.40	U	12.00	U			P
Iron	16.80	U	84.00	U			P
Lead	1.30	U	6.50	U			P
Magnesium	3535.00	B	3545.00	B	0.3		P
Manganese	10.31	B	8.54	B	17.2		P
Nickel	2.10	U	10.50	U			P
Potassium	1867.00	B	1965.00	U	100.0		P
Selenium	1.70	U	8.50	U			P
Silver	2.20	U	11.00	U			P
Sodium	3385.00	B	2363.50	U	100.0		P
Thallium	2.80	U	14.00	U			P
Vanadium	2.00	U	10.00	U			P
Zinc	3.09	B	5.00	U	100.0		P

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: Date: 7/1/2003

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	10.0	AS

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: Date: 7/1/2003

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.215		200	23.6	P
Antimony	206.838		60	4.7	P
Arsenic	189.042		10	4.8	P
Barium	493.409		200	5.9	P
Beryllium	313.042		5	0.2	P
Cadmium	226.502		5	0.6	P
Calcium	317.933		5000	182.1	P
Chromium	267.716		10	1.4	P
Cobalt	228.616		50	2.0	P
Copper	324.754		25	2.4	P
Lead	220.353		3	1.3	P
Magnesium	279.078		5000	178.3	P
Manganese	257.610		15	0.7	P
Nickel	231.604		40	2.1	P
Potassium	766.491		5000	393.0	P
Silver	328.068		10	2.2	P
Sodium	330.232		5000	472.7	P
Vanadium	292.402		50	2.0	P
Zinc	213.856		20	1.0	P

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Iron	271.441		100	16.8	P
Selenium	196.026		5	1.7	P
Thallium	190.864		10	2.8	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ag
Aluminum	308.215	0.0000000	0.0000000	-0.0002180	0.0000000	0.0000000
Antimony	206.838	0.0000080	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000170	0.0000000	-0.0000590	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Cadmium	226.502	0.0000010	0.0000000	0.0000590	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000100	0.0000000	-0.0000200	0.0000060	0.0000000
Cobalt	228.616	0.0000000	0.0000000	-0.0000400	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0001740	0.0000000	0.0000000	-0.001587	0.0000000
Lead	220.353	-0.0000300	0.0000000	0.0000550	-0.000006	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000520	0.0000000	0.0000000
Phosphorus	178.287	0.0000070	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	-0.0007500	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000240	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000080	0.0000000	-0.0001100	0.0000000	0.0000000
Tin	189.989	0.0000090	0.0000000	-0.0000750	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000140	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000030	0.0000040	0.0000000
Zinc	206.200	0.0000300	0.0000000	-0.0000600	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		As	B	Be	Cd	Co
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	-0.0082960
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001900
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0002350
Tin	189.989	0.0000000	0.0000000	-0.0004370	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Na	Ni
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0078510	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	-0.0002840	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001750
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0008900	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000800
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	-0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0044570	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Pb	Sb	Se	Si	Tl
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	178.287	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.232	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0003500	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0003900	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 10/1/2002

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Zn			
Aluminum	308.215	0.0173200	0.0000000			
Antimony	206.838	-0.0012700	0.0000000			
Arsenic	189.042	-0.0002800	0.0000000			
Barium	493.409	0.0000000	0.0000000			
Beryllium	313.042	0.0004800	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000000	0.0000000			
Calcium	317.933	0.0000000	0.0000000			
Chromium	267.716	-0.0003600	0.0000000			
Cobalt	228.616	0.0000000	0.0000000			
Copper	324.754	0.0000000	0.0000000			
Iron	271.441	0.0081200	0.0000000			
Lead	220.353	-0.0000850	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Manganese	257.610	0.0000000	0.0000000			
Molybdenum	202.030	0.0000000	0.0000000			
Nickel	231.604	0.0000000	0.0000000			
Phosphorus	178.287	0.0000000	0.0164830			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.026	0.0000000	0.0000000			
Silver	328.068	-0.0003350	0.0000000			
Sodium	330.232	-0.1479730	0.6581000			
Strontium	421.552	0.0000000	0.0000000			
Thallium	190.864	0.0014900	0.0000000			
Tin	189.989	0.0000000	0.0000000			
Titanium	334.941	0.0000000	0.0000000			
Vanadium	292.402	0.0000000	0.0000000			
Zinc	206.200	-0.0004730	0.0000000			

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	1000000.0	P
Antimony	10.00	100000.0	P
Arsenic	10.00	5000.0	P
Barium	10.00	10000.0	P
Beryllium	10.00	5000.0	P
Cadmium	10.00	5000.0	P
Calcium	10.00	600000.0	P
Chromium	10.00	100000.0	P
Cobalt	10.00	100000.0	P
Copper	10.00	10000.0	P
Lead	10.00	10000.0	P
Magnesium	10.00	500000.0	P
Manganese	10.00	10000.0	P
Nickel	10.00	10000.0	P
Potassium	10.00	100000.0	P
Silver	10.00	2000.0	P
Sodium	10.00	100000.0	P
Vanadium	10.00	100000.0	P
Zinc	10.00	5000.0	P

Comments:

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

ICP ID Number: TJA ICAP 6 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Iron	10.00	1000000.0	P
Selenium	10.00	5000.0	P
Thallium	10.00	5000.0	P

Comments: _____

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Method: AS

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
GRANSTPWP53	7/31/2003	50.0	50.0
GRANSTPWP54	7/31/2003	50.0	50.0
GRANSTSFW53	7/31/2003	50.0	50.0
GRANSTSFW53S	7/31/2003	50.0	50.0
ICV	7/31/2003	50.0	50.0
LCSD0731C	7/31/2003	50.0	50.0
MAGNADSFW13	7/31/2003	50.0	50.0
MAGNADSFW55	7/31/2003	50.0	50.0
MAGNPDSFW11	7/31/2003	50.0	50.0
MAGNSTPWP02	7/31/2003	50.0	50.0
MAGNSTPWP03	7/31/2003	50.0	50.0
MAGNSTSFW03	7/31/2003	50.0	50.0
PBW0731C	7/31/2003	50.0	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
GRANSTPWP53F	8/5/2003	100.0	100.0
GRANSTPWP54F	8/5/2003	100.0	100.0
GRANSTSFW53	8/5/2003	100.0	100.0
GRANSTSFW53D	8/5/2003	100.0	100.0
GRANSTSFW53F	8/5/2003	100.0	100.0
GRANSTSFW53FD	8/5/2003	100.0	100.0
GRANSTSFW53FS	8/5/2003	100.0	100.0
GRANSTSFW53S	8/5/2003	100.0	100.0
LCSW0805C	8/5/2003	100.0	100.0
MAGNADSFW13	8/5/2003	100.0	100.0
MAGNADSFW13F	8/5/2003	100.0	100.0
MAGNADSFW55	8/5/2003	100.0	100.0
MAGNADSFW55F	8/5/2003	100.0	100.0
MAGNPDSFW11	8/5/2003	100.0	100.0
MAGNPDSFW11F	8/5/2003	100.0	100.0
MAGNSTPWP02F	8/5/2003	100.0	100.0
MAGNSTPWP03F	8/5/2003	100.0	100.0
MAGNSTSFW03	8/5/2003	100.0	100.0
MAGNSTSFW03F	8/5/2003	100.0	100.0
PBW0805C	8/5/2003	100.0	100.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
GRANSTPWP53F	8/8/2003	100.0	100.0
GRANSTPWP54F	8/8/2003	100.0	100.0
GRANSTSFW53	8/8/2003	100.0	100.0
GRANSTSFW53D	8/8/2003	100.0	100.0
GRANSTSFW53F	8/8/2003	100.0	100.0
GRANSTSFW53FD	8/8/2003	100.0	100.0
GRANSTSFW53FS	8/8/2003	100.0	100.0
GRANSTSFW53S	8/8/2003	100.0	100.0
LCSW0808I	8/8/2003	100.0	100.0
MAGNADSFW13	8/8/2003	100.0	100.0
MAGNADSFW13F	8/8/2003	100.0	100.0
MAGNADSFW55	8/8/2003	100.0	100.0
MAGNADSFW55F	8/8/2003	100.0	100.0
MAGNPDSFW11	8/8/2003	100.0	100.0
MAGNPDSFW11F	8/8/2003	100.0	100.0
MAGNSTPWP02F	8/8/2003	100.0	100.0
MAGNSTPWP03F	8/8/2003	100.0	100.0
MAGNSTSFW03	8/8/2003	100.0	100.0
MAGNSTSFW03F	8/8/2003	100.0	100.0
PBW0808I	8/8/2003	100.0	100.0

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/31/2003 End Date: 7/31/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1728																								X
S10	1.00	1729																								X
S30	1.00	1730																								X
S50	1.00	1731																								X
S100	1.00	1732																								X
S200	1.00	1733																								X
S300	1.00	1734																								X
ICV	1.00	1735																								X
ICB	1.00	1736																								X
LRS	1.00	1737																								X
LRS	1.00	1738																								X
CCV	1.00	1739																								X
CCB	1.00	1740																								X
PBW0731C	1.00	1741																								X
ZZZZZZ	1.00	1742																								
LCSD0731C	1.00	1743																								X
ZZZZZZ	1.00	1744																								
ZZZZZZ	1.00	1745																								
ZZZZZZ	1.00	1746																								
MAGNSTPWP02	1.00	1747																								X
MAGNSTSFW03	1.00	1748																								X
MAGNSTPWP03	1.00	1749																								X
MAGNPDSFW11	1.00	1750																								X
CCV	1.00	1751																								X
CCB	1.00	1752																								X
MAGNADSFW13	1.00	1753																								X
GRANSTPWP54	1.00	1754																								X
GRANSTPWP53	1.00	1755																								X
GRANSTSFW53	1.00	1756																								X
GRANSTSFW53S	1.00	1757																								X
MAGNADSFW55	1.00	1758																								X
ZZZZZZ	1.00	1759																								
ZZZZZZ	1.00	1800																								
ZZZZZZ	1.00	1801																								
ZZZZZZ	1.00	1802																								
CCV	1.00	1803																								X
CCB	1.00	1803																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/8/2003 End Date: 8/8/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1355																X									
S0.2	1.00	1356																X									
S0.5	1.00	1358																X									
S1	1.00	1400																X									
S5	1.00	1402																X									
S10	1.00	1404																X									
ICV	1.00	1406																X									
ICB	1.00	1408																X									
CRA	1.00	1410																X									
CCV	1.00	1411																X									
CCB	1.00	1413																X									
ZZZZZZ	1.00	1415																									
ZZZZZZ	1.00	1417																									
ZZZZZZ	1.00	1418																									
ZZZZZZ	1.00	1420																									
ZZZZZZ	1.00	1422																									
ZZZZZZ	1.00	1424																									
ZZZZZZ	1.00	1425																									
ZZZZZZ	1.00	1427																									
ZZZZZZ	1.00	1429																									
CCV	1.00	1431																X									
CCB	1.00	1433																X									
ZZZZZZ	1.00	1435																									
ZZZZZZ	1.00	1436																									
ZZZZZZ	1.00	1438																									
ZZZZZZ	1.00	1440																									
ZZZZZZ	1.00	1442																									
ZZZZZZ	1.00	1443																									
ZZZZZZ	1.00	1445																									
ZZZZZZ	1.00	1447																									
ZZZZZZ	1.00	1449																									
CCV	1.00	1450																X									
CCB	1.00	1452																X									
ZZZZZZ	1.00	1454																									
PBW0805C	1.00	1455																X									
LCSW0805C	1.00	1458																X									
MAGNSTPWP02F	1.00	1459																X									
MAGNSTSFW03	1.00	1501																X									

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/8/2003 End Date: 8/8/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MAGNSTSFW03F	1.00	1503																X									
MAGNSTPWP03F	1.00	1505																X									
MAGNPDSFW11	1.00	1507																X									
MAGNPDSFW11F	1.00	1509																X									
CCV	1.00	1510																X									
CCB	1.00	1512																X									
MAGNADSFW13	1.00	1514																X									
MAGNADSFW13F	1.00	1516																X									
GRANSTPWP54F	1.00	1518																X									
GRANSTPWP53F	1.00	1520																X									
GRANSTSFW53	1.00	1522																X									
GRANSTSFW53D	1.00	1524																X									
GRANSTSFW53S	1.00	1525																X									
GRANSTSFW53F	1.00	1527																X									
GRANSTSFW53FD	1.00	1529																X									
CCV	1.00	1530																X									
CCB	1.00	1532																X									
GRANSTSFW53FS	1.00	1535																X									
MAGNADSFW55	1.00	1537																X									
MAGNADSFW55F	1.00	1539																X									
CCV	1.00	1541																X									
CCB	1.00	1543																X									

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 8/22/2003 End Date: 8/22/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	0120		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
S	1.00	0125		X						X						X				X			X							
S	1.00	0129			X	X									X															
S	1.00	0133					X	X	X		X	X	X				X		X			X			X	X				
LRS	1.00	0139		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
LRS	1.00	0144		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
LRS	1.00	0149		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
ICV	1.00	0155		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
ICB	1.00	0200		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
ICSA	1.00	0205		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
ICSAB	1.00	0210		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CRI	1.00	0215		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCV	1.00	0220		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCB	1.00	0225		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
PBW0808I	1.00	0231		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
LCSW0808I	1.00	0236		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNSTPWP02F	1.00	0241		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNSTSFW03	1.00	0246		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNSTSFW03F	1.00	0251		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNSTPWP03F	1.00	0256		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNPDSFW11	1.00	0301		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNPDSFW11F	1.00	0306		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNADSFW13	1.00	0311		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNADSFW13F	1.00	0316		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCV	1.00	0321		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCB	1.00	0327		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTPWP54F	1.00	0332		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTPWP53F	1.00	0337		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53	1.00	0342		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53L	5.00	0347		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53A	1.00	0352		X	X	X	X	X	X		X	X	X		X		X		X			X			X	X				
GRANSTSFW53D	1.00	0357		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53S	1.00	0402		X	X	X	X	X	X		X	X	X		X		X		X			X			X	X				
GRANSTSFW53F	1.00	0407		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53FL	5.00	0412		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53FA	1.00	0418		X	X	X	X	X	X		X	X	X		X		X		X			X			X	X				
CCV	1.00	0423		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCB	1.00	0428		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 8/22/2003 End Date: 8/22/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
GRANSTSFW53FD	1.00	0433		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
GRANSTSFW53FS	1.00	0438		X	X	X	X	X	X		X	X	X		X		X		X			X			X	X				
MAGNADSFW55	1.00	0443		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
MAGNADSFW55F	1.00	0448		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
ICSA	1.00	0453		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
ICSAB	1.00	0458		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CRI	1.00	0504		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCV	1.00	0509		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				
CCB	1.00	0514		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X	X		X	X				

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW004

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/29/2003 End Date: 8/29/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	0150												X							X			X						
S	1.00	0154												X																
S	1.00	0158																			X			X						
S	1.00	0202																												
LRS	1.00	0206												X							X			X						
LRS	1.00	0210												X							X			X						
LRS	1.00	0215												X							X			X						
ICV	1.00	0219												X							X			X						
ICB	1.00	0223												X							X			X						
ICSA	1.00	0227												X							X			X						
ICSAB	1.00	0231												X							X			X						
CRI	1.00	0235												X							X			X						
CCV	1.00	0239												X							X			X						
CCB	1.00	0244												X							X			X						
PBW0808I	1.00	0248												X							X			X						
LCSW0808I	1.00	0252												X							X			X						
MAGNSTPWP02F	1.00	0256												X							X			X						
MAGNSTSFW03	1.00	0300												X							X			X						
MAGNSTSFW03F	1.00	0304												X							X			X						
MAGNSTPWP03F	1.00	0308												X							X			X						
MAGNPDSFW11	1.00	0312												X							X			X						
MAGNPDSFW11F	1.00	0316												X							X			X						
MAGNADSFW13	1.00	0320												X							X			X						
MAGNADSFW13F	1.00	0324												X							X			X						
CCV	1.00	0328												X							X			X						
CCB	1.00	0333												X							X			X						
GRANSTPWP54F	1.00	0337												X							X			X						
GRANSTPWP53F	1.00	0341												X							X			X						
GRANSTSFW53	1.00	0345												X							X			X						
GRANSTSFW53L	5.00	0349												X							X			X						
GRANSTSFW53A	1.00	0353												X							X			X						
GRANSTSFW53D	1.00	0357												X							X			X						
GRANSTSFW53S	1.00	0401												X							X			X						
GRANSTSFW53F	1.00	0405												X							X			X						
GRANSTSFW53FL	5.00	0410												X							X			X						
GRANSTSFW53FA	1.00	0414												X							X			X						
CCV	1.00	0418												X							X			X						
CCB	1.00	0422												X							X			X						

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW004

Instrument ID Number: TJA ICAP 6 Method: P

Start Date: 8/29/2003 End Date: 8/29/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
GRANSTSFW53FD	1.00	0426												X							X			X						
GRANSTSFW53FS	1.00	0430												X							X			X						
MAGNADSFW55	1.00	0434												X							X			X						
MAGNADSFW55F	1.00	0438												X							X			X						
ICSA	1.00	0442												X							X			X						
ICSAB	1.00	0446												X							X			X						
CRI	1.00	0451												X							X			X						
CCV	1.00	0455												X							X			X						
CCB	1.00	0459												X							X			X						

SEVERN TRENT STL

Geotechnical Analysis
Sample Data Summary Package

EASEAT

GCW004

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

MAGNSTSFW03

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535380

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/17/03		mV	1	10	161	

Printed on: 09/08/03 01:58 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

MAGNPDSFW11

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535384

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/17/03		mV	1	10	167	

Printed on: 09/08/03 01:59 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNADSFW13

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535386

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/17/03		mV	1	10	193	

Printed on: 09/08/03 01:59 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.
GRANSTSFW53REP

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535392DP

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD*
QSOA	Redox Potential D1498	08/17/03		mV	184		183		1

** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/08/03 02:00 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.
GRANSTSFW53

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535392

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/17/03		mV	1	10	184	

Printed on: 09/08/03 02:01 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.
MAGNADSFW55

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW004

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535394

Matrix: WATER | Client: EASEAT | Date Received: 07/22/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/17/03		mV	1	10	186	

Printed on: 09/08/03 02:01 PM

ASTM Method D1498: Standard Practice for Oxidation-Reduction Potential of Water

Client Code:	EASEAT	**Analysis Date:**	8/17/2003
ETR:	94961	**Analysis Time:**	12:00
SDG:	GCW004	**Analyst:**	MRD

Oxidation-Reduction Potential Probe Calibration Check

Calibration Solution	Reading 1 (mV)	Reading 2 (mV)	Temp. (°C)
100 mL pH 4 buffer + 1.0g Quinhydrone	295	294	18.5
100 mL pH 7 buffer + 1.0g Quinhydrone	121	120	18.5

*Silver/Siver Chloride Reference Electrode used

Field Sample Oxidation-Reduction Potential Determinations

Laboratory Number	Temp. (°C)	Reading 1 (mV)	Reading 2 (mV)	Oxidation-Reduction Potential (ORP) in mV
535380	17.0	161	161	161
535384	17.0	169	165	167
535386	17.0	194	191	193
535392	17.0	184	183	184
535392DP	17.0	183	183	183
535394	17.0	187	185	186

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: GCW009

SEVERN TRENT STL

September 16, 2003

Ms. Jennifer Kindred
EA Engineering
12011 Bellevue-Redmond Rd.
Suite 200
Bellevue, WA 98005

Re: Laboratory Project No. 23046
Case No. 23046; SDG: GCW009

Dear Ms. Kindred:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on July 26, 2003. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 07/26/03 ETR No: 95007		
535945	BLACSTSFW04	07/22/03	Water
535946	BLACSTSFW04F	07/22/03	Water
535947	BLUEPDSFW40	07/20/03	Water
535948	BLUEPDSFW40F	07/20/03	Water
535949	BLUEPDSFW18	07/22/03	Water
535950	BLUEPDSFW18F	07/22/03	Water
535951	BLUEPDSFW16	07/22/03	Water
535952	BLUEPDSFW16F	07/22/03	Water
535953	BLACPDSFW43	07/23/03	Water
535954	BLACPDSFW43F	07/23/03	Water
535955	BLACSTPWP03	07/22/03	Water
535956	BLACSTPWP03F	07/22/03	Water
535957	BLACSTPWR02	07/22/03	Water
535958	BLACSTPWR02F	07/22/03	Water
535959	BLACSTPWP01	07/23/03	Water
535960	BLACSTPWP01F	07/23/03	Water
535961	BLACSTPWR03	07/22/03	Water
535962	BLACSTPWR03F	07/22/03	Water
535963	BLACADSFW11	07/23/03	Water
535964	BLACADSFW11F	07/23/03	Water

Due to reporting software limitations, sample identifications may have been truncated. In most instances only punctuation was removed.

Documentation that identifies the condition of the samples at the time of sample receipt and the issues arising at the time of sample log-in is included in the Sample Handling section of this submittal.

The analysis for arsenic speciation was performed by STL's North Canton facility, as approved by EA Engineering. STL North Canton assigned "Lot" numbers as samples were received. Though laboratory numbers may differ, the client's sample identifications were maintained. The results for this delivery group including a case narrative prepared by the North Canton laboratory are attached to the extended data package.

There were no exceptions to quality control criteria noted during the analysis of samples in this delivery group. If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0411.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure
MFW/jtd/jmm

0001-B LAST ALPHA

SEVERN TRENT **STL**

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

water

2 of 3

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: EA Engineering	Company: Same
Address: 12011 Bel Red Rd Suite 200, Bellevue, WA 98005	Address:
Contact: Jen Kindred	Contact:
Phone: 425-451-7480	Phone:
Fax: 425-451-7800	Fax:
Contract/ Quote:	

Sampler's Name: Don Norman

Sampler's Signature: Don Norman

Proj. No. 13890.16 (TM)

Project Name: Granite Creek Watershed

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	Arsenic Speciation	pH, redox, soy, spec. conduct, etc	TAL metals - Total	TAL Metals - dissolved	Cyanide	TSS/TDS	TSS/TDS (VR)	Lab/Sample ID (Lab Use Only)
W	7/22	1000		X	BLAC-ST-SFW-04		2	1	2	X	X	X	X	X			
W	7/20	1600		X	BLUE-AD-SFW-40		1	1	3	X	X	X	X	X			
W	7/22	1630		X	BLUE-PD-SFW-18		2	1	2	X	X	X	X	X			
W	7/22	1615		X	BLUE-PD-SFW-16		2	1	2	X	X	X	X	X			
W	7/23	1400		X	BLAC-PD-SFW-43		1	1	6	X	X	X	X	X	X		
W	7/22	1715		X	BLAC-ST-PWR-03			1	1				X	X			
W	7/22	1920		X	BLAC-ST-PWR-02			1	1				X	X			
W	7/23	1200		X	BLAC-ST-PWR-01			1	2	X			X	X			
W	7/22	1730		X	BLAC-ST-PWR-03			1	1				X	X			
W	7/23	1300		X	BLAC-AD-SFW-11		1	1	6	X	X	X	X	X	X		

yr = 03

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil

[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other 500 ml

STL cannot accept verbal changes.
Please Fax written changes to
(802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL

Geotechnical Analysis
Sample Data Summary Package

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTSFW04

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535945

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/27/03		mV	1	10	147	

Printed on: 09/08/03 04:03 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BLUEPDSFW40

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535947

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/27/03		mV	1	10	267	

Printed on: 09/08/03 04:04 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BLUEPDSFW18

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535949

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/27/03		mV	1	10	294	

Printed on: 09/08/03 04:05 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BLUEPDSFW16

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535951

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/27/03		mV	1	10	298	

Printed on: 09/08/03 04:05 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BLACPDSFW43

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535953

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/27/03		mV	1	10	228	

Printed on: 09/08/03 04:06 PM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BLACADSFW11

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535963

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
QSOA	Redox Potential D1498	08/27/03		mV	1	10	232	

Printed on: 09/08/03 04:07 PM

ASTM Method D1498: Standard Practice for Oxidation-Reduction Potential of Water

Client Code:	EASEAT	**Analysis Date:**	8/27/2003
ETR:	95007	**Analysis Time:**	14:40
SDG:	GCW009	**Analyst:**	DJP

Oxidation-Reduction Potential Probe Calibration Check

Calibration Solution	Reading 1 (mV)	Reading 2 (mV)	Temp. (°C)
100 mL pH 4 buffer + 1.0g Quinhydrone	294	292	21.0
100 mL pH 7 buffer + 1.0g Quinhydrone	122	118	21.0

*Silver/Siver Chloride Reference Electrode used

Field Sample Oxidation-Reduction Potential Determinations

Laboratory Number	Temp. (°C)	Reading 1 (mV)	Reading 2 (mV)	Oxidation-Reduction Potential (ORP) in mV
535945	23.0	149	145	147
535947	23.0	264	270	267
535949	23.0	291	297	294
535951	23.0	297	298	298
535953	23.0	231	225	228
535963	23.0	232	232	232

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACSTSFW04

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535945

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	08/12/03		umhos/cm	1	0.000	113	
130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	1	2.0	104	
310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	59.5	
310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	59.5	
375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	1	5.0	6.8	
9040B	Corrosivity by pH	07/28/03		pH Units	1	0.1	8.4	

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLUEPDSFW40

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535947

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	08/12/03		umhos/cm	1	0.000	163	
130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	1	2.0	148	
310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	6.8	
310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	6.8	
375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	5	25.0	63.3	
9040B	Corrosivity by pH	07/28/03		pH Units	1	0.1	5.2	

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.
BLUEPDSFW18

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535949

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	08/12/03		umhos/cm	1	0.000	171	
130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	1	2.0	228	
310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	5.4	
310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	5.4	
375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	5	25.0	65.9	
9040B	Corrosivity by pH	07/28/03		pH Units	1	0.1	5.2	

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLUEPDSFW16

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535951

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	08/12/03		umhos/cm	1	0.000	406	
130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	1	2.0	284	
310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.9	
310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.9	
375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	10	50.0	193	
9040B	Corrosivity by pH	07/28/03		pH Units	1	0.1	4.8	

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACPDSFW43

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535953

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	08/12/03		umhos/cm	1	0.000	170	
130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	1	2.0	124	
160.1	Total Dissolved Solids	07/30/03	BLKDS0730B	mg/L	1	5.0	105	
160.2	Total Suspended Solids	07/28/03	BLKSS0728E	mg/L	1	0.53	1.8	
160.4	Volatile Suspended Solids	07/28/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	20.2	
310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	20.2	
375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	5	25.0	60.1	
9040B	Corrosivity by pH	07/28/03		pH Units	1	0.1	6.1	

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

BLACADSFW11

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046 | Lab Sample ID: 535963

Matrix: WATER | Client: EASEAT | Date Received: 07/26/03

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
120.1	Conductivity (umhos/cm)	08/12/03		umhos/cm	1	0.000	179	
130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	1	2.0	128	
160.1	Total Dissolved Solids	07/30/03	BLKDS0730B	mg/L	1	5.0	209	
160.2	Total Suspended Solids	07/28/03	BLKSS0728E	mg/L	1	0.50	21.7	
160.4	Volatile Suspended Solids	07/28/03		mg/L	1	5.0	5.0	U
310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	1.0	U
310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	35.4	
310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	1	1.0	35.4	
375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	5	25.0	67.4	
9040B	Corrosivity by pH	07/28/03		pH Units	1	0.1	6.6	

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Method Blank Report Summary

Lab Name: STL BURLINGTON | Contract: LSO1024805 | SDG No.: GCW009

Lab Code: STLVT | Case No.: 23046

Matrix: WATER | Client: EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Conc.	Units	Qual.	DF	RL	Analytical Run Date	Analytical Batch
BLKAL0730A	310.1	Hydroxide Alkalinity	1.0	mg/L	U	1	1.0	07/30/03	BLKAL0730A
BLKAL0730A	310.1	Carbonate Alkalinity	1.0	mg/L	U	1	1.0	07/30/03	BLKAL0730A
BLKAL0730A	310.1	Bicarbonate Alkalinity	1.0	mg/L	U	1	1.0	07/30/03	BLKAL0730A
BLKAL0730A	310.1	Total Alkalinity	1.0	mg/L	U	1	1.0	07/30/03	BLKAL0730A
BLKDS0730B	160.1	Total Dissolved Solids	5.0	mg/L	U	1	5.0	07/30/03	BLKDS0730B
BLKHA0811A	130.2	Total Hardness as CaCO3	2.0	mg/L	U	1	2.0	08/11/03	BLKHA0811A
BLKSS0728E	160.2	Total Suspended Solids	0.50	mg/L	U	1	0.50	07/28/03	BLKSS0728E
BLKSU0807A	375.4	Sulfate	5.0	mg/L	U	1	5.0	08/07/03	BLKSU0807A

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Laboratory Control Sample Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW009

Lab Code: STLVT **Case No.:** 23046

Matrix: WATER **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCS Conc.	True Value	% Recovery*
LCS DS0730B	160.1	Total Dissolved Solids	07/30/03	BLKDS0730B	mg/L	50.0	50.0	100.0
LCSAL0730A	310.1	Hydroxide Alkalinity	07/30/03	BLKAL0730A	mg/L	59.7	54.7000	109.2
LCSAL0730A	310.1	Carbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	59.7	54.7000	109.2
LCSAL0730A	310.1	Bicarbonate Alkalinity	07/30/03	BLKAL0730A	mg/L	59.7	54.7000	109.2
LCSAL0730A	310.1	Total Alkalinity	07/30/03	BLKAL0730A	mg/L	59.7	54.7000	109.2
LCSCD0812A	120.1	Conductivity (umhos/cm)	08/12/03		umhos/c	1000	997.0000	100.3
LCSHA0811A	130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	124	121.0000	102.5
LCSPH0728A	9040B	Corrosivity by pH	07/28/03		pH Units	6.0	6.0000	100.5
LCSSS0728E	160.2	Total Suspended Solids	07/28/03	BLKSS0728E	mg/L	500	500	100.0
LCSSU0807A	375.4	Sulfate	08/07/03	BLKSU0807A	mg/L	9.6	10.0	96.0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*

Printed on: 09/10/03 06:50 PM

WET CHEMISTRY

Laboratory Control Sample Duplicate
Report Summary

Lab Name: STL BURLINGTON **Contract:** LSO1024805 **SDG No.:** GCW009

Lab Code: STLVT **Case No.:** 23046

Matrix: WATER **Client:** EASEAT

% Solids:

Lab Sample ID	Method	Parameter	Analytical Run Date	Analytical Batch	Units	LCSD Conc.	True Value	% Recovery*	RPD**
LCSDHA0811A	130.2	Total Hardness as CaCO3	08/11/03	BLKHA0811A	mg/L	124	121.0000	102.5	0
LCSDPH0728A	9040B	Corrosivity by pH	07/28/03		pH Units	6.0	6.0000	100.3	0

** Control Limit for Percent Recovery is 80-120%, unless otherwise specified.*
*** Control Limit for RPD is +/- 20%, unless otherwise specified.*

Printed on: 09/10/03 06:50 PM

SEVERN TRENT STL

Sample Data Summary Package For Metals

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
BLACADSFW11	535963
BLACADSFW11F	535964
BLACPDSFW43	535953
BLACPDSFW43F	535954
BLACSTPWP01	535959
BLACSTPWP01F	535960
BLACSTPWP03	535955
BLACSTPWP03F	535956
BLACSTPWR02	535957
BLACSTPWR02F	535958
BLACSTPWR03	535961
BLACSTPWR03F	535962
BLACSTSFW04	535945
BLACSTSFW04F	535946
BLUEPDSFW16	535951
BLUEPDSFW16F	535952
BLUEPDSFW18	535949
BLUEPDSFW18F	535950
BLUEPDSFW40	535947
BLUEPDSFW40F	535948

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

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

Signature: _____ Name: _____

Date: _____ Title: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACADSFW11

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535963

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	30.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	7460			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	11.8	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	26000			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	13000			P
7439-96-5	Manganese	2430			P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	44.8			P
7440-09-7	Potassium	1440	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2740	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	108			P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACADSFW11F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535964

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	27.6	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	7390			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	12.0	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	13100			P
7439-92-1	Lead	1.8	B		P
7439-95-4	Magnesium	12900			P
7439-96-5	Manganese	2380			P
7439-97-6	Mercury	0.21			CV
7440-02-0	Nickel	43.2			P
7440-09-7	Potassium	1460	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2820	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	89.3			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACPDSFW43

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535953

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	5.9	U		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	7420			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	231			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	13800			P
7439-96-5	Manganese	101			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1440	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2810	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	3.7	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACPDSFW43F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535954

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	5.9	U		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	7500			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.6	B		P
7439-89-6	Iron	53.0	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	13900			P
7439-96-5	Manganese	188			P
7439-97-6	Mercury	0.20			CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1460	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2800	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	4.9	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPWP01

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535959

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPWP01F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535960

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	36.3	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	23.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	13500			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	33.3	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	7540			P
7439-96-5	Manganese	2.9	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1560	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3420	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	3.0	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPWP03

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535955

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPWP03F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535956

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	18.8	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	33.3	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	7000			P
7439-96-5	Manganese	2.8	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1380	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2750	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	2.9	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACSTPWR02

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535957

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACSTPWR02F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535958

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	15.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	11400			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	33.3	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	6490			P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	0.12	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1300	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2580	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	1.9	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPWR03

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535961

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	10.0	U		AS

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTPWR03F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535962

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.6	U		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	13.6	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	11300			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	33.3	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	6510			P
7439-96-5	Manganese	0.71	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1210	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2560	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	1.4	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLACSTSFW04

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535945

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	59.0	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	15.1	B		P
7440-41-7	Beryllium	0.30	B		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	11900			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	33.3	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	6880			P
7439-96-5	Manganese	4.2	B		P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1260	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2620	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	2.8	B		P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLACSTSFW04F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535946

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24.9	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	14.6	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	11700			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	33.3	U		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	6780			P
7439-96-5	Manganese	2.8	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	U		P
7440-09-7	Potassium	1200	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	2600	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	1.8	B		P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUEPDSFW16

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535951

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	83.5	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	19.9	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	27400			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	30.8	B		P
7440-50-8	Copper	4.3	B		P
7439-89-6	Iron	1920			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	25600			P
7439-96-5	Manganese	4960			P
7439-97-6	Mercury	0.20	B		CV
7440-02-0	Nickel	129			P
7440-09-7	Potassium	1850	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	5680			P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	192			P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
BLUEPDSFW16F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535952

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	68.2	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	19.6	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	27300			P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	30.6	B		P
7440-50-8	Copper	2.9	B		P
7439-89-6	Iron	1310			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	25500			P
7439-96-5	Manganese	4930			P
7439-97-6	Mercury	0.27			CV
7440-02-0	Nickel	126			P
7440-09-7	Potassium	1860	B		P
7782-49-2	Selenium	3.4	B		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	5780			P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	192			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUEPDSFW18

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535949

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	225			P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	9.4	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	4470	B		P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	35.3	B		P
7440-50-8	Copper	3.4	B		P
7439-89-6	Iron	17400			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	11400			P
7439-96-5	Manganese	4980			P
7439-97-6	Mercury	0.30			CV
7440-02-0	Nickel	112			P
7440-09-7	Potassium	1340	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3080	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	210			P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUEPDSFW18F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535950

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	87.2	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	9.0	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.71	B		P
7440-70-2	Calcium	4370	B		P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	35.0	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	6740			P
7439-92-1	Lead	1.4	B		P
7439-95-4	Magnesium	11100			P
7439-96-5	Manganese	4860			P
7439-97-6	Mercury	0.24			CV
7440-02-0	Nickel	108			P
7440-09-7	Potassium	1310	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3270	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	204			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUEPDSFW40

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535947

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	614			P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	9.7	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	4350	B		P
7440-47-3	Chromium	5.0	B		P
7440-48-4	Cobalt	34.0	B		P
7440-50-8	Copper	8.7	B		P
7439-89-6	Iron	37500			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	11000			P
7439-96-5	Manganese	4750			P
7439-97-6	Mercury	0.38			CV
7440-02-0	Nickel	108			P
7440-09-7	Potassium	1330	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3080	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	202			P
57-12-5	Cyanide	10.0	U		AS

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLUEPDSFW40F

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Lab Sample ID: 535948

Level (low/med): LOW Date Received: 7/26/2003

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.8	B		P
7440-36-0	Antimony	4.7	U		P
7440-38-2	Arsenic	4.8	U		P
7440-39-3	Barium	9.3	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	4400	B		P
7440-47-3	Chromium	1.4	U		P
7440-48-4	Cobalt	34.8	B		P
7440-50-8	Copper	2.4	U		P
7439-89-6	Iron	7340			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium	11100			P
7439-96-5	Manganese	4790			P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	106			P
7440-09-7	Potassium	1340	B		P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	3090	B		P
7440-28-0	Thallium	5.7	U		P
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	198			P

Color Before: colorless Clarity Before: clear Texture:

Color After: colorless Clarity After: clear Artifacts:

Comments:

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	26000.0	26230.00	100.9	30200.0	29630.00	98.1	29460.00	97.5	P
Antimony	250.0	249.10	99.6	300.0	295.50	98.5	297.70	99.2	P
Arsenic	250.0	246.40	98.6	100.0	96.40	96.4	99.72	99.7	P
Barium	500.0	490.30	98.1	200.0	194.70	97.4	193.60	96.8	P
Beryllium	500.0	497.50	99.5	100.0	95.69	95.7	96.31	96.3	P
Cadmium	500.0	489.00	97.8	100.0	94.45	94.4	94.64	94.6	P
Calcium	25000.0	25290.00	101.2	30200.0	29290.00	97.0	29210.00	96.7	P
Chromium	500.0	494.50	98.9	200.0	190.40	95.2	190.60	95.3	P
Cobalt	500.0	488.30	97.7	200.0	191.80	95.9	193.10	96.6	P
Copper	500.0	497.60	99.5	200.0	196.80	98.4	195.50	97.8	P
Iron	25500.0	26210.00	102.8	30200.0	29400.00	97.4	29480.00	97.6	P
Lead	1000.0	995.10	99.5	400.0	383.10	95.8	385.90	96.5	P
Magnesium	25000.0	25330.00	101.3	30200.0	29130.00	96.5	29310.00	97.1	P
Manganese	500.0	490.80	98.2	200.0	192.50	96.2	193.40	96.7	P
Mercury	3.0	3.01	100.3	5.0	5.48	109.6	5.35	107.0	CV
Nickel	500.0	491.80	98.4	200.0	188.20	94.1	189.60	94.8	P
Potassium	25000.0	26500.00	106.0	30200.0	30880.00	102.3	30670.00	101.6	P
Selenium	250.0	242.20	96.9	100.0	94.93	94.9	97.41	97.4	P
Silver	500.0	495.20	99.0	100.0	96.59	96.6	97.68	97.7	P
Sodium	25000.0	25120.00	100.5	30200.0	29090.00	96.3	29180.00	96.6	P
Thallium	250.0	242.10	96.8	100.0	98.75	98.8	98.04	98.0	P
Vanadium	500.0	492.40	98.5	200.0	193.50	96.8	194.10	97.0	P
Zinc	500.0	495.30	99.1	200.0	193.50	96.8	194.60	97.3	P
Cyanide	120.0	113.10	94.2	150.0	145.09	96.7	144.62	96.4	AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				30200.0	29440.00	97.5	29540.00	97.8	P
Antimony				300.0	297.20	99.1	298.60	99.5	P
Arsenic				100.0	98.70	98.7	97.19	97.2	P
Barium				200.0	194.00	97.0	193.60	96.8	P
Beryllium				100.0	96.20	96.2	96.41	96.4	P
Cadmium				100.0	94.04	94.0	94.41	94.4	P
Calcium				30200.0	29140.00	96.5	29460.00	97.5	P
Chromium				200.0	190.50	95.2	191.10	95.6	P
Cobalt				200.0	193.10	96.6	193.80	96.9	P
Copper				200.0	196.10	98.0	196.10	98.0	P
Iron				30200.0	29510.00	97.7	29610.00	98.0	P
Lead				400.0	387.60	96.9	389.40	97.4	P
Magnesium				30200.0	29240.00	96.8	29400.00	97.4	P
Manganese				200.0	193.50	96.8	193.50	96.8	P
Mercury				5.0	5.45	109.0	5.29	105.8	CV
Nickel				200.0	190.20	95.1	191.00	95.5	P
Potassium				30200.0	30710.00	101.7	30660.00	101.5	P
Selenium				100.0	94.74	94.7	97.19	97.2	P
Silver				100.0	95.78	95.8	97.09	97.1	P
Sodium				30200.0	29220.00	96.8	29010.00	96.1	P
Thallium				100.0	98.44	98.4	99.39	99.4	P
Vanadium				200.0	194.20	97.1	194.30	97.2	P
Zinc				200.0	194.30	97.2	194.50	97.2	P
Cyanide				150.0	147.23	98.2			AS

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead	1000.0	985.70	98.6	400.0	390.20	97.6	388.80	97.2	P
Selenium	250.0	243.20	97.3	100.0	98.11	98.1	98.32	98.3	P

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

USEPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Initial Calibration Source: Inorganic Ventures/Fisher

Continuing Calibration Source: SPEX/Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Lead				400.0	388.10	97.0	389.60	97.4	P
Selenium				100.0	96.48	96.5	98.39	98.4	P

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

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				400.0	520.80	130.2	517.40	129.4
Antimony				120.0	119.20	99.3	121.60	101.3
Arsenic				20.0	19.33	96.6	17.24	86.2
Barium				400.0	386.30	96.6	388.00	97.0
Beryllium				10.0	9.99	99.9	9.87	98.7
Cadmium				10.0	9.83	98.3	9.46	94.6
Calcium				10000.0	10260.00	102.6	10160.00	101.6
Chromium				20.0	24.56	122.8	29.51	147.6
Cobalt				100.0	96.37	96.4	95.62	95.6
Copper				50.0	50.93	101.9	51.15	102.3
Iron				200.0	268.90	134.4	279.10	139.6
Lead				6.0	5.36	89.3	4.54	75.7
Magnesium				10000.0	10050.00	100.5	9947.00	99.5
Manganese				30.0	33.32	111.1	31.57	105.2
Mercury	0.2	0.26	130.0					
Nickel				80.0	106.40	133.0	96.67	120.8
Potassium				10000.0	10760.00	107.6	10800.00	108.0
Selenium				10.0	11.09	110.9	11.59	115.9
Silver				20.0	19.19	96.0	19.17	95.8
Sodium				10000.0	9713.00	97.1	9685.00	96.8
Thallium				20.0	19.32	96.6	19.68	98.4
Vanadium				100.0	97.23	97.2	95.93	95.9
Zinc				40.0	40.07	100.2	39.85	99.6

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

AA CRDL Standard Source: Inorganic Ventures

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP Initial True	Found	%R	Final Found	%R
Lead				6.0	6.69	111.5	5.56	92.7
Selenium				10.0	10.36	103.6	10.69	106.9

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	23.6	U	23.6	U	23.6	U	23.6	U	23.600	U	P
Antimony	4.7	U	4.7	U	4.7	U	4.7	U	4.700	U	P
Arsenic	4.8	U	4.8	U	4.8	U	4.8	U	4.800	U	P
Barium	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Beryllium	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Calcium	182.1	U	182.1	U	182.1	U	182.1	U	182.100	U	P
Chromium	-3.1	B	-2.7	B	-3.2	B	-3.1	B	-2.813	B	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Copper	2.4	U	2.4	U	2.4	U	2.4	U	2.400	U	P
Iron	-33.3	B	33.3	U	33.3	U	-35.0	B	33.300	U	P
Lead	1.3	U	1.3	U	1.3	U	-1.8	B	1.300	U	P
Magnesium	178.3	U	178.3	U	178.3	U	178.3	U	178.300	U	P
Manganese	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Mercury	0.1	B	0.1	B	0.2	B	0.1	B	0.100	U	CV
Nickel	-3.4	B	-3.0	B	-3.7	B	-2.8	B	-3.736	B	P
Potassium	393.0	U	393.0	U	393.0	U	393.0	U	393.000	U	P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U	3.400	U	P
Silver	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Sodium	472.7	U	472.7	U	472.7	U	472.7	U	472.700	U	P
Thallium	5.7	U	5.7	U	5.7	U	5.7	U	5.700	U	P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	2.354	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	AS

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			23.6	U							P
Antimony			4.7	U							P
Arsenic			4.8	U							P
Barium			5.9	U							P
Beryllium			0.2	U							P
Cadmium			0.6	U							P
Calcium			182.1	U							P
Chromium			-3.1	B							P
Cobalt			2.0	U							P
Copper			2.4	U							P
Iron			33.3	U							P
Lead			1.3	U							P
Magnesium			178.3	U							P
Manganese			0.7	U							P
Mercury			0.1	U							CV
Nickel			-3.2	B							P
Potassium			393.0	U							P
Selenium			3.4	U							P
Silver			2.2	U							P
Sodium			472.7	U							P
Thallium			5.7	U							P
Vanadium			2.0	U							P
Zinc			1.0	U							P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead	1.3	U	1.3	U	1.3	U	1.3	U			P
Selenium	3.4	U	3.4	U	3.4	U	3.4	U			P

USEPA - CLP

3

BLANKS

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Lead			1.4	B							P
Selenium			3.4	U							P

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	482740	493200	486900.0	100.9	490000	485200.0	100.5
Antimony	0	596	-1	602.5	101.1	-3	598.1	100.4
Arsenic	0	102	3	97.6	95.7	3	101.8	99.8
Barium	0	503	2	487.2	96.9	2	484.9	96.4
Beryllium	0	482	0	464.1	96.3	0	470.7	97.7
Cadmium	0	938	-1	901.0	96.1	-1	906.6	96.7
Calcium	500000	477840	482600	474100.0	99.2	474500	478900.0	100.2
Chromium	0	483	1	463.2	95.9	0	468.2	96.9
Cobalt	0	457	-1	444.0	97.2	-1	452.0	98.9
Copper	0	526	4	499.2	94.9	4	499.7	95.0
Iron	200000	191980	198400	192700.0	100.4	196000	194900.0	101.5
Lead	0	49	-1	45.9	93.7	-2	45.1	92.0
Magnesium	500000	521880	531500	521400.0	99.9	522400	529300.0	101.4
Manganese	0	474	1	458.1	96.6	1	462.9	97.7
Nickel	0	952	-2	922.8	96.9	-2	934.5	98.2
Potassium	0	0	74	-17.4		-8	52.4	
Selenium	0	47	1	43.9	93.4	-1	43.3	92.1
Silver	0	213	0	206.5	96.9	0	207.0	97.2
Sodium	0	0	-403	-318.4		-409	-297.9	
Thallium	0	89	-5	84.9	95.4	-6	89.3	100.3
Vanadium	0	478	3	458.3	95.9	3	462.3	96.7
Zinc	0	998	3	970.6	97.3	3	978.0	98.0

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

ICP ID Number: TJA ICAP 4 ICS Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	49	-3	45.1	92.0	1	43.9	89.6
Selenium	0	47	-9	39.3	83.6	-7	43.4	92.3

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	50940.00	99.9						
Antimony	2000.0	2030.00	101.5						
Arsenic	1050.0	1043.00	99.3						
Barium	500.0	494.10	98.8						
Beryllium	500.0	492.20	98.4						
Cadmium	525.0	504.60	96.1						
Calcium	50000.0	49840.00	99.7						
Chromium	500.0	502.60	100.5						
Cobalt	500.0	485.90	97.2						
Copper	500.0	505.80	101.2						
Iron	50500.0	51230.00	101.4						
Lead	1015.0	1000.00	98.5						
Magnesium	50000.0	50090.00	100.2						
Manganese	500.0	491.30	98.3						
Mercury	1.0	0.96	96.0						
Nickel	500.0	495.30	99.1						
Potassium	50000.0	49770.00	99.5						
Selenium	525.0	491.20	93.6						
Silver	500.0	414.90	83.0						
Sodium	50000.0	51030.00	102.1						
Thallium	550.0	529.10	96.2						
Vanadium	500.0	500.50	100.1						
Zinc	500.0	490.50	98.1						
Cyanide	120.0	114.80	95.7						

7

LABORATORY CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Solid LCS Source: _____

Aqueous LCS Source: Inorganic Ventures

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	51000.0	50390.00	98.8						
Antimony	2000.0	1979.00	99.0						
Arsenic	1050.0	1015.00	96.7						
Barium	500.0	489.10	97.8						
Beryllium	500.0	479.60	95.9						
Cadmium	525.0	490.00	93.3						
Calcium	50000.0	48650.00	97.3						
Chromium	500.0	493.10	98.6						
Cobalt	500.0	474.00	94.8						
Copper	500.0	500.50	100.1						
Iron	50500.0	49990.00	99.0						
Lead	1015.0	970.90	95.7						
Magnesium	50000.0	48810.00	97.6						
Manganese	500.0	481.30	96.3						
Mercury	1.0	1.12	112.0						
Nickel	500.0	485.30	97.1						
Potassium	50000.0	49570.00	99.1						
Selenium	525.0	484.20	92.2						
Silver	500.0	410.00	82.0						
Sodium	50000.0	50470.00	100.9						
Thallium	550.0	514.70	93.6						
Vanadium	500.0	489.60	97.9						
Zinc	500.0	477.90	95.6						
Cyanide	120.0	116.06	96.7						

9
ICP SERIAL DILUTIONS

SAMPLE NO.

BLACSTSFW04L

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	58.95	B	118.00	U	100.0		P
Antimony	4.70	U	23.50	U			P
Arsenic	4.80	U	24.00	U			P
Barium	15.11	B	29.50	U	100.0		P
Beryllium	0.30	B	1.00	U	100.0		P
Cadmium	0.60	U	3.00	U			P
Calcium	11880.00		11850.00	B	0.3		P
Chromium	1.40	U	7.00	U			P
Cobalt	2.00	U	10.00	U			P
Copper	2.40	U	12.00	U			P
Iron	33.30	U	166.50	U			P
Lead	1.30	U	6.50	U			P
Magnesium	6885.00		6871.00	B	0.2		P
Manganese	4.24	B	4.81	B	13.4		P
Nickel	2.10	U	10.50	U			P
Potassium	1264.00	B	1965.00	U	100.0		P
Selenium	3.40	U	17.00	U			P
Silver	2.20	U	11.00	U			P
Sodium	2616.00	B	2363.50	U	100.0		P
Thallium	5.70	U	28.50	U			P
Vanadium	2.00	U	10.00	U			P
Zinc	2.78	B	14.20	B	410.8		P

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

ICP ID Number: Date: 7/1/2003

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	10.0	AS

Comments:

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

ICP ID Number: Date: 7/1/2003

Flame AA ID Number: Leeman Hydra AA

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.10	CV

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Lead	220.353		3	1.3	P
Selenium	196.026		5	3.4	P

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0008950	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000330	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0004320
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006300	0.0000000	0.0000090	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0000220	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000200	0.0000000	-0.0000900	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000490	0.0000000	0.0000000
Zinc	213.86	0.0000250	0.0000000	0.0000630	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0072400
Antimony	206.84	0.0000000	0.0111600	0.0000000	0.0000000	-0.0024800
Arsenic	189.04	0.0000000	0.0004700	0.0000000	0.0000000	0.0013380
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0001150	0.0000000	0.0000000	0.0000000	0.0001350
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	-0.0016380
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.1059800	0.0000000	0.0000000	0.0000000	0.0036200
Lead	220.35	-0.0022600	-0.0001190	0.0000000	0.0000000	-0.0007540
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	-0.0004300	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	-0.0038600	0.0000000	0.0000000	-0.0042750
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007920
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0032700	0.0002540	0.0000000	-0.008140	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0160000
Zinc	213.86	0.0000000	0.0000000	0.0003300	0.0000000	0.0000000

Comments: _____

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

ICP ID Number: TJA ICAP 4 Date: 6/30/2003

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ni	Sb	Sn	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.1440400	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0006280	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	-0.000192	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0237000	0.0000000
Lead	220.35	0.0001240	-0.0002280	0.0000000	0.0005020	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0001660	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	-0.1212200	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.1177000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0025400	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0052400	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

ICP ID Number: TJA ICAP 4 Date: 7/1/2003

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Lead	10.00	10000.0	P
Selenium	10.00	5000.0	P

Comments:

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Method: AS

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLACADSFW11	7/31/2003	50.0	50.0
BLACPDSFW43	7/31/2003	50.0	50.0
BLACSTPWP01	7/31/2003	50.0	50.0
BLACSTPWP03	7/31/2003	50.0	50.0
BLACSTPWR02	7/31/2003	50.0	50.0
BLACSTPWR03	7/31/2003	50.0	50.0
BLACSTSFW04	7/31/2003	50.0	50.0
BLUEPDSFW16	7/31/2003	50.0	50.0
BLUEPDSFW18	7/31/2003	50.0	50.0
BLUEPDSFW40	7/31/2003	50.0	50.0
ICV	7/31/2003	50.0	50.0
LCS0731A	7/31/2003	50.0	50.0
LCSD0731A	7/31/2003	50.0	50.0
PBW0731A	7/31/2003	50.0	50.0

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLACADSFW11	8/5/2003	100.0	100.0
BLACADSFW11F	8/5/2003	100.0	100.0
BLACPDSFW43	8/5/2003	100.0	100.0
BLACPDSFW43F	8/5/2003	100.0	100.0
BLACSTPWP01F	8/5/2003	100.0	100.0
BLACSTPWP03F	8/5/2003	100.0	100.0
BLACSTPWR02F	8/5/2003	100.0	100.0
BLACSTPWR03F	8/5/2003	100.0	100.0
BLACSTSFW04	8/5/2003	100.0	100.0
BLACSTSFW04F	8/5/2003	100.0	100.0
BLUEPDSFW16	8/5/2003	100.0	100.0
BLUEPDSFW16F	8/5/2003	100.0	100.0
BLUEPDSFW18	8/5/2003	100.0	100.0
BLUEPDSFW18F	8/5/2003	100.0	100.0
BLUEPDSFW40	8/5/2003	100.0	100.0
BLUEPDSFW40F	8/5/2003	100.0	100.0
LCSDW0805F	8/5/2003	100.0	100.0
LCSW0805F	8/5/2003	100.0	100.0
PBW0805F	8/5/2003	100.0	100.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
BLACADSFW11	8/8/2003	100.0	100.0
BLACADSFW11F	8/8/2003	100.0	100.0
BLACPDSFW43	8/8/2003	100.0	100.0
BLACPDSFW43F	8/8/2003	100.0	100.0
BLACSTPWP01F	8/8/2003	100.0	100.0
BLACSTPWP03F	8/8/2003	100.0	100.0
BLACSTPWR02F	8/8/2003	100.0	100.0
BLACSTPWR03F	8/8/2003	100.0	100.0
BLACSTSFW04	8/8/2003	100.0	100.0
BLACSTSFW04F	8/8/2003	100.0	100.0
BLUEPDSFW16	8/8/2003	100.0	100.0
BLUEPDSFW16F	8/8/2003	100.0	100.0
BLUEPDSFW18	8/8/2003	100.0	100.0
BLUEPDSFW18F	8/8/2003	100.0	100.0
BLUEPDSFW40	8/8/2003	100.0	100.0
BLUEPDSFW40F	8/8/2003	100.0	100.0
LCSDW0808H	8/8/2003	100.0	100.0
LCSW0808H	8/8/2003	100.0	100.0
PBW0808H	8/8/2003	100.0	100.0

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Instrument ID Number: Lachat Cyanide QC8000 Method: AS

Start Date: 7/31/2003 End Date: 7/31/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1336																								X
S10	1.00	1337																								X
S30	1.00	1338																								X
S50	1.00	1339																								X
S100	1.00	1340																								X
S200	1.00	1341																								X
S300	1.00	1342																								X
ICV	1.00	1343																								X
ICB	1.00	1344																								X
LRS	1.00	1345																								X
LRS	1.00	1346																								X
CCV	1.00	1347																								X
CCB	1.00	1348																								X
PBW0731A	1.00	1349																								X
ZZZZZZ	1.00	1350																								
LCS0731A	1.00	1351																								X
ZZZZZZ	1.00	1352																								
LCSD0731A	1.00	1353																								X
ZZZZZZ	1.00	1354																								
ZZZZZZ	1.00	1355																								
ZZZZZZ	1.00	1356																								
ZZZZZZ	1.00	1357																								
ZZZZZZ	1.00	1358																								
CCV	1.00	1359																								X
CCB	1.00	1400																								X
BLACSTSFW04	1.00	1401																								X
BLUEPDSFW40	1.00	1402																								X
BLUEPDSFW18	1.00	1403																								X
BLUEPDSFW16	1.00	1404																								X
BLACPDSFW43	1.00	1405																								X
BLACSTPWP03	1.00	1406																								X
BLACSTPWR02	1.00	1407																								X
BLACSTPWP01	1.00	1408																								X
BLACSTPWR03	1.00	1409																								X
BLACADSFW11	1.00	1410																								X
CCV	1.00	1411																								X
CCB	1.00	1411																								X

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/11/2003 End Date: 9/11/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1719													X						X						
S	1.00	1723																									
S	1.00	1727													X						X						
S	1.00	1730																									
LRS	1.00	1736													X						X						
LRS	1.00	1740													X						X						
LRS	1.00	1745													X						X						
ICV	1.00	1750													X						X						
ICB	1.00	1755													X						X						
ICSA	1.00	1759													X						X						
ICSAB	1.00	1804													X						X						
CRI	1.00	1809													X						X						
CCV	1.00	1814													X						X						
CCB	1.00	1818													X						X						
ZZZZZZ	1.00	1823																									
ZZZZZZ	1.00	1828																									
ZZZZZZ	1.00	1832																									
ZZZZZZ	1.00	1837																									
ZZZZZZ	5.00	1842																									
ZZZZZZ	1.00	1846																									
ZZZZZZ	1.00	1851																									
ZZZZZZ	1.00	1856																									
ZZZZZZ	1.00	1900																									
ZZZZZZ	1.00	1905																									
CCV	1.00	1910													X						X						
CCB	1.00	1914													X						X						
ZZZZZZ	1.00	1919																									
ZZZZZZ	1.00	1924																									
ZZZZZZ	1.00	1929																									
ZZZZZZ	1.00	1933																									
ZZZZZZ	5.00	1938																									
ZZZZZZ	1.00	1943																									
ZZZZZZ	1.00	1947																									
ZZZZZZ	1.00	1952																									
ZZZZZZ	1.00	1957																									
ZZZZZZ	5.00	2001																									
CCV	1.00	2006													X						X						
CCB	1.00	2011													X						X						

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/11/2003 End Date: 9/11/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN				
ZZZZZZ	1.00	2015																												
BLACSTPWR03F	1.00	2020																			X									
BLACADSFW11	1.00	2025													X															
ICSA	1.00	2029													X						X									
ICSAB	1.00	2034													X						X									
CRI	1.00	2039													X						X									
CCV	1.00	2044													X						X									
CCB	1.00	2048													X						X									

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/13/2003 End Date: 8/13/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2131																X									
S0.2	1.00	2132																X									
S0.5	1.00	2134																X									
S1	1.00	2136																X									
S5	1.00	2138																X									
S10	1.00	2140																X									
ICV	1.00	2141																X									
ICB	1.00	2143																X									
CRA	1.00	2145																X									
CCV	1.00	2147																X									
CCB	1.00	2148																X									
PBW0805F	1.00	2150																X									
LCSW0805F	1.00	2152																X									
LCSDW0805F	1.00	2154																X									
BLACSTSFW04	1.00	2156																X									
BLACSTSFW04F	1.00	2158																X									
BLUEPDSFW40	1.00	2159																X									
BLUEPDSFW40F	1.00	2201																X									
BLUEPDSFW18	1.00	2203																X									
BLUEPDSFW18F	1.00	2205																X									
CCV	1.00	2207																X									
CCB	1.00	2208																X									
BLUEPDSFW16	1.00	2210																X									
BLUEPDSFW16F	1.00	2212																X									
BLACPDSFW43	1.00	2214																X									
BLACPDSFW43F	1.00	2215																X									
BLACSTPWP03F	1.00	2217																X									
BLACSTPWR02F	1.00	2219																X									
BLACSTPWP01F	1.00	2221																X									
BLACSTPWR03F	1.00	2223																X									
BLACADSFW11	1.00	2225																X									
CCV	1.00	2227																X									
CCB	1.00	2228																X									
BLACADSFW11F	1.00	2230																X									
ZZZZZZ	1.00	2232																									
ZZZZZZ	1.00	2234																									
ZZZZZZ	1.00	2236																									
ZZZZZZ	1.00	2237																									

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: SDG No.: GCW009

Instrument ID Number: Leeman Hydra AA Method: CV

Start Date: 8/13/2003 End Date: 8/13/2003

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2239																										
ZZZZZZ	1.00	2241																										
ZZZZZZ	1.00	2243																										
ZZZZZZ	1.00	2245																										
CCV	1.00	2247																X										
CCB	1.00	2249																X										

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/7/2003 End Date: 9/7/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
S0	1.00	1935		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
S	1.00	1940		X						X				X		X				X			X							
S	1.00	1944			X	X									X						X			X						
S	1.00	1948					X	X	X		X	X	X				X		X			X			X	X				
LRS	1.00	1953		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LRS	1.00	1958		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LRS	1.00	2004		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICV	1.00	2009		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICB	1.00	2014		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICSA	1.00	2019		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
ICSAB	1.00	2024		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CRI	1.00	2029		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	2034		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	2039		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
PBW0808H	1.00	2045		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LCSW0808H	1.00	2050		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LCSDW0808H	1.00	2055		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTSFW04	1.00	2100		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTSFW04L	5.00	2105		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTSFW04F	1.00	2110		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLUEPDSFW40	1.00	2115		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLUEPDSFW40F	1.00	2120		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLUEPDSFW18	1.00	2125		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLUEPDSFW18F	1.00	2130		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	2135		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	2140		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLUEPDSFW16	1.00	2145		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLUEPDSFW16F	1.00	2150		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACPDSFW43	1.00	2155		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACPDSFW43F	1.00	2200		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTPWP03F	1.00	2205		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTPWR02F	1.00	2210		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTPWP01F	1.00	2216		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
BLACSTPWR03F	1.00	2221		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X				
BLACADSFW11	1.00	2226		X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X				
BLACADSFW11F	1.00	2231		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.00	2236		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.00	2241		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				

USEPA - CLP

14

ANALYSIS RUN LOG

Lab Name: STL BURLINGTON Contract: 23046

Lab Code: STLVT Case No.: 23046 SAS No.: _____ SDG No.: GCW009

Instrument ID Number: TJA ICAP 4 Method: P

Start Date: 9/7/2003 End Date: 9/7/2003

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN				
ICSA	1.00	2246		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICSAB	1.00	2251		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CRI	1.00	2256		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCV	1.00	2301		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCB	1.00	2307		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					

ABA Data

BC RESEARCH Inc.

BC Research Inc., BC Research and Innovation Complex, 3650 Wesbrook Mall, Vancouver, BC, Canada V6S 2L2
Telephone: (604) 224-4331 • Facsimile: (604) 224-0540 • Email: info@bcresearch.com • Website: bcresearch.com

Table 1: Modified ABA Results for STL Burlington Samples Batch 3 - Received July 29, 2003

Sample	Paste pH	Total Sulphur (Wt.%)	Sulphate Sulphur (Wt.%)	Sulphide Sulphur* (Wt.%)	Maximum Potential Acidity** (Kg CaCO3/Tonne)	Neutralization Potential (Kg CaCO3/Tonne)	Net Neutralization Potential (Kg CaCO3/Tonne)	Fizz Rating
AJAX-WP-SUS-08-1.2	7.8	0.74	0.01	0.73	22.8	72.5	49.7	slight
AJAX-WP-SUS-09-1.0	8.2	0.57	<0.01	0.57	17.8	83.8	66.0	slight
AJAX-WP-SUS-10-2.0	4.1	0.09	0.06	0.03	0.9	-1.3	-2.2	none
CAPM-WP-SUS-20-4.0	7.2	< .02	<0.01	< .02	<0.6	3.3	3.3	none
CAPM-WP-SUS-21-2.5	7.7	0.25	<0.01	0.25	7.8	11.0	3.2	none
CAPM-WP-SUS-39-2.0	5.1	< .02	<0.01	< .02	<0.6	-1.3	-1.3	none
GRAN-BG-SSS-34-0.5	6.0	< .02	<0.01	< .02	<0.6	-5.0	-5.0	none
GRAN-BG-SSS-35-0.5	6.4	< .02	<0.01	< .02	<0.6	-5.0	-5.0	none
GRAN-BG-SSS-36-0.5	6.3	< .02	<0.01	< .02	<0.6	0.5	0.5	none
LUCA-BG-SSS-19-0.5	5.7	< .02	<0.01	< .02	<0.6	-6.0	-6.0	none
MAGN-TA-SSS-15-0.5	4.8	0.53	0.20	0.33	10.3	-2.3	-12.6	none
MAGN-TA-SSS-15-0.5-100	4.7	0.37	0.23	0.14	4.4	-1.3	-5.7	none
MAGN-WP-SUS-14-3.0	5.7	1.58	0.61	0.97	30.3	12.5	-17.8	slight
MAGN-WP-SUS-14-3.0 Rep.	5.9	1.47	0.61	0.86	26.9	13.5	-13.4	slight
MAGN-WP-SSS-16-0.5	3.1	0.32	0.27	0.05	1.6	-5.3	-6.9	none
MAGN-WP-SUS-17-2.0	7.7	0.77	0.02	0.75	23.4	31.0	7.6	slight
SHER-WP-SUS-23-3.5	7.2	< .02	<0.01	< .02	<0.6	4.8	4.8	none

*Based on difference between total sulphur and sulphate-sulphur

**Based on sulphide-sulphur

BC RESEARCH Inc.

BC Research Inc., BC Research and Innovation Complex, 3650 Wesbrook Mall, Vancouver, BC, Canada V6S 2L2
Telephone: (604) 224-4331 • Facsimile: (604) 224-0540 • Email: info@bcresearch.com • Website: bcresearch.com

Table 2a: QA/QC for NP Determination (Modified ABA Method)

Sample	Neutralisation Potential (kgCaCO3/Tonne)	Neutralisation Potential (kgCaCO3/Tonne)
CAPM-WP-SUS-20-4.0	3.3	2.5
MAGN-WP-SSS-16-0.5	-5.3	-5.8
NBM-1 Reference (NP = 42)	39.5	-

Table 2b: QA/QC for Sulphur Speciation

Sample	Sulphur (Wt.%)	Sulphur (Wt.%)
Duplicates - total sulphur		
LUCA-BG-SSS-19-0.5	<.02	<.02
SHER-WP-SUS-23-3.5	<.02	<.02
Std. CSB (5.3%)	5.34	-
BCRI Std. (0.11%)	0.11	-
Dulpicates - sulphate sulphur		
AJAX-WP-SUS-08-1.2	0.01	0.01
MAGN-WP-SUS-17-2.0	<0.01	<0.01
BCRI 0.23% SO4-S Ref.	0.24	-

Clay Mineralogy

K/T GeoServices
Incorporated

X-ray Diffraction
Mineralogy
with Impact

www.ktgeo.com

(940) 597-9076
fax (940) 387-9980

4993 Kiowa Trail
Argyle TX 76226

September 19, 2003

Cathy Bohlke
EA Engineering, Science and Technology
12011 Bellevue-Redmond Rd, Suite 200
Bellevue, WA 98005
425-451-7400 ext. 144

Subject: X-ray Diffraction Analysis
Project No.: 1389016-0007
K/T File No.: Z03222C

Dear Cathy,

This report presents the results of clay fraction (<4 micron) X-ray diffraction (XRD) analyses performed on 7 samples. These analyses are performed to provide mineralogy of the samples.

Enclosed find the tabular XRD data (weight percentage), diffraction traces for the sample and a detailed description of sample preparation and analytical procedures. For your convenience, I have sent a copy of this report via e-mail.

Unused portions of the sample will be returned upon request. If you have any questions concerning these results or if you need anything else please contact me at (940) 597-9076.

Thank you for using K/T GeoServices to perform your X-ray diffraction analyses and I look forward to working with you again in the future.

Sincerely,

James Talbot

Mineral Definitions

Phyllosilicate (Clay) Minerals

Smectite (Montmorillonite)
A clay mineral group synonymous with the montmorillonite group. The smectite group is composed of expandable (swelling) clay minerals. The general formula for Smectite is $Al_2(Si_4O_{10})(OH)_2$. Smectites are characterized by swelling in water and extreme colloidal behavior.

Illite & Mica
Illite & Mica (muscovite) are common non-expanding (non-swelling) minerals. Illite is the fine-grained clay mineral analogue to muscovite. Illite and Mica are hydrated silicates containing potassium, silica and alumina.

Kaolinite
Kaolinite is a common non-expanding (non-swelling) clay mineral. It is a hydrous aluminum silicate with the general formula $Al_2(Si_2O_5)(OH)_4$.

Chlorite
Chlorite is a common non-expanding (non-swelling) clay mineral. It is a hydrous aluminum silicate that often contains iron.

Reference for general mineral definitions:
Dictionary of Geological Terms, American Geological Institute, 1976, Anchor Press/Doubleday, Garden City, New York.

Mineral Definitions (continued)

Rock Forming (nonclay) Minerals

Amphibole
The term amphibole refers to a mineral group. Hornblende is a common member of this group.

Goethite
Goethite ($FeO \bullet OH$) is a common weathering product of iron-bearing minerals such as siderite, magnetite, pyrite, etc.

Quartz
Quartz (SiO_2) is the most common rock-forming mineral.

Plagioclase
Plagioclase is a mineral series ranging in composition from Albite ($NaAlSi_3O_8$) to Anorthite ($CaAl_2Si_2O_8$) and is one of the most common rock forming mineral groups.

Reference for general mineral definitions:
Dictionary of Geological Terms, American Geological Institute, 1976, Anchor Press/Doubleday, Garden City, New York.

Discussion of Terminology and Limitations

Clay Fraction (<4 micron size fraction)

For purposes of this report, the clay fraction is defined as the <4 micron ESD (Equivalent Spherical Diameter) fraction of the sample. Clay fraction does not mean clay minerals (phyllosilicates) only, it is a size term and as such this size fraction can and almost always does include non-clay minerals (quartz, plagioclase, etc.). This size fraction is used because it typically contains abundant clay minerals.

Clay Fraction weight %

The <4 micron size cutoff for this fraction is based on calculated settling rates for the specific centrifuge used in the sample preparation. This is not a strict size analysis but is considered a convenient cutoff to aid in clay mineral analysis.

Data table

Data are formatted as weight percent, but are actually calculated as weight fractions. Therefore, slight rounding errors may be observed in the formatted data.

Non-crystalline (X-ray amorphous) material

XRD methods can quantify crystalline material only. Organic non-crystalline material in large concentrations can be detected but not quantified. Therefore, any organic and/or non-crystalline material is not included in the accompanying results.

K/T GeoServices, Inc., Clay Fraction XRD
Sample Preparation and Analytical Procedures

Sample Preparation

Samples submitted for clay fraction XRD analysis are first dried overnight in a convection oven at 60° C. The samples are then disaggregated using a mortar and pestle, weighed, and dispersed in a dilute sodium phosphate solution using a sonic probe. The samples are next size-fractionated using a centrifuge into bulk (>4 microns) and clay-size fractions (<4 microns equivalent spherical diameter (ESD)). The bulk fractions of each sample are dried and weighed in order to determine weight loss due to removal of clay-size materials. This weight loss is identified in the accompanying data table as "<4 Weight %." The clay suspensions (clay-size fractions) are decanted and vacuum deposited on membrane filters to produce oriented clay mounts. The oriented clay mounts are attached to glass slides and exposed to ethylene glycol vapor at 60 degrees C in a vacuum oven for a minimum of 12 hours to aid in detection and characterization of expandable clays.

Analytical Procedures

X-ray Diffraction (XRD) analyses of the samples are performed using a Rigaku automated powder diffractometer equipped with a copper X-ray source (40kV, 35mA) and a scintillation X-ray detector. The glycol solvated oriented clay mounts are analyzed over an angular range of two to fifty degrees two theta at a rate of one and one half degrees per minute.

Semi-quantitative determinations of clay fraction mineral amounts are done utilizing integrated peak areas (derived from peak-decomposition / profile-fitting methods) and empirical reference intensity ratio (RIR) factors determined specifically for the diffractometer used in data collection. The relative amounts of phyllosilicate minerals are determined from the patterns using profile-fitted integrated peak intensities and combined empirical and calculated RIR factors. Determinations of mixed-layer clay ordering and expandability are done by comparing experimental diffraction data from the glycol-solvated clay aggregates with simulated one dimensional diffraction profiles generated using the program NEWMOD written by R. C. Reynolds.

Weight Percent X-ray Diffraction Data

Project No.	1389016-0007	1389016-0007	1389016-0007	1389016-0007	1389016-0007	1389016-0007	1389016-0007
XRD#	1	2	3	27	28	29	30
Sample ID	AJAX-ST-PSD-04	AJAX-PD-SSD-06	AJAX-ST-SSD-52	MAGN-ST-PSD-01	MAGN-ST-PSD-02	MAGN-ST-PSD-03	MAGN-PD-SSD-11
<4 Weight%	2.4%	28.3%	3.2%	2.9%	2.9%	2.0%	13.2%
Smectite	17 %	16 %	3.8%	56 %	36 %	39 %	21 %
Illite & Mica	15 %	51 %	35 %	4.5%	22 %	24 %	36 %
Kaolinite	15 %	0%	14 %	0%	24 %	16 %	30 %
Chlorite	0%	13 %	0%	0%	0.5%	0.6%	0.5%
Amphibole	5.9%	0%	5.9%	9.6%	3.9%	8.8%	4.5%
Goethite	0%	20 %	0%	0%	0%	0%	0%
Quartz	36 %	0%	32 %	0%	9.1%	8.2%	5.8%
Plagioclase	11 %	0%	8.1%	30 %	4.4%	2.9%	2.7%
TOTAL	100%	100%	100 %	100%	100 %	100 %	100%

K/T GeoServices
Incorporated

X-ray Diffraction
Mineralogy
with Impact

www.ktgeo.com

(940) 597-9076
fax (940) 387-9980

4993 Kiowa Trail
Argyle TX 76226

September 26, 2003

Cathy Bohlke
EA Engineering, Science and Technology
12011 Bellevue-Redmond Rd, Suite 200
Bellevue, WA 98005
425-451-7400 ext. 144

Subject: X-ray Diffraction Analysis
Project No.: 1389013-0002
K/T File No.: Z03222D

Dear Cathy,

This report presents the results of clay fraction (<4 micron) X-ray diffraction (XRD) analyses performed on 11 samples. These analyses are performed to provide mineralogy of the samples.

Enclosed find the tabular XRD data (weight percentage), diffraction traces for the sample and a detailed description of sample preparation and analytical procedures. For your convenience, I have sent a copy of this report via e-mail.

Unused portions of the sample will be returned upon request. If you have any questions concerning these results or if you need anything else please contact me at (940) 597-9076.

Thank you for using K/T GeoServices to perform your X-ray diffraction analyses and I look forward to working with you again in the future.

Sincerely,

James Talbot

Mineral Definitions

Phyllosilicate (Clay) Minerals

Smectite (Montmorillonite)
A clay mineral group synonymous with the montmorillonite group. The smectite group is composed of expandable (swelling) clay minerals. The general formula for Smectite is $Al_2(Si_4O_{10})(OH)_2$. Smectites are characterized by swelling in water and extreme colloidal behavior.

Illite & Mica
Illite & Mica (muscovite) are common non-expanding (non-swelling) minerals. Illite is the fine-grained clay mineral analogue to muscovite. Illite and Mica are hydrated silicates containing potassium, silica and alumina.

Kaolinite
Kaolinite is a common non-expanding (non-swelling) clay mineral. It is a hydrous aluminum silicate with the general formula $Al_2(Si_2O_5)(OH)_4$.

Chlorite
Chlorite is a common non-expanding (non-swelling) clay mineral. It is a hydrous aluminum silicate that often contains iron.

Reference for general mineral definitions:
Dictionary of Geological Terms, American Geological Institute, 1976, Anchor Press/Doubleday, Garden City, New York.

Mineral Definitions (continued)

Rock Forming (nonclay) Minerals

Amphibole
The term amphibole refers to a mineral group. Hornblende is a common member of this group.

Laumontite
Laumontite is a zeolite mineral with the formula $Ca(Al_2Si_4O_{12})\bullet 4H_2O$.

Quartz
Quartz (SiO_2) is the most common rock-forming mineral.

Plagioclase
Plagioclase is a mineral series ranging in composition from Albite ($NaAlSi_3O_8$) to Anorthite ($CaAl_2Si_2O_8$) and is one of the most common rock forming mineral groups.

Reference for general mineral definitions:
Dictionary of Geological Terms, American Geological Institute, 1976, Anchor Press/Doubleday, Garden City, New York.

Discussion of Terminology and Limitations

Clay Fraction (<4 micron size fraction)

For purposes of this report, the clay fraction is defined as the <4 micron ESD (Equivalent Spherical Diameter) fraction of the sample. Clay fraction does not mean clay minerals (phyllosilicates) only, it is a size term and as such this size fraction can and almost always does include non-clay minerals (quartz, plagioclase, etc.). This size fraction is used because it typically contains abundant clay minerals.

Clay Fraction weight %

The <4 micron size cutoff for this fraction is based on calculated settling rates for the specific centrifuge used in the sample preparation. This is not a strict size analysis but is considered a convenient cutoff to aid in clay mineral analysis.

Data table

Data are formatted as weight percent, but are actually calculated as weight fractions. Therefore, slight rounding errors may be observed in the formatted data.

Non-crystalline (X-ray amorphous) material

XRD methods can quantify crystalline material only. Organic non-crystalline material in large concentrations can be detected but not quantified. Therefore, any organic and/or non-crystalline material is not included in the accompanying results.

K/T GeoServices, Inc., Clay Fraction XRD
Sample Preparation and Analytical Procedures

Sample Preparation

Samples submitted for clay fraction XRD analysis are first dried overnight in a convection oven at 60° C. The samples are then disaggregated using a mortar and pestle, weighed, and dispersed in a dilute sodium phosphate solution using a sonic probe. The samples are next size-fractionated using a centrifuge into bulk (>4 microns) and clay-size fractions (<4 microns equivalent spherical diameter (ESD)). The bulk fractions of each sample are dried and weighed in order to determine weight loss due to removal of clay-size materials. This weight loss is identified in the accompanying data table as "<4 Weight %." The clay suspensions (clay-size fractions) are decanted and vacuum deposited on membrane filters to produce oriented clay mounts. The oriented clay mounts are attached to glass slides and exposed to ethylene glycol vapor at 60 degrees C in a vacuum oven for a minimum of 12 hours to aid in detection and characterization of expandable clays.

Analytical Procedures

X-ray Diffraction (XRD) analyses of the samples are performed using a Rigaku automated powder diffractometer equipped with a copper X-ray source (40kV, 35mA) and a scintillation X-ray detector. The glycol solvated oriented clay mounts are analyzed over an angular range of two to fifty degrees two theta at a rate of one and one half degrees per minute.

Semi-quantitative determinations of clay fraction mineral amounts are done utilizing integrated peak areas (derived from peak-decomposition / profile-fitting methods) and empirical reference intensity ratio (RIR) factors determined specifically for the diffractometer used in data collection. The relative amounts of phyllosilicate minerals are determined from the patterns using profile-fitted integrated peak intensities and combined empirical and calculated RIR factors. Determinations of mixed-layer clay ordering and expandability are done by comparing experimental diffraction data from the glycol-solvated clay aggregates with simulated one dimensional diffraction profiles generated using the program NEWMOD written by R. C. Reynolds.

Weight Percent X-ray Diffraction Data

Project No.	1389013-0002	1389013-0002
XRD#	25	26
Sample ID	GRAN-ST-PSD-53	GRAN-ST-PSD-54
<4 Weight%	2.1%	1.9%
Smectite	6.5%	8.5%
Illite & Mica	39 %	64 %
Kaolinite	5.6%	8.8%
Chlorite	2.2%	1.6%
Amphibole	3.4%	5.5%
Laumontite	0%	0%
Quartz	31 %	9.9%
Plagioclase	13 %	1.9%
TOTAL	100%	100%