STL Edison
777 New Durham Road
Edison, NJ 08817

Tel 732 549 3900 Fax 732 549 3679
www.stl-inc.com

11/14/2005

ENSR Consulting & Engineering - NJ
20 New England Ave
Piscataway, NJ 08854

Attention: Mr. Greg Micalizio

Laboratory Results
Job No. H389 - Phillipsburg

Dear Mr. Micalizio:

Enclosed are the results you requested for the following sample(s) received at our laboratory on October 18, 2005.

Lab No.	Client ID	Analysis Required
678433	MW49	Methane, Ethane, Ethene
		Fe
		Sulfide
		Ferric Iron
		Alkalinity
		Chloride
		Nitrate
		Ammonia
		Sulfate
		Alkalinity - Carbonate
		Alkalinity - Bicarbonate
		Ferrous Iron
		Heterotrophic Plate Count
678434	RW09	Methane, Ethane, Ethene
		Fe
		Sulfide
		Ferric Iron
		Alkalinity
		Chloride
		Nitrate

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Laboratory Results
Job No. H389 - Phillipsburg (cont'd)

Lab No.	Client ID	Analysis Required
		Ammonia
		Sulfate
		Alkalinity - Carbonate
		Alkalinity - Bicarbonate
		Ferrous Iron
		Heterotrophic Plate Count
678435	RW16	Methane, Ethane, Ethene
		Fe
		Sulfide
		Ferric Iron
		Alkalinity
		Chloride
		Nitrate
		Ammonia
		Sulfate
		Alkalinity - Carbonate
		Alkalinity - Bicarbonate
		Ferrous Iron

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Laboratory Results
Job No. H389 - Phillipsburg (cont'd)

Lab No.	Client ID	Analysis Required
		Heterotrophic Plate Count

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, David Lissy, at (732) 549-3900.

Very Truly Yours,

Michael J. Urban
Laboratory Manager

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Analytical Results Summary

Client ID: **MW49**
Site: Phillipsburg

Lab Sample No: **678433**
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05
Date Analyzed: 10/26/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9726.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	ND	5.0
Ethene	ND	5.0
Ethane	ND	5.0

Client ID: **RW09**
Site: Phillipsburg

Lab Sample No: **678434**
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05
Date Analyzed: 10/31/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9742.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 50.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	3600	250
Ethene	ND	250
Ethane	ND	250

Client ID: **RW16**
Site: Phillipsburg

Lab Sample No: **678435**
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05
Date Analyzed: 10/31/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9741.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 25.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	3000	120
Ethene	ND	120
Ethane	ND	120

Client ID: **MW49**
Site: **Phillipsburg**

Lab Sample No: 678433
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Iron	388	47.4	P

M Column - Method Code (See Section 2 of Report)

Client ID: **RW09**
Site: **Phillipsburg**

Lab Sample No: 678434
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Iron	4570	47.4	P

M Column - Method Code (See Section 2 of Report)

Client ID: **RW16**
Site: **Phillipsburg**

Lab Sample No: 678435
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Iron	6320	47.4	P

M Column - Method Code (See Section 2 of Report)

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 2083

Alkalinity

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/28/05	1.0	208
678434	RW09	10/18/05	10/28/05	1.0	312
678435	RW16	10/18/05	10/28/05	1.0	480

Quantitation Limit for Alkalinity is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 2083

Alkalinity - Bicarbonate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/28/05	1.0	208
678434	RW09	10/18/05	10/28/05	1.0	312
678435	RW16	10/18/05	10/28/05	1.0	480

Quantitation Limit for Alkalinity - Bicarbonate is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 2083

Alkalinity - Carbonate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/28/05	1.0	ND
678434	RW09	10/18/05	10/28/05	1.0	ND
678435	RW16	10/18/05	10/28/05	1.0	ND

Quantitation Limit for Alkalinity - Carbonate is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 1021

Ammonia

STL Edison Sample #	Client ID	Date Sampled	Date Extracted	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	11/01/05	11/02/05	1.0	0.13
678434	RW09	10/18/05	11/01/05	11/02/05	1.0	0.28
678435	RW16	10/18/05	11/01/05	11/02/05	1.0	0.86

Quantitation Limit for Ammonia is 0.1 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 2310

Chloride

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/24/05	1.0	32.5
678434	RW09	10/18/05	10/24/05	1.0	139
678435	RW16	10/18/05	10/24/05	1.0	82.9

Quantitation Limit for Chloride is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 0160

Ferrous Iron

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/19/05	1.0	ND
678434	RW09	10/18/05	10/19/05	1.0	3.3
678435	RW16	10/18/05	10/19/05	1.0	4.6

Quantitation Limit for Ferrous Iron is 0.1 mg/l.

X-Method 3500-Fe (Standard Methods for the Examination of Water and Wastewater, 18th Edition) specifies that ferrous iron be determined "at sampling site because of the possibility of change in the ferrous-ferric ratio with time in acid solutions" (p3-67).

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: -----

Heterotrophic Plate Count

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: CFU/mL
678433	MW49	10/18/05	10/18/05	1.0	505
678434	RW09	10/18/05	10/18/05	1.0	416
678435	RW16	10/18/05	10/18/05	1.0	529

Quantitation Limit for Heterotrophic Plate Count is 0.0 CFU/mL.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 1486

Nitrate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/20/05	5.0	7.6
678434	RW09	10/18/05	10/19/05	1.0	ND
678435	RW16	10/18/05	10/19/05	1.0	ND

Quantitation Limit for Nitrate is 0.1 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: -----

Ferric Iron

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	11/02/05	1.0	0.39
678434	RW09	10/18/05	11/02/05	1.0	1.3
678435	RW16	10/18/05	11/02/05	1.0	1.7

Quantitation Limit for Ferric Iron is 0.1 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 2253

Sulfate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/24/05	1.0	26.2
678434	RW09	10/18/05	10/24/05	1.0	ND
678435	RW16	10/18/05	10/24/05	1.0	ND

Quantitation Limit for Sulfate is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 1717

Sulfide

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/24/05	1.0	ND
678434	RW09	10/18/05	10/24/05	1.0	ND
678435	RW16	10/18/05	10/24/05	1.0	ND

Quantitation Limit for Sulfide is 1.0 mg/l.

General Information

Chain of Custody

H389

STL Edison

20

STL EDISON
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): GREGG MICALIZIO
Company: ENSR
Address: 20 NEW ENGLAND AVE.
City: PISCATAWAY, State: NJ
Phone: 732-981-0200 Fax: 732-981-0116

Samplers Name (Printed): J. Holzer, A. Mosoly
P.O. #: 2034012

Site/Project Identification: IR-PHILLIPSBURG
State (Location of site): NJ: [x] NY: [ ] Other:
Regulatory Program: ISRA

Analysis Turnaround Time
Standard [x]
Rush Charges Authorized For:
2 Week [ ]
1 Week [ ]
Other [ ] _____

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No: 924152
Job No: H389

Sample Identification	Date	Time	Matrix	No. of. Cont.	Methane, Ethane, Ethene	Alkalinity, Sulfate, Nitrate	Chloride, Ammonia	Fe, Fe+2, Fe+3	Total Sulfide	Heterotrophic Plate Count					Sample Numbers
MW49	10-18-05	10:20	GW	10	X	X	X	X	X	X	X				678433
RW09	10-18-05	14:55	GW	10	X	X	X	X	X	X	X				678434
RW16	10-18-05	13:05	GW	10	X	X	X	X	X	X	X				678435
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other Sterile w/ Thio				Soil:											
				Water:	1,2	1	1	1,3	1,4	1,5	1,7				

Special Instructions: Alkalinity, BICARBONATE, & CARBONATE Alkalinities

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) [signature]	ENSR	10/18/05 15:40	1) [signature]	STL
2) [signature]	STL	10/18/05 16:05	2) [signature]	STL
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

STL-6003

Laboratory Chronicles

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No: H389 **Site:** Phillipsburg

Client: ENSR Consulting & Engineering - NJ

VOAGC

3810

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/26/2005	Yip, Ming	1093
678434	10/18/2005	10/18/2005			10/31/2005	Yip, Ming	1093
678435	10/18/2005	10/18/2005			10/31/2005	Yip, Ming	1093

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

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08817

Job No:	H389	**Site:**	Phillipsburg
Client:	ENSR Consulting & Engineering - NJ	**Date Sampled:**	10/18/2005
Sample No.:	678433	**Date Received:**	10/18/2005
		Matrix:	WATER

METALS

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
IRON	10/24/2005	Dave, Virendra	10/25/2005	Maguire, Christopher	19473

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No:	H389	**Site:**	Phillipsburg
Client:	ENSR Consulting & Engineering - NJ	**Date Sampled:**	10/18/2005
Sample No.:	678434	**Date Received:**	10/18/2005
		Matrix:	WATER

METALS

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
IRON	10/24/2005	Dave, Virendra	10/25/2005	Maguire, Christopher	19473

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

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08817

Job No:	H389	**Site:**	Phillipsburg
Client:	ENSR Consulting & Engineering - NJ	**Date Sampled:**	10/18/2005
Sample No.:	678435	**Date Received:**	10/18/2005
		Matrix:	WATER

METALS

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
IRON	10/24/2005	Dave, Virendra	10/25/2005	Maguire, Christopher	19473

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

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Job No: H389 **Site:** Phillipsburg

Client: ENSR Consulting & Engineering - NJ

WET CHEM

ALKALINITY

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083
678434	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083
678435	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083

ALKALINITY - BICARBONATE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083
678434	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083
678435	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083

ALKALINITY - CARBONATE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083
678434	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No: H389 **Site:** Phillipsburg

Client: ENSR Consulting & Engineering - NJ

WET CHEM

ALKALINITY - CARBONATE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678435	10/18/2005	10/18/2005			10/28/2005	Galing, Maria	2083

CHLORIDE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/24/2005	Raisa, Kamenetskaya	2310
678434	10/18/2005	10/18/2005			10/24/2005	Raisa, Kamenetskaya	2310
678435	10/18/2005	10/18/2005			10/24/2005	Raisa, Kamenetskaya	2310

FERROUS IRON

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/19/2005	Raisa, Kamenetskaya	0160
678434	10/18/2005	10/18/2005			10/19/2005	Raisa, Kamenetskaya	0160
678435	10/18/2005	10/18/2005			10/19/2005	Raisa, Kamenetskaya	0160

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No: H389 **Site:** Phillipsburg

Client: ENSR Consulting & Engineering - NJ

WET CHEM

Het P C WW

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/18/2005	Karim, Amna	-----
678434	10/18/2005	10/18/2005			10/18/2005	Karim, Amna	-----
678435	10/18/2005	10/18/2005			10/18/2005	Karim, Amna	-----

NITROGEN-AMMONIA

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			11/2/2005	Kaur, Kuldeep	1021
678434	10/18/2005	10/18/2005			11/2/2005	Kaur, Kuldeep	1021
678435	10/18/2005	10/18/2005			11/2/2005	Kaur, Kuldeep	1021

NITROGEN-NITRATE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/20/2005	Kaur, Kuldeep	1486
678434	10/18/2005	10/18/2005			10/19/2005	Kaur, Kuldeep	1486

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No: H389 **Site:** Phillipsburg

Client: ENSR Consulting & Engineering - NJ

WET CHEM

NITROGEN-NITRATE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678435	10/18/2005	10/18/2005			10/19/2005	Kaur, Kuldeep	1486

Ferric Iron

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			11/2/2005	Legaspi, Gloria	-----
678434	10/18/2005	10/18/2005			11/2/2005	Legaspi, Gloria	-----
678435	10/18/2005	10/18/2005			11/2/2005	Legaspi, Gloria	-----

SULFATE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/24/2005	Raisa, Kamenetskaya	2253
678434	10/18/2005	10/18/2005			10/24/2005	Raisa, Kamenetskaya	2253
678435	10/18/2005	10/18/2005			10/24/2005	Raisa, Kamenetskaya	2253

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No: H389 **Site:** Phillipsburg

Client: ENSR Consulting & Engineering - NJ

WET CHEM

TOTAL SULFIDE

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
WATER							
678433	10/18/2005	10/18/2005			10/24/2005	Ullah, Ibad	1717
678434	10/18/2005	10/18/2005			10/24/2005	Ullah, Ibad	1717
678435	10/18/2005	10/18/2005			10/24/2005	Ullah, Ibad	1717

Methodology Review

Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2 Rev 4.1. Solid samples are analyzed for volatile organics as specified in the EPA publication “Test Methods for Evaluating Solid Waste” (SW-846, 3rd Edition) Method 8260B. Water samples are analyzed for volatile organics by purge and trap GC/PID and GC/ELCD as specified in EPA Methods 601 and 602. Solid samples are analyzed by GC/PID and GC/ELCD in accordance with SW-846, 3rd Edition Method 8021B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication “Test Methods for Evaluating Solid Waste” (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication “Test Methods for Evaluating Solid Waste” (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP “Remedial Investigation Guide” Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)

A - Flame Atomic Absorption

F - Furnace Atomic Absorption

CV - Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in “Methods for Chemical Analysis of Water and Wastewater” (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication “Test Methods for Evaluating Solid Waste” (SW-846, 3rd Edition); samples are digested according to Method 3050B “Acid Digestion of Soil, Sediments and Sludges.”

Specific method references for ICP analyses are water Method - 200.7/SW846 6010B and for solid matrix - 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1/7470A and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

Element	Water Test Method Furnace	Solid Test Method Furnace
Antimony	200.9	7041
Arsenic	200.9	7060A
Cadmium	200.9	7131A
Lead	200.9	7421
Selenium	200.9	7740
Thallium	200.9	7841

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in water and solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication “Test Methods for Evaluating Solid Waste” (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability	- Method 1020A
Corrosivity	- Water pH Method 9040B Soil pH Method 9045C
Reactivity	- Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release
Toxicity	- TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

Data Reporting Qualifiers

ORGANIC DATA REPORTING QUALIFIERS

ND - The compound was not detected at the indicated concentration.

J - Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified quantitation limit but greater than or equal to the method detection limit. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

INORGANIC DATA REPORTING QUALIFIERS (SW-846 METHODS ONLY)

ND/U - The compound was not detected at the indicated concentration.

B - Reported value is less than the Practical Quantitation Limit but greater than or equal to the Instrument Detection Limit.

E - The reported value is estimated because of the presence of interference. See explanatory note in the Nonconformance Summary if the problem applies to all of the samples or on the individual Inorganic Analysis Data Sheet if the problem is isolated.

M - Duplicate injection precision not met on the Furnace Atomic Absorption analysis.

N - The spiked sample recovery is not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

* - Duplicate Analysis is not within control limits.

W - Post digestion spike for Furnace Atomic Absorption analysis is out of control.

+ - Correlation coefficient for MSA is less than 0.995.

M Column - Method Qualifiers

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP).

A - Flame Atomic Absorption Spectroscopy (FAA).

F - Graphite Furnace Atomic Absorption Spectroscopy (GFAA).

CV - Cold Vapor Atomic Absorption Spectroscopy.

Non-Conformance Summary

Nonconformance Summary

STL Edison Job Number: H389

Client: ENSR Consulting & Engineering - NJ

Date: 11/8/2005

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC):

All data conforms with method requirements.

Metals:

All data conforms with method requirements.

Wet Chemistry \ Microbiology:

QA batch 2253 : MS/MSD-Duplicate RPD for Sulfate is biased high.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael J.Urban
Laboratory Manager

GC/FID Forms and Data (Methane,Ethane,Ethene)

Results Summary and Chromatograms

Client ID: **MW49**
Site: Phillipsburg

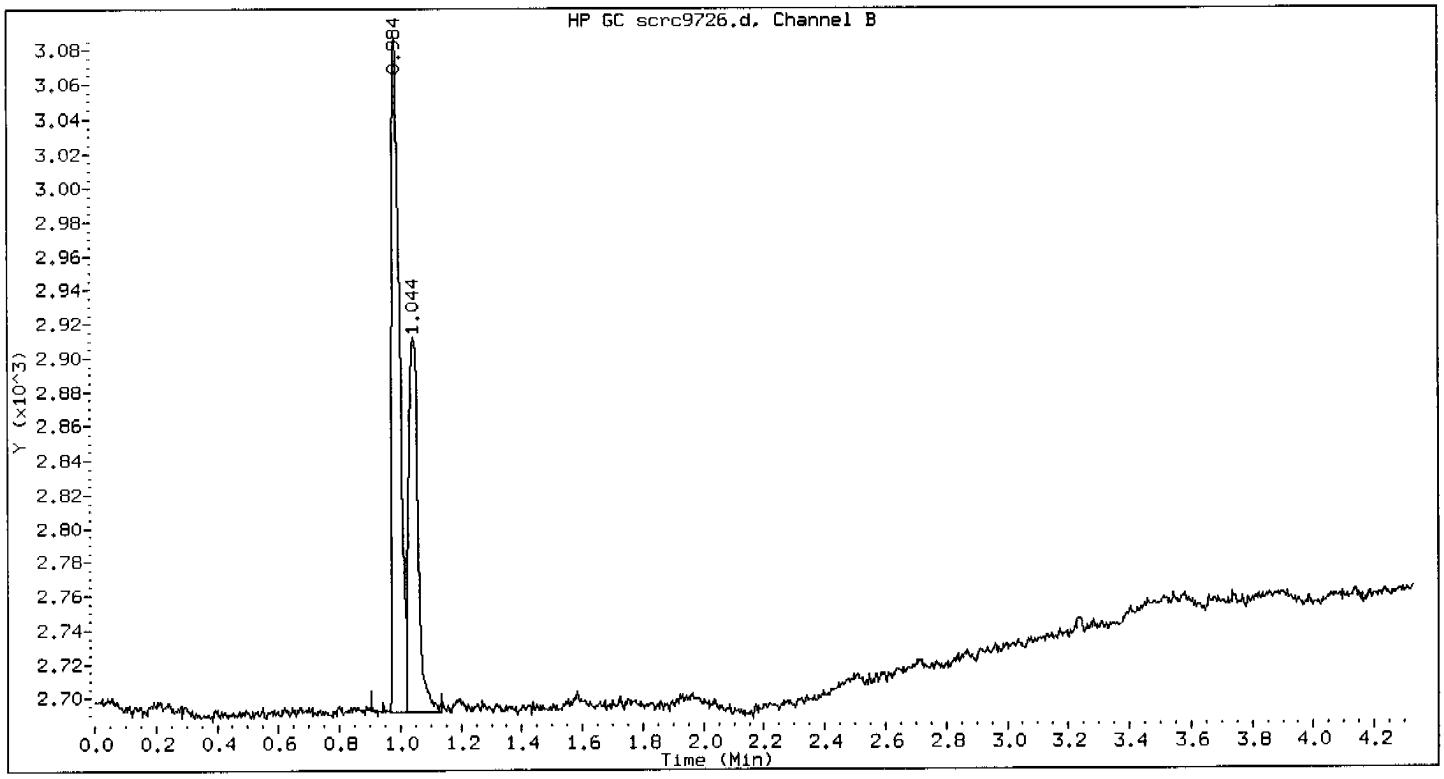
Lab Sample No: **678433**
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05
Date Analyzed: 10/26/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9726.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	ND	5.0
Ethene	ND	5.0
Ethane	ND	5.0



Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : 678433
Lab ID : 678433
Inj Date : 26-OCT-2005 16:25
Operator : vscreen3
Cpnd Sublist: MEE

Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)

Client ID: **RW09**
Site: Phillipsburg

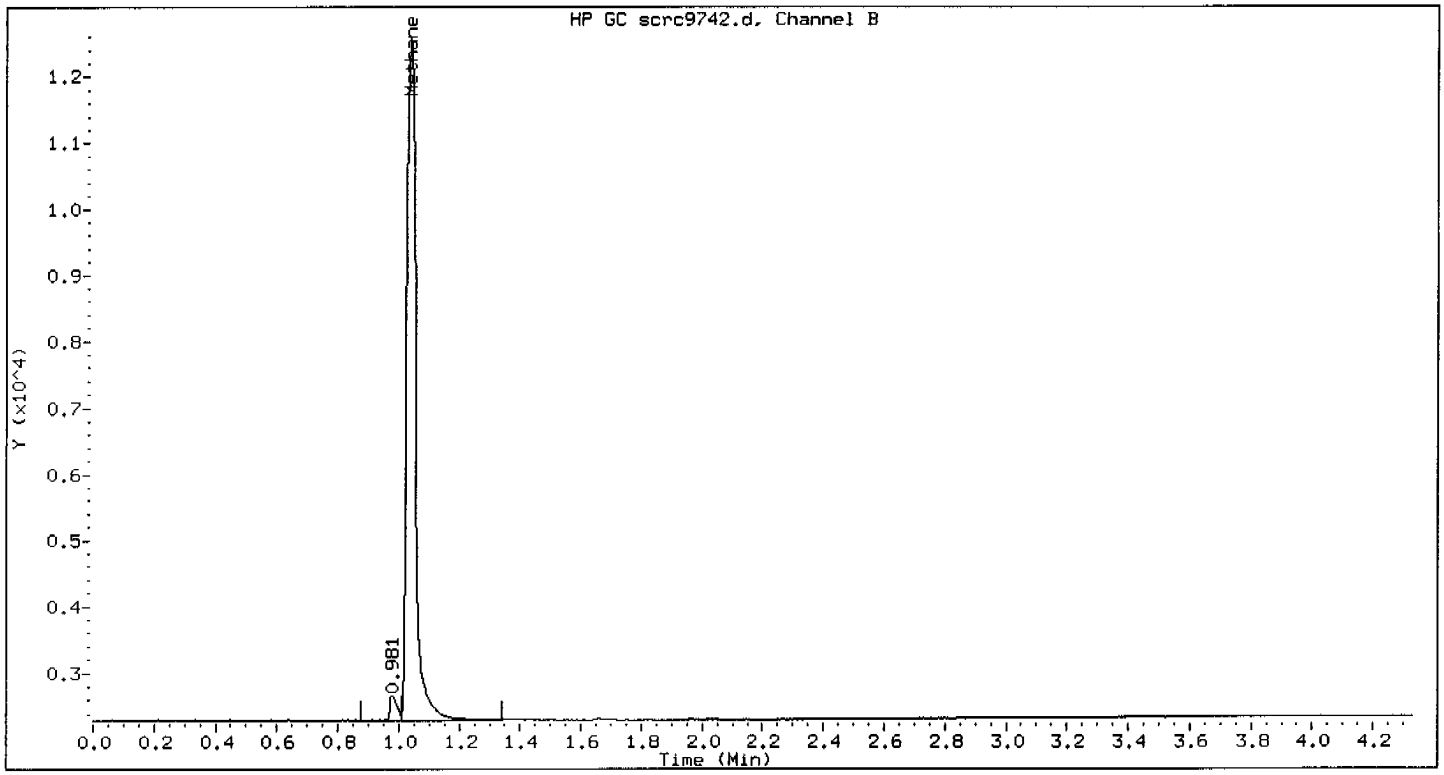
Lab Sample No: **678434**
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05
Date Analyzed: 10/31/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9742.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 50.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	3600	250
Ethene	ND	250
Ethane	ND	250



Method : /chem/VSCREEN3.i/3810/10-26-05/31oct05.b/3810_05.m
Sample Info : 678434;;50
Lab ID : 678434
Inj Date : 31-OCT-2005 14:45
Operator : vscreen3
Cpnd Sublist: MEE
Inst ID : VSCREEN3.i
Dil Factor : 50
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/L)
Methane	1.039	1.045	0.006	107000	71.742	3587.090

Client ID: **RW16**
Site: Phillipsburg

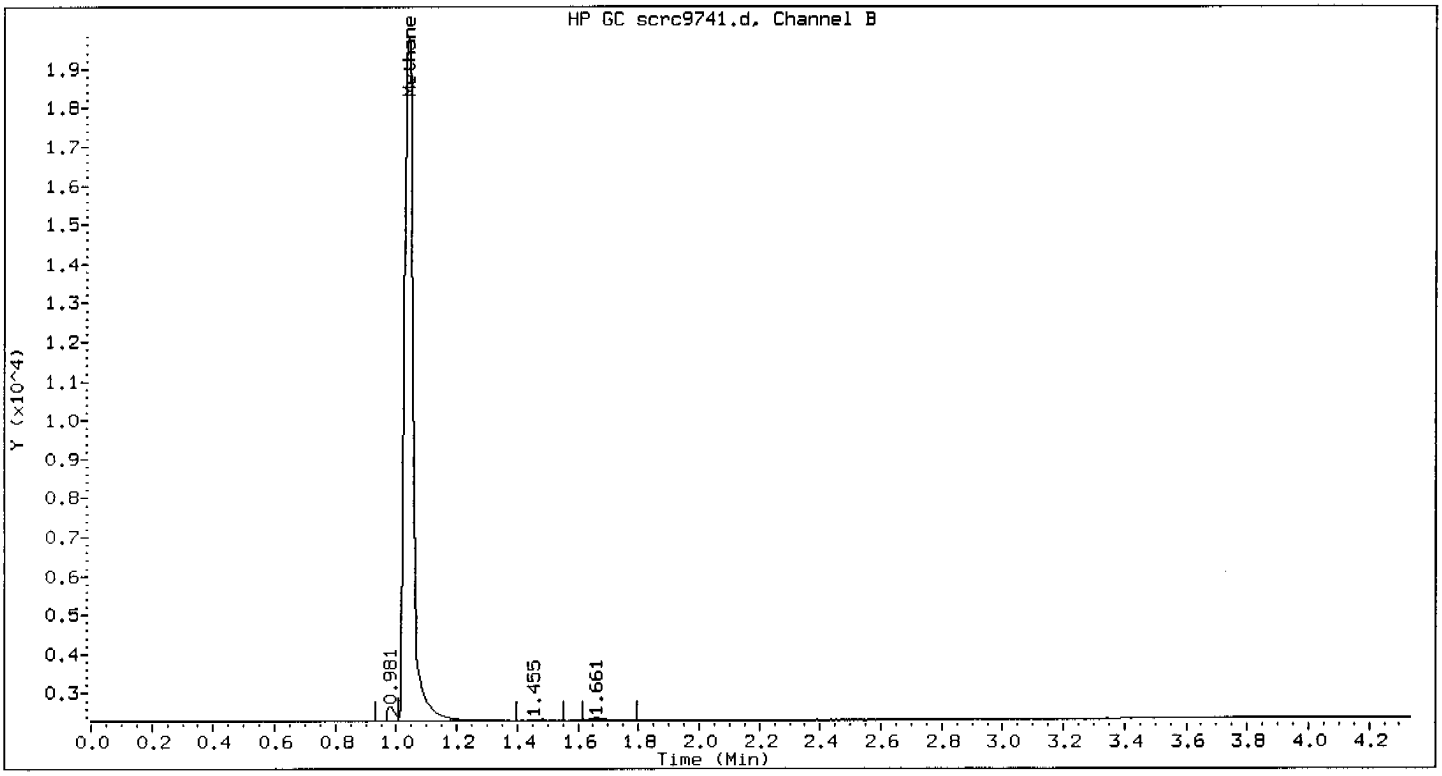
Lab Sample No: **678435**
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05
Date Analyzed: 10/31/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9741.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 25.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	3000	120
Ethene	ND	120
Ethane	ND	120



Method : /chem/VSCREEN3.i/3810/10-26-05/31oct05.b/3810_05.m
Sample Info : 678435;;25
Lab ID : 678435
Inj Date : 31-OCT-2005 14:36
Operator : vscreen3
Cpnd Sublist: MEE
Inst ID : VSCREEN3.i
Dil Factor : 25
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.039	1.045	0.007	181884	121.950	3048.758

Method Blank Results Summary

LAB SAMPLE NO.

CG299A

VOLATILE METHOD BLANK SUMMARY

Date Analyzed: 10/26/05

Instrument ID: VSCREEN3

Time Analyzed: 1531

Lab File ID: SCRC9720

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	MW49	678433	SCRC9726	1625
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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25				
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28				
29				
30				

COMMENTS:

page 1 of 1

Client ID: **CG299A**
Site:

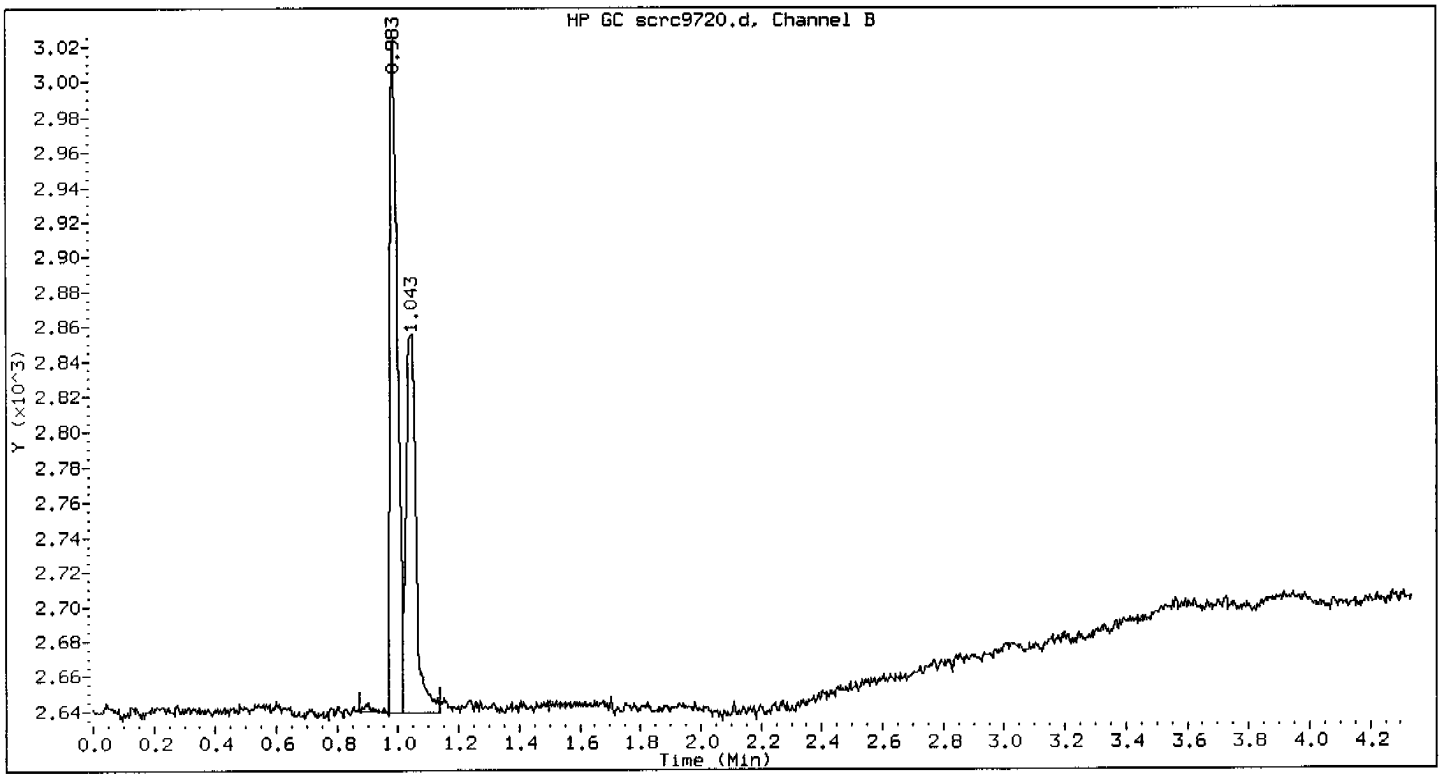
Lab Sample No: **CG299A**
Lab Job No: H389

Date Sampled: _____
Date Received: _____
Date Analyzed: 10/26/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9720.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	ND	5.0
Ethene	ND	5.0
Ethane	ND	5.0
Propane	ND	5.0



Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : CG299a
Lab ID : CG299a
Inj Date : 26-OCT-2005 15:31
Operator : vscreen3
Cpnd Sublist: all

Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)

LAB SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

CG304

Date Analyzed: 10/31/05

Instrument ID: VSCREEN3

Time Analyzed: 1359

Lab File ID: SCRC9737

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	RW16	678435	SCRC9741	1436
02	RW09	678434	SCRC9742	1445
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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28				
29				
30				

COMMENTS:

page 1 of 1

Client ID: **CG304**
Site:

Lab Sample No: **CG304**
Lab Job No: H389

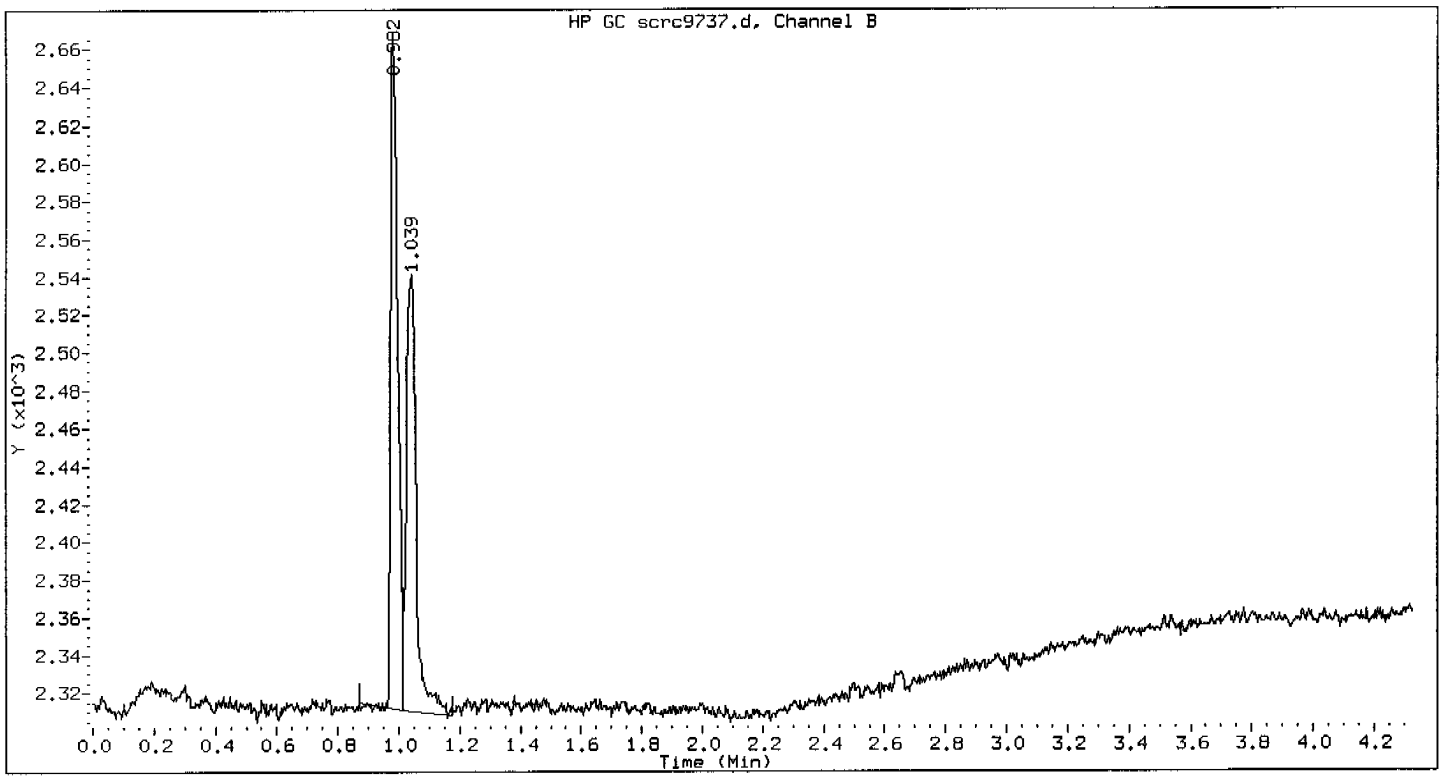
Date Sampled: _____
Date Received: _____
Date Analyzed: 10/31/05
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc9737.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	ND	5.0
Ethene	ND	5.0
Ethane	ND	5.0
Propane	ND	5.0

Data File: /chem/VSCREEN3.i/3810/10-26-05/31oct05.b/scrc9737.d Page 1
Report Date 11/01/2005 10:36



Method : /chem/VSCREEN3.i/3810/10-26-05/31oct05.b/3810_05.m
Sample Info : CG304
Lab ID : CG304
Inj Date : 31-OCT-2005 13:59
Operator : vscreen3
Cpnd Sublist: all
Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/L)

Standards Summary

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VSCREEN3

Calibration Date(s): 10/26/05 10/26/05

Calibration Time(s): 0952 1058

LAB FILE ID: RRF5: SCRC9692 RRF25: SCRC9689 RRF50: SCRC9693
RRF100: SCRC9688 RRF200: SCRC9687

COMPOUND	RRF5	RRF25	RRF50	RRF100	RRF200
Methane	1695	1468	1404	1449	1442
Ethene	1116	1434	1440	1529	1530
Ethane	1126	1380	1395	1477	1482
Propane	1114	1400	1390	1470	1494

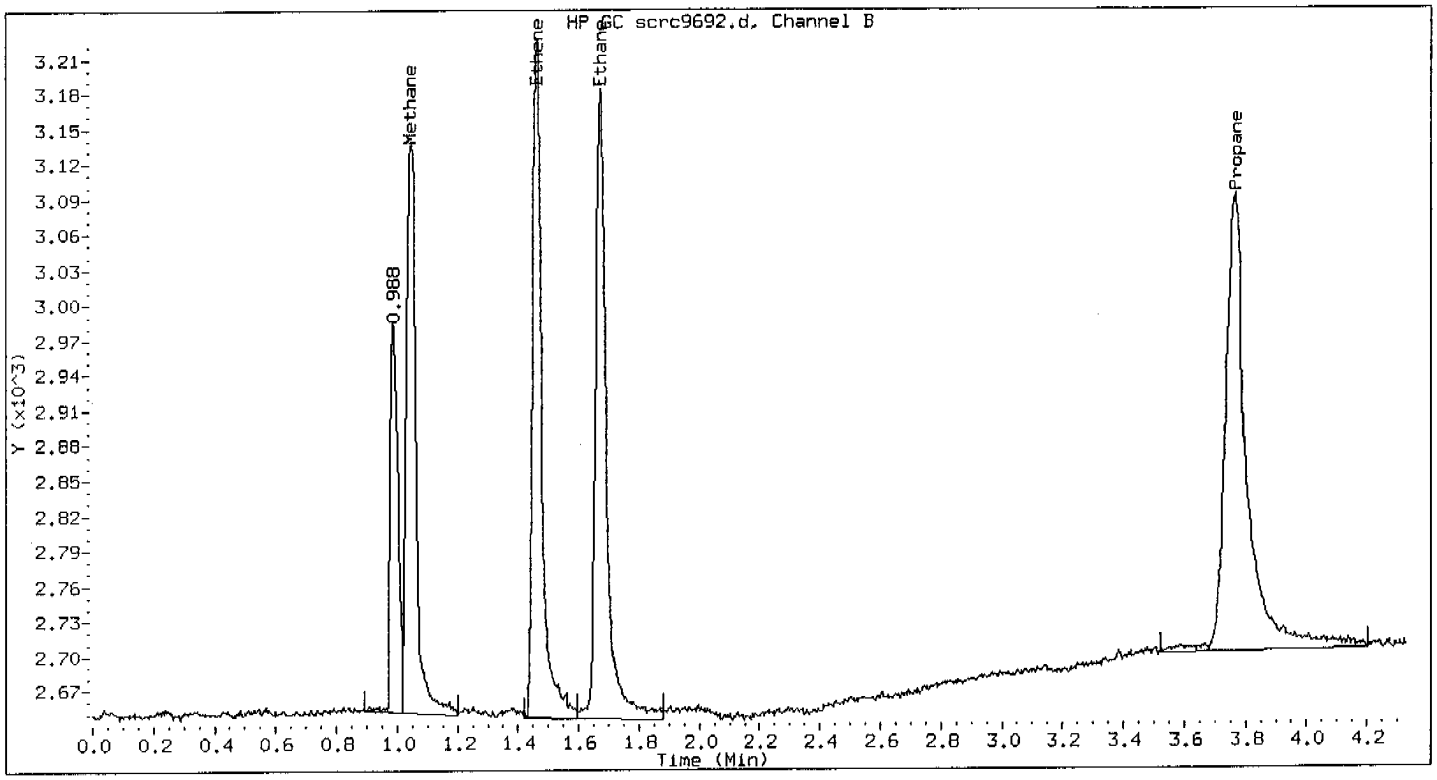
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VSCREEN3 Calibration Date(s): 10/26/05 10/26/05

Calibration Time(s): 0952 1058

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Methane	AVRG	1491	7.8*
Ethene	AVRG	1410	12*
Ethane	AVRG	1372	10*
Propane	AVRG	1374	11*

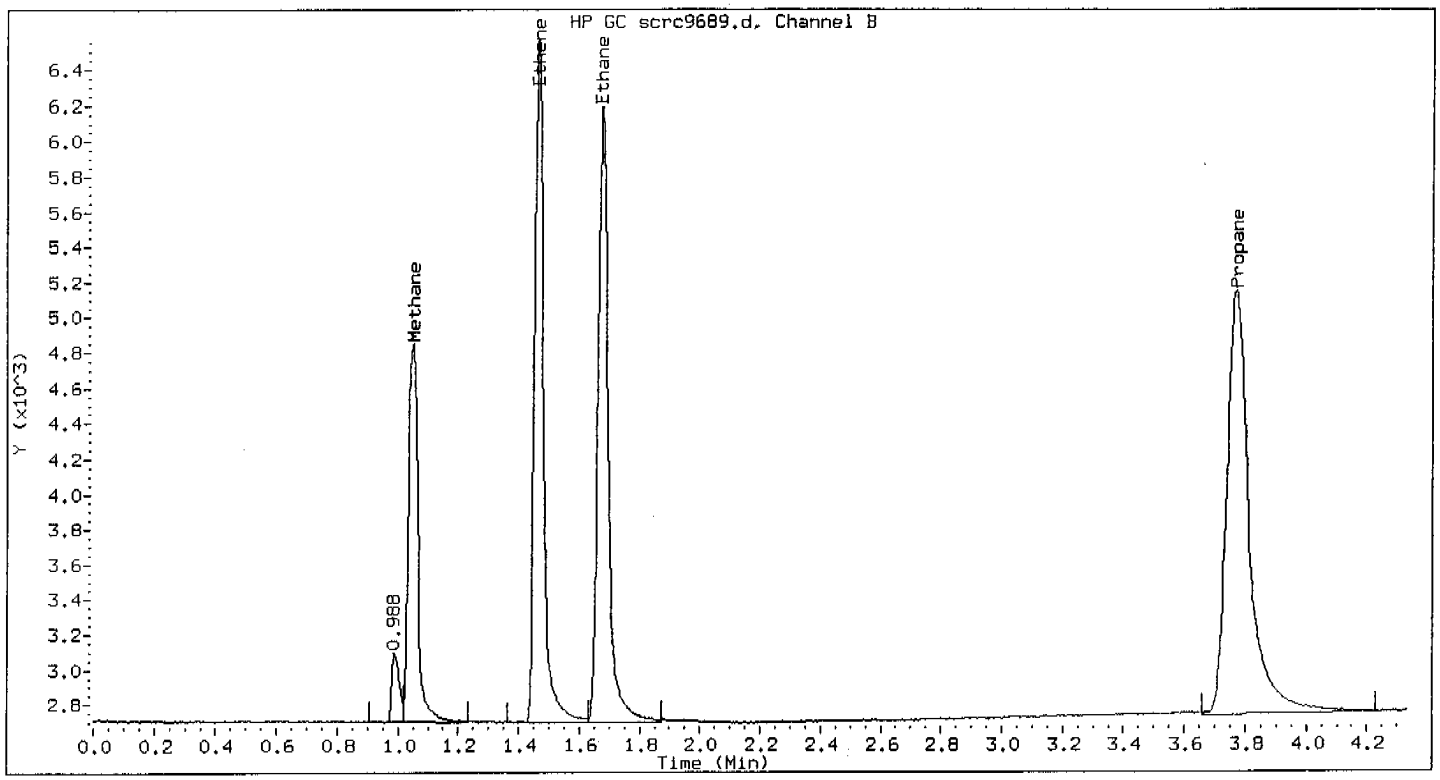
* Compounds with required maximum %RSD values.



Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : SCRC005
Lab ID : SCRC005
Inj Date : 26-OCT-2005 10:50
Operator : vscreen3
Cpnd Sublist: all

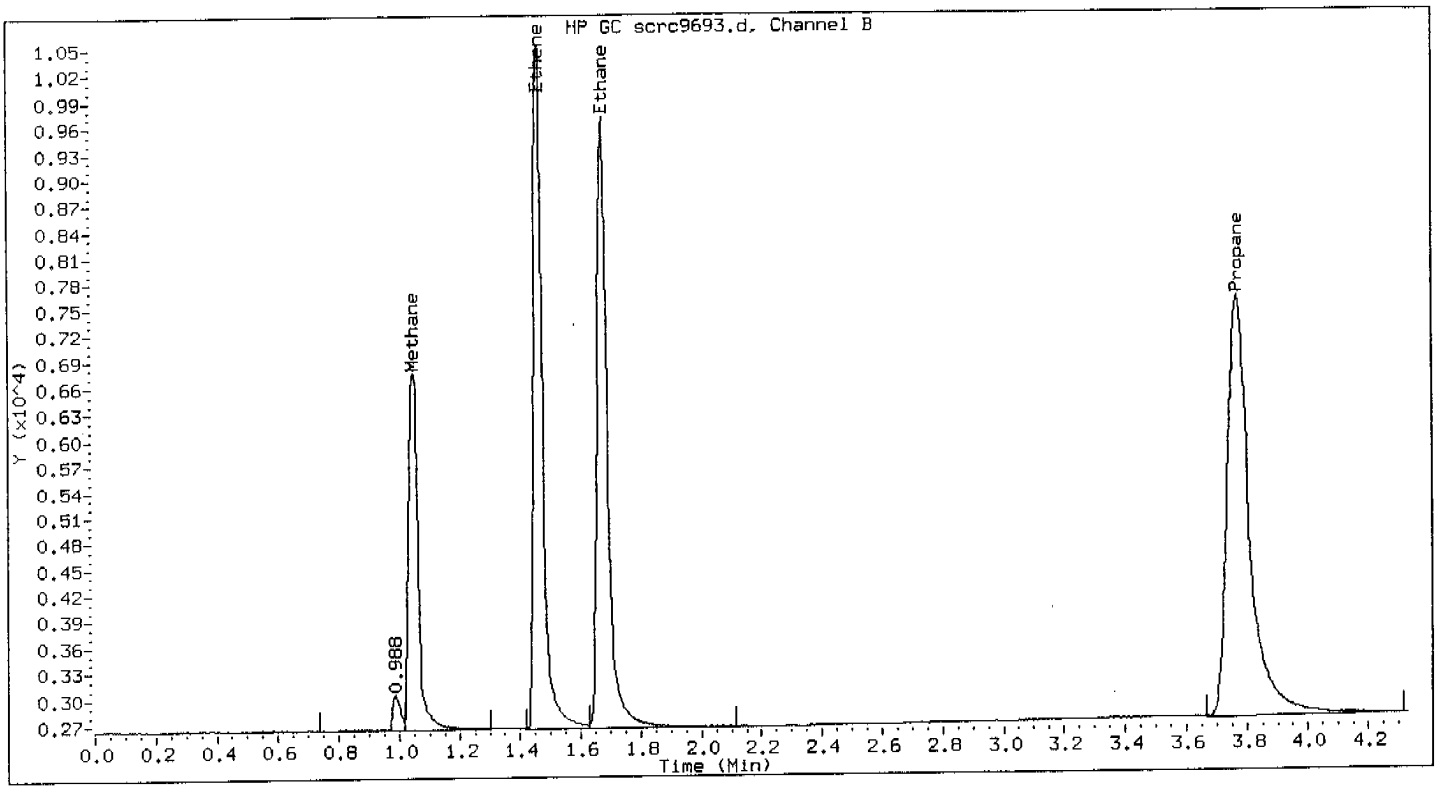
Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.045	1.046	0.002	5542	3.716	3.716
Ethene	1.461	1.460	0.001	6362	4.513	4.513
Ethane	1.671	1.673	0.002	6922	5.046	5.046
Propane	3.766	3.768	0.002	9975	7.261	7.261



Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : SCRC025
Lab ID : SCRC025
Inj Date : 26-OCT-2005 10:09
Operator : vscreen3
Cpnd Sublist: all
Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_2

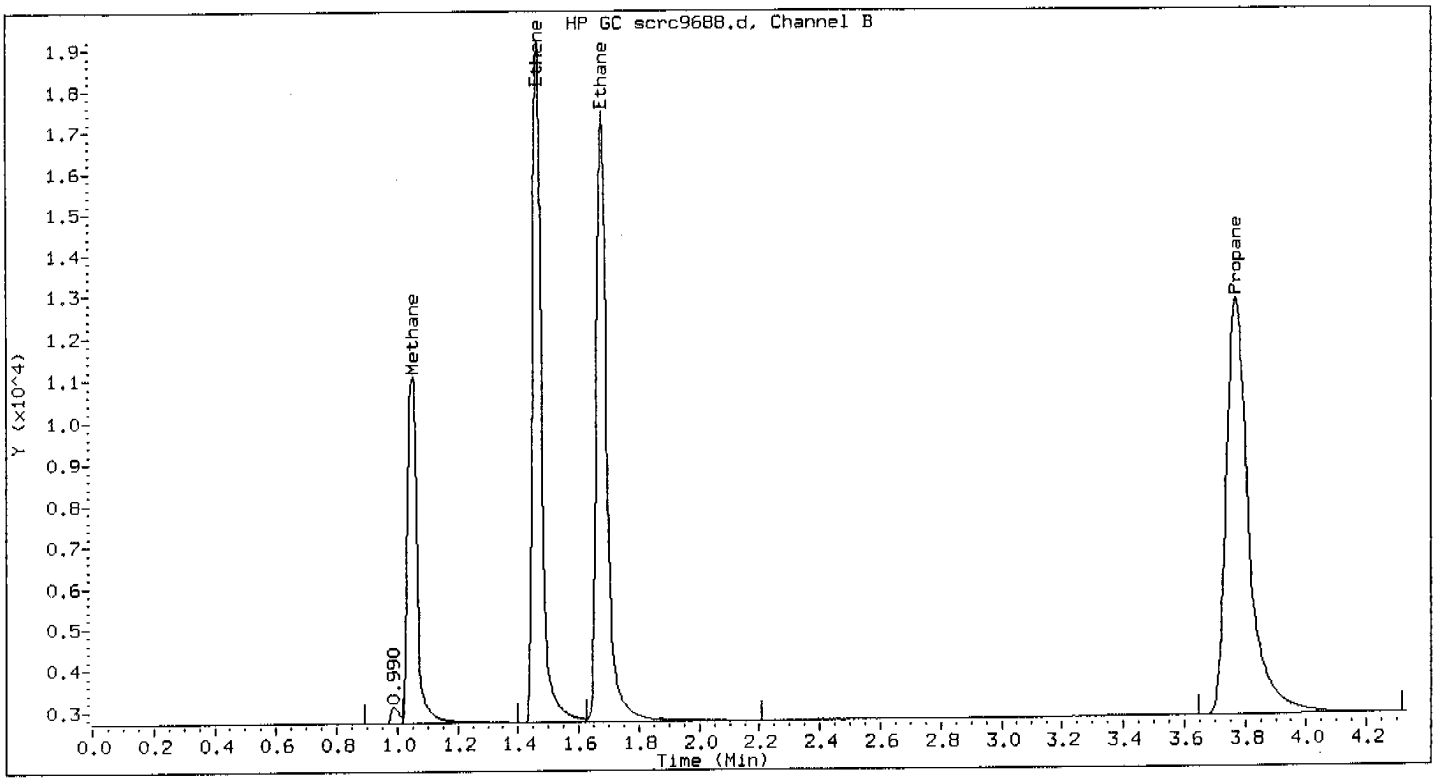
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.049	1.046	0.002	23995	16.088	16.088
Ethene	1.462	1.460	0.003	40869	28.991	28.991
Ethane	1.675	1.673	0.002	42438	30.934	30.934
Propane	3.768	3.768	0.001	62646	45.602	45.602



Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : SCRC050
Lab ID : SCRC050
Inj Date : 26-OCT-2005 10:58
Operator : vscreen3
Cpnd Sublist: all

Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.046	1.046	0.000	45899	30.775	30.775
Ethene	1.460	1.460	0.000	82078	58.223	58.223
Ethane	1.673	1.673	0.000	85786	62.531	62.531
Propane	3.768	3.768	0.000	124384	90.543	90.543

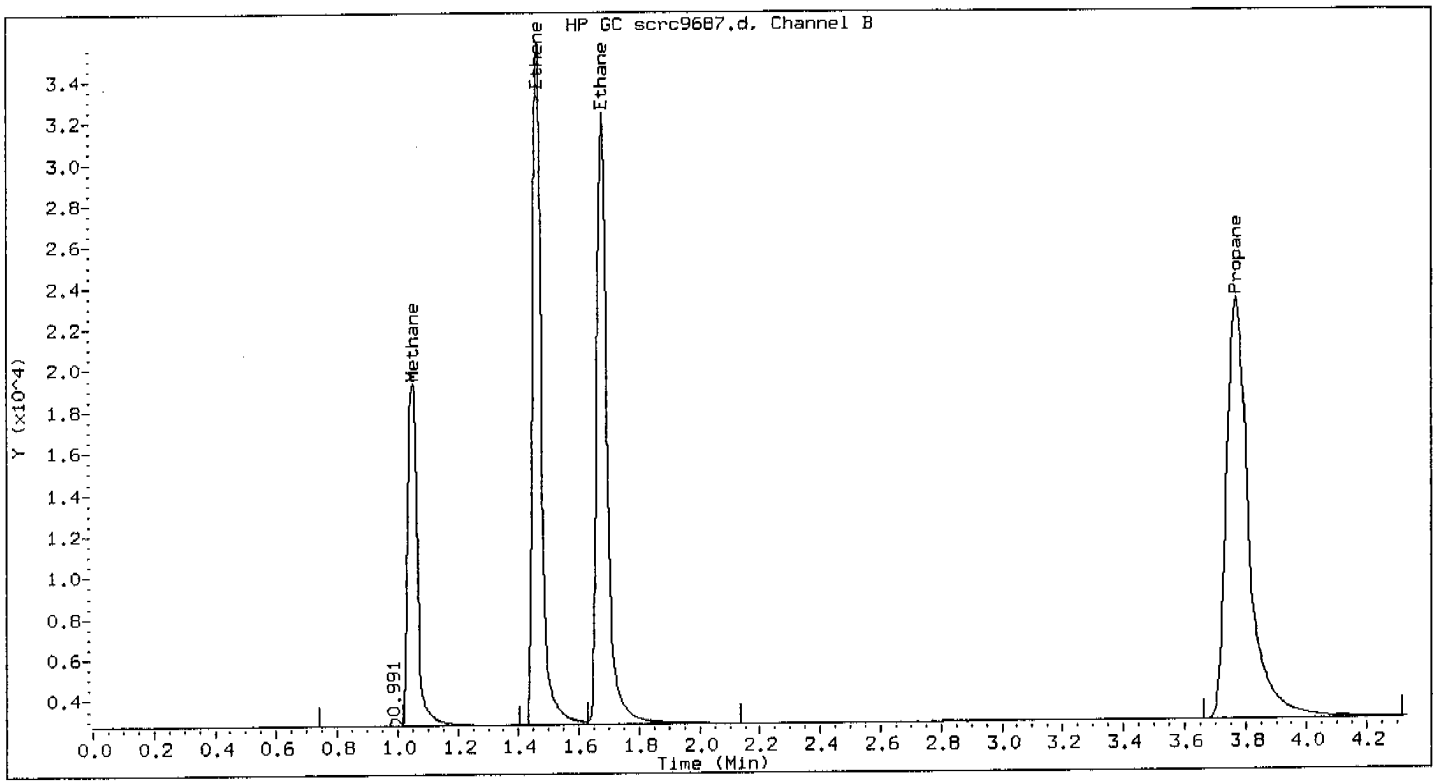


Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : SCRC100
Lab ID : SCRC100
Inj Date : 26-OCT-2005 10:00
Operator : vscreen3
Cpnd Sublist: all

Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.048	1.046	0.002	94783	63.550	63.550
Ethene	1.461	1.460	0.002	174275	123.625	123.625
Ethane	1.675	1.673	0.002	181712	132.454	132.454
Propane	3.769	3.768	0.001	263171	191.570	191.570

Data File: /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/scrc9687.d Page 1
Report Date 10/27/2005 13:31



Method : /chem/VSCREEN3.i/3810/10-26-05/26oct05.b/3810_05.m
Sample Info : SCRC200
Lab ID : SCRC200
Inj Date : 26-OCT-2005 09:52
Operator : vscreen3
Cpnd Sublist: all

Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.049	1.046	0.002	187459	125.688	125.688
Ethene	1.461	1.460	0.002	348771	247.407	247.407
Ethane	1.676	1.673	0.003	364467	265.669	265.669
Propane	3.769	3.768	0.001	534986	389.432	389.432

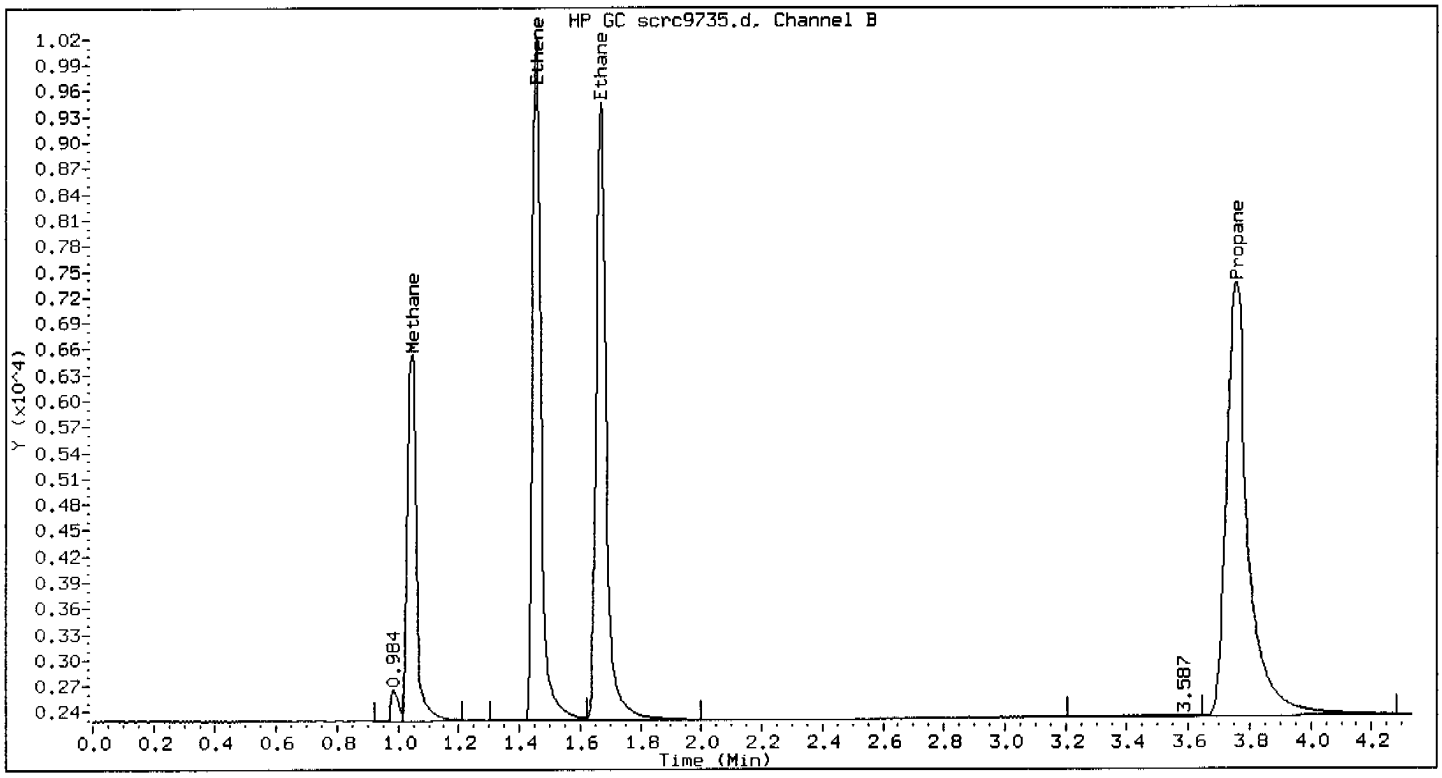
VOLATILE ORGANICS CONTINUING CALIBRATION CHECK

Instrument ID: VSCREEN3 Calibration Date: 10/31/05 Time: 1336

Lab File ID: SCRC9735 Init. Calib. Date(s): 10/26/05 10/26/05

Heated Purge: (Y/N) N Init. Calib. Times: 0952 1058

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Methane	1491.46	1380.43		7.4	15.0
Ethene	1409.71	1399.89		0.7	15.0
Ethane	1371.88	1376.55		-0.3	15.0
Propane	1373.76	1384.07		-0.8	15.0



Method : /chem/VSCREEN3.i/3810/10-26-05/31oct05.b/3810_05.m
Sample Info : SCRC304
Lab ID : SCRC304
Inj Date : 31-OCT-2005 13:36
Operator : vscreen3
Cpnd Sublist: all
Inst ID : VSCREEN3.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Methane	1.045	1.045	0.000	45140	30.266	30.266
Ethene	1.455	1.455	0.000	79794	56.603	56.603
Ethane	1.667	1.667	0.000	84658	61.709	61.709
Propane	3.757	3.757	0.000	123874	90.171	90.171

Spike Recovery Summary

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
METHOD 3810

Matrix: WATER

Level: MED

Matrix Spike - Lab Sample No.: 677135

MS Sample from Lab Job No: H118

QA Batch: 1093

Compound	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Methane	33	0.00	36	109	59-131
Ethene	57	0.00	68	119	59-136
Ethane	62	0.00	73	118	60-138
Propane	90	0.00	100	111	60-136

Compound	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Methane	33	36	109	0	40	59-131
Ethene	57	66	116	3	40	59-136
Ethane	62	72	116	1	40	60-138
Propane	90	100	111	0	40	60-136

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

COMMENTS:

Metals Forms and Data

Analytical Results Summary

Client ID: **MW49**
Site: **Phillipsburg**

Lab Sample No: 678433
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Iron	388	47.4	P

M Column - Method Code (See Section 2 of Report)

Client ID: **RW09**
Site: **Phillipsburg**

Lab Sample No: 678434
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Iron	4570	47.4	P

M Column - Method Code (See Section 2 of Report)

Client ID: **RW16**
Site: **Phillipsburg**

Lab Sample No: 678435
Lab Job No: H389

Date Sampled: 10/18/05
Date Received: 10/18/05

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Iron	6320	47.4	P

M Column - Method Code (See Section 2 of Report)

Blank Results Summary

BLANKS

Lab Name: STL_EDISON

Lab Code: 12028_ Lab Job No.: _H389 Batch No.: 19473_

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic	4.7	U	4.7	U	4.7	U	4.7	U	4.700	U	P
Barium											NR
Beryllium											NR
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron	47.4	U	47.4	U	47.4	U	47.4	U	47.400	U	P
Lead	2.7	U	2.7	U	2.7	U	2.7	U	2.700	U	P
Magnesium											NR
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Boron											NR

BLANKS

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

Preparation Blank Matrix (soil/water):

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic			4.7	U							P
Barium											NR
Beryllium											NR
Cadmium			0.6	U							P
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron			47.4	U							P
Lead			2.7	U							P
Magnesium											NR
Manganese			1.0	U							P
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Boron											NR

BLANKS

Lab Name: STL_EDISON

Lab Code: 12028_ Lab Job No.: _H389 Batch No.: 19473_

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	2.7	U	2.7	U	2.7	U	2.7	U			P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Boron											NR

Calibration Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL_EDISON

Lab Code: 12028_ Lab Job No.: H389 Batch No.: 19473_

Initial Calibration Source: INORG VENT__

Continuing Calibration Source: INORG VENT__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony									NR
Arsenic	5000.0	4993.08	99.9	5000.0	5054.27	101.1	4949.56	99.0	P
Barium									NR
Beryllium									NR
Cadmium	2500.0	2478.27	99.1	2500.0	2523.10	100.9	2419.15	96.8	P
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron	100000.0	100461.4	100.5	100000.0	101930.8	101.9	98313.06	98.3	P
Lead	10000.0	9970.50	99.7	10000.0	10149.34	101.5	9734.82	97.3	P
Magnesium									NR
Manganese	5000.0	5030.15	100.6	5000.0	5084.43	101.7	4944.70	98.9	P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

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

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

Initial Calibration Source: INORG VENT

Continuing Calibration Source: INORG VENT

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony									NR
Arsenic				5000.0	4963.34	99.3	5074.38	101.5	P
Barium									NR
Beryllium									NR
Cadmium				2500.0	2454.37	98.2	2529.00	101.2	P
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron				100000.0	99506.36	99.5	101594.8	101.6	P
Lead				10000.0	9844.52	98.4	10046.74	100.5	P
Magnesium									NR
Manganese				5000.0	4984.13	99.7	5058.81	101.2	P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

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

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

Initial Calibration Source: INORG VENT

Continuing Calibration Source: INORG VENT

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	10000.0	10178.34	101.8	10000.0	9704.22	97.0	9494.56	94.9	P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

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

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: STL_EDISON

Lab Code: 12028_ Lab Job No.: H389 Batch No.: 19473_

Initial Calibration Source: INORG VENT__

Continuing Calibration Source: INORG VENT__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				10000.0	9460.48	94.6			P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

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

ICP Interference Check Results Summary

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

ICP ID Number: TRACE1 TJA61 ICS Source: INORG VENT

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	487890	490406.3	98.1	492140	449959.2	90.0
Antimony		100		96.6	96.6		108.9	108.9
Arsenic		100		102.5	102.5		89.3	89.3
Barium		100		106.3	106.3		99.3	99.3
Beryllium		100		101.7	101.7		92.4	92.4
Cadmium		100		100.9	100.9		92.0	92.0
Calcium	500000	500000	465747	470860.7	94.2	473591	429273.7	85.9
Chromium		100		96.9	96.9		88.2	88.2
Cobalt		100		97.9	97.9		89.3	89.3
Copper		100		104.0	104.0		95.2	95.2
Iron	200000	200000	196621	198889.7	99.4	199723	180566.0	90.3
Lead		100		101.2	101.2		95.7	95.7
Magnesium	500000	500000	519282	526225.2	105.2	526658	473017.1	94.6
Manganese		100		101.1	101.1		91.4	91.4
Mercury								
Nickel		100		98.4	98.4		89.8	89.8
Potassium								
Selenium		100		100.2	100.2		85.6	85.6
Silver		100		105.4	105.4		97.5	97.5
Sodium								
Thallium		100		94.6	94.6		90.4	90.4
Vanadium		100		101.2	101.2		91.5	91.5
Zinc		100		94.9	94.9		87.1	87.1

ICP INTERFERENCE CHECK SAMPLE

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

ICP ID Number: TRACE1 TJA61 ICS Source: INORG VENT

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	505076	491483.8	98.3	504424	503671.4	100.7
Antimony		100		111.7	111.7		110.0	110.0
Arsenic		100		98.3	98.3		92.1	92.1
Barium		100		105.7	105.7		109.4	109.4
Beryllium		100		100.5	100.5		98.6	98.6
Cadmium		100		97.6	97.6		94.5	94.5
Calcium	500000	500000	470352	464905.4	93.0	453610	450650.4	90.1
Chromium		100		94.8	94.8		93.1	93.1
Cobalt		100		95.4	95.4		94.2	94.2
Copper		100		103.4	103.4		107.3	107.3
Iron	200000	200000	197847	195665.2	97.8	193037	191822.7	95.9
Lead		100		104.2	104.2		101.9	101.9
Magnesium	500000	500000	517393	514445.5	102.9	499135	494652.6	98.9
Manganese		100		100.0	100.0		100.6	100.6
Mercury								
Nickel		100		95.1	95.1		92.2	92.2
Potassium								
Selenium		100		96.3	96.3		95.5	95.5
Silver		100		103.7	103.7		106.7	106.7
Sodium								
Thallium		100		107.9	107.9		94.6	94.6
Vanadium		100		98.5	98.5		100.0	100.0
Zinc		100		92.4	92.4		93.7	93.7

Spike Sample Recovery Summary

LAB SAMPLE NO.

SPIKE SAMPLE RECOVERY

BSW102405

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

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									NR
Antimony									NR
Arsenic	80-120	2008.9220		4.7000	U	2000.00	100.4		P
Barium									NR
Beryllium									NR
Cadmium	80-120	51.7750		0.6000	U	50.00	103.6		P
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron	80-120	974.2000		47.4000	U	1000.00	97.4		P
Lead	80-120	514.4000		2.7000	U	500.00	102.9		P
Magnesium									NR
Manganese	80-120	514.3540		1.0000	U	500.00	102.9		P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

SPIKE SAMPLE RECOVERY

LAB SAMPLE NO.

679429MS

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

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									NR
Antimony									NR
Arsenic	80-120	1974.7060		4.7000	U	2000.00	98.7		P
Barium									NR
Beryllium									NR
Cadmium	80-120	51.1660		0.6000	U	50.00	102.3		P
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron	80-120	1187.6680		185.0000		1000.00	100.3		P
Lead	80-120	503.4430		2.7000	U	500.00	100.7		P
Magnesium									NR
Manganese	80-120	512.1690		4.1000	B	500.00	101.6		P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

Sample and MS Duplicate Results Summary

LAB SAMPLE NO.

DUPLICATES

679429D

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

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								NR
Antimony								NR
Arsenic		4.7000	U	4.7000	U			P
Barium								NR
Beryllium								NR
Cadmium		0.6000	U	0.6000	U			P
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron	150.0	185.0000		164.1080		12.0		P
Lead		2.7000	U	2.7000	U			P
Magnesium								NR
Manganese		4.1000	B	4.0410	B	1.4		P
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

Laboratory Control Samples Results Summary

LABORATORY CONTROL SAMPLE

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

Solid LCS Source:

Aqueous LCS Source: INORG VENT

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic	1000.0	981.60	98.2						
Barium									
Beryllium									
Cadmium	1000.0	1033.20	103.3						
Calcium									
Chromium									
Cobalt									
Copper									
Iron	1000.0	1059.66	106.0						
Lead	1000.0	1017.65	101.8						
Magnesium									
Manganese	1000.0	1025.81	102.6						
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Boron									

Serial Dilution Summary

LAB SAMPLE NO.

ICP SERIAL DILUTION

679429L

Lab Name: STL_EDISON

Lab Code: 12028 Lab Job No.: H389 Batch No.: 19473

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							NR
Antimony							NR
Arsenic	4.70	U	23.50	U			P
Barium							NR
Beryllium							NR
Cadmium	0.60	U	3.00	U			P
Calcium							NR
Chromium							NR
Cobalt							NR
Copper							NR
Iron	185.00		237.00	U	100.0		P
Lead	2.70	U	13.50	U			P
Magnesium							NR
Manganese	4.10	B	5.00	U	100.0		P
Mercury							NR
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR

Analysis Run Log

ANALYSIS RUN LOG

Lab Name: STL_EDISON_____ Contract: _____

Lab Code: 12028_ Case No.: _____ SAS No.: _____ SDG No.:19473_

Instrument ID Number: TRACE1 TJA61_ Method: P_

Start Date: 10/25/05 End Date: 10/26/05

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	B
1CAL-BLK	1.00	2353		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
T1CAL1	1.00	2358		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
T1CAL2	1.00	0004		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
T1CAL3	1.00	0009		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
ZZZZZZ	1.00	0015		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ICV/CCV	1.00	0020		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
ICB/CCB	1.00	0026		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
ICSA	1.00	0031		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
ICSAB	1.00	0037		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	0042		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	0047		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
SW102405	1.00	0053		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
BW102405	1.00	0058		_	_	X	_	_	X	_	_	_	_	X	_	_	X	_	_	_	_	_	_	_	_	_	_
LCSW	1.00	0104		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
679429D	1.00	0109		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
679429	1.00	0115		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679429L	1.00	0120		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
CCV	1.00	0126		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
CCB	1.00	0131		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
679429MS	1.00	0136		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	0142		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
679428	1.00	0147		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679430	1.00	0153		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679431	1.00	0158		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679432	1.00	0204		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679433	1.00	0209		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679434	1.00	0215		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679435	1.00	0220		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
679436	1.00	0225		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_
CCV	1.00	0231		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
CCB	1.00	0236		_	_	X	_	_	X	_	_	_	_	X	X	_	X	_	_	_	_	_	_	_	_	_	_
679437	1.00	0242		_	_	X	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_

ANALYSIS RUN LOG

Lab Name: STL_EDISON

Contract: _____

Lab Code: 12028_ Case No.: _____

SAS No.: _____ SDG No.:19473_

Instrument ID Number: TRACE1 TJA61_

Method: P_

Start Date: 10/25/05

End Date: 10/26/05

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	B
678366	1.00	0247												X													
678433	1.00	0253												X													
678434	1.00	0258												X													
678435	1.00	0303												X													
679517	1.00	0309							X						X												
679518	1.00	0314							X						X												
679521	1.00	0320							X						X												
679524	1.00	0325							X						X												
679525	1.00	0331							X						X												
CCV	1.00	0336				X			X					X	X		X										
CCB	1.00	0342				X			X					X	X		X										
679527	1.00	0347							X						X												
679528	1.00	0352							X						X												
ICSA	1.00	0358				X			X					X	X		X										
ICSAB	1.00	0403				X			X					X	X		X										
CCV	1.00	0409				X			X					X	X		X										
CCB	1.00	0414				X			X					X	X		X										

ANALYSIS RUN LOG

Lab Name: STL_EDISON_____ Contract: _____

Lab Code: 12028_ Case No.: _____ SAS No.: _____ SDG No.:19473_

Instrument ID Number: TRACE1 TJA61_ Method: P_

Start Date: 10/26/05 End Date: 10/26/05

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	B
1CAL-BLK	1.00	1023		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
T1CAL1	1.00	1029		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
T1CAL2	1.00	1034		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
T1CAL3	1.00	1039		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	_	X	X	X	X
ZZZZZZ	1.00	1044		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ICV/CCV	1.00	1050		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ICB/CCB	1.00	1055		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ICSA	1.00	1100		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ICSAB	1.00	1105		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1111		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1116		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1121		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
BW102405	1.00	1126		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1131		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1137		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1142		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1147		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
CCV	1.00	1152		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
CCB	1.00	1158		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1203		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1208		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1213		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1218		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1224		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1229		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1234		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1239		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1245		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1250		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
CCV	1.00	1255		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
CCB	1.00	1300		_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	2.00	1305		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

ANALYSIS RUN LOG

Lab Name: STL_EDISON_____ Contract: _____

Lab Code: 12028_ Case No.: _____ SAS No.: _____ SDG No.:19473_

Instrument ID Number: TRACE1 TJA61_ Method: P_

Start Date: 10/26/05 End Date: 10/26/05

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	B
ZZZZZZ	2.00	1311																									
ZZZZZZ	2.00	1316																									
ZZZZZZ	2.00	1321																									
ZZZZZZ	2.00	1326																									
ZZZZZZ	2.00	1332																									
ZZZZZZ	2.00	1337																									
ZZZZZZ	1.00	1342																									
ICSA	1.00	1347													X												
ICSAB	1.00	1353													X												
CCV	1.00	1358													X												
CCB	1.00	1403													X												

General Chemistry Forms

Analytical Results Summary

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 2083

Alkalinity

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/28/05	1.0	208
678434	RW09	10/18/05	10/28/05	1.0	312
678435	RW16	10/18/05	10/28/05	1.0	480

Quantitation Limit for Alkalinity is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389
Matrix: WATER QA Batch: 2083

Alkalinity - Bicarbonate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/28/05	1.0	208
678434	RW09	10/18/05	10/28/05	1.0	312
678435	RW16	10/18/05	10/28/05	1.0	480

Quantitation Limit for Alkalinity - Bicarbonate is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389
Matrix: WATER QA Batch: 2083

Alkalinity - Carbonate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/28/05	1.0	ND
678434	RW09	10/18/05	10/28/05	1.0	ND
678435	RW16	10/18/05	10/28/05	1.0	ND

Quantitation Limit for Alkalinity - Carbonate is 5.0 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: 1021

Ammonia

STL Edison Sample #	Client ID	Date Sampled	Date Extracted	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	11/01/05	11/02/05	1.0	0.13
678434	RW09	10/18/05	11/01/05	11/02/05	1.0	0.28
678435	RW16	10/18/05	11/01/05	11/02/05	1.0	0.86

Quantitation Limit for Ammonia is 0.1 mg/l.

Site: Phillipsburg | Lab Job No: H389
Matrix: WATER | QA Batch: 2310

Chloride

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/24/05	1.0	32.5
678434	RW09	10/18/05	10/24/05	1.0	139
678435	RW16	10/18/05	10/24/05	1.0	82.9

Quantitation Limit for Chloride is 5.0 mg/l.

Site: Phillipsburg | Lab Job No: H389
Matrix: WATER | QA Batch: 0160

Ferrous Iron

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/19/05	1.0	ND
678434	RW09	10/18/05	10/19/05	1.0	3.3
678435	RW16	10/18/05	10/19/05	1.0	4.6

Quantitation Limit for Ferrous Iron is 0.1 mg/l.

X-Method 3500-Fe (Standard Methods for the Examination of Water and Wastewater, 18th Edition) specifies that ferrous iron be determined "at sampling site because of the possibility of change in the ferrous-ferric ratio with time in acid solutions" (p3-67).

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: -----

Heterotrophic Plate Count

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: CFU/mL
678433	MW49	10/18/05	10/18/05	1.0	505
678434	RW09	10/18/05	10/18/05	1.0	416
678435	RW16	10/18/05	10/18/05	1.0	529

Quantitation Limit for Heterotrophic Plate Count is 0.0 CFU/mL.

Site: Phillipsburg

Lab Job No: H389

Matrix: WATER

QA Batch: 1486

Nitrate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/20/05	5.0	7.6
678434	RW09	10/18/05	10/19/05	1.0	ND
678435	RW16	10/18/05	10/19/05	1.0	ND

Quantitation Limit for Nitrate is 0.1 mg/l.

Site: Phillipsburg Lab Job No: H389

Matrix: WATER QA Batch: -----

Ferric Iron

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	11/02/05	1.0	0.39
678434	RW09	10/18/05	11/02/05	1.0	1.3
678435	RW16	10/18/05	11/02/05	1.0	1.7

Quantitation Limit for Ferric Iron is 0.1 mg/l.

Site: Phillipsburg

Lab Job No: H389

Matrix: WATER

QA Batch: 2253

Sulfate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/24/05	1.0	26.2
678434	RW09	10/18/05	10/24/05	1.0	ND
678435	RW16	10/18/05	10/24/05	1.0	ND

Quantitation Limit for Sulfate is 5.0 mg/l.

Site: Phillipsburg | Lab Job No: H389
Matrix: WATER | QA Batch: 1717

Sulfide

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
678433	MW49	10/18/05	10/24/05	1.0	ND
678434	RW09	10/18/05	10/24/05	1.0	ND
678435	RW16	10/18/05	10/24/05	1.0	ND

Quantitation Limit for Sulfide is 1.0 mg/l.

QA Summary

ALKALINITY

Matrix: Water **Lab Sample No.:** 678010

QA Batch No.: 2083 **Lab Job No.:** H325

Laboratory Blank	
Blank Conc Units: mg/l	Quant Limit Units: mg/l
ND	5.0

Duplicate			
Sample Conc. Units: mg/l	Dup Conc. Units: mg/l	RPD	Q.C. Limits RPD
236.0	232.0	1.71	7.70

Laboratory Control Sample				
Vendor	Lot #	True Value Units: mg/l	Range Units: mg/l	Measured Value (mg/l)
ERA	P119-506	56.4	49.4-59.4	54.4

NITROGEN-AMMONIA

Matrix: WATER

Lab Sample No.: 678433

QA Batch No.: **1021**

Lab Job No.: H389

Laboratory Blank	
Blank Conc (mg/l as N)	Quant Limit (mg/l as N)
ND	0.10

Matrix Spike				
Spike Added (mg/l as N)	Sample Conc (mg/l as N)	MS Conc (mg/l as N)	MS % Rec	QC Limits Rec
1.0	0.13	0.991	86.1	60-126

Matrix Spike Duplicate					
Spike Added (mg/l as N)	MSD Conc (mg/l as N)	MSD % Rec	% RPD	QC LIMITS RPD	REC
1.0	0.977	84.7	1.4	12.0	60-126

Blank Spike			
Spike Added (mg/l as N)	BS Conc. (mg/l as N)	% Recovery	QC LIMIT BS %REC
1.0	1.01	101	90-110

CHLORIDE

Matrix: WATER

Lab Sample No.: 678120

QA Batch No.: **2310**

Lab Job No.: H 329

Laboratory Blank	
Blank Conc Units: mg/l	Quant Limit Units: mg/l
ND	5.0

Matrix Spike				
Spike Added Units: mg/l	Sample Conc Units: mg/l	MS Conc Units: mg/l	MS % Rec	QC Limits Rec
50.0	28.5	76.2	95.4	68-127

Matrix Spike Duplicate					
Spike Added Units: mg/l	MSD Conc Units: mg/l	MSD % Rec	% RPD	QC LIMITS RPD	REC
50.0	76.1	95.2	0.1	10.0	68-127

Laboratory Control Sample				
Vendor	Lot #	True Value Units: mg/l	Acceptable Range: mg/l	Measured Value: mg/l
ERA	P118-506	62.4	54.7-68.3	61.4

FERROUS IRON

Matrix: WATER

Lab Sample No.: 678141

QA Batch No.: 0160

Lab Job No.: H 330

Laboratory Blank	
Blank Conc Units: mg/l	Quant Limit Units: mg/l
ND	0.10

Matrix Spike				
Spike Added Units: mg/l	Sample Conc Units: mg/l	MS Conc Units: mg/l	MS % Rec	QC Limits Rec
2.0	ND	1.94	97.0	75-125

Matrix Spike Duplicate					
Spike Added Units: mg/l	MSD Conc Units: mg/l	MSD % Rec	% RPD	QC LIMITS RPD	REC
2.0	1.94	97.0	0.0	10.0	75-125

Blank Spike		
Spike Conc Units: mg/L	BS Conc Units: mg/L	Acceptable Range Units: mg/L
0.50	0.502	0.45 - 0.55

NITROGEN-NITRATE

Matrix: WATER

Lab Sample No.: 677028

QA Batch No.: **1486**

Lab Job No.: H106

Laboratory Blank	
Blank Conc (mg/l as N)	Quant Limit (mg/l as N)
ND	0.10

Matrix Spike				
Spike Added (mg/l as N)	Sample Conc (mg/l as N)	MS Conc (mg/l as N)	MS % Rec	QC Limits Rec
1.0	0.11	1.13	102	73-115

Matrix Spike Duplicate					
Spike Added (mg/l as N)	MSD Conc (mg/l as N)	MSD % Rec	% RPD	QC LIMITS RPD	REC
1.0	1.11	100	1.79	10.0	73-115

Laboratory Control Sample				
Vendor	Lot #	True Value (mg/l as N)	Acceptable Range: mg/l	Measured Value: mg/l
ERA	P101505	1.43	1.20-1.60	1.46

SULFATE

Matrix: WATER

Lab Sample No.: 676333

QA Batch No.: 2253

Lab Job No.: G 974

Laboratory Blank	
Blank Conc Units: mg/l	Quant Limit Units: mg/l
ND	5.0

Matrix Spike				
Spike Added Units: mg/l	Sample Conc Units: mg/l	MS Conc Units: mg/l	MS % Rec	MS %Rec Limits
100	40.5	160	120	79-120

Matrix Spike Duplicate					
Spike Added Units: mg/l	MSD Conc Units: mg/l	MSD % Rec	% RPD	QC LIMITS RPD	REC
100	139	98.5	14.0	10.0	79-120

Laboratory Control Sample				
Vendor	Lot #	True Value Units: mg/l	Acceptable Range: mg/l	Measured Value: mg/l
ERA	P118-506	32.5	28.7-35.3	31.8

TOTAL SULFIDE

Matrix: WATER

Lab Sample No.: 678462

QA Batch No.: 1717

Lab Job No.: H 398

Laboratory Blank	
Blank Conc Units: mg/l	Quant Limit Units: mg/l
ND	1.0

Matrix Spike				
Spike Added Units: mg/l	Sample Conc Units: mg/l	MS Conc Units: mg/l	MS % Rec	QC Limits Rec
6.2	ND	6.6	106.5	60-131

Matrix Spike Duplicate					
Spike Added Units: mg/l	MSD Conc Units: mg/l	MSD % Rec	% RPD	QC LIMITS RPD	REC
6.2	6.2	100.0	6.2	10.0	60-131

Laboratory Control Sample				
Vendor	Lot #	True Value Units: mg/l	Acceptable Range: mg/l	Measured Value: mg/l
ERA	P096071	3.40	1.70-4.83	3.90

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